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Khitan Verbal Inflectional Morphology

A Corpus-Based Analysis

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Abbreviations and symbols

Glossing conventions adhere to the Leipzig Glossing Rules, with the exception of novel abbreviations proposed where necessary to accommodate language-specific features.

The following abbreviations and symbols are employed:

2 – second person

ABL – ablative

ADJZ – adjectivizer

AGM – adjective gender marker

A-N – adnominal-nominal

AP – adpositional phrase

C – consonant

CAUS – causative

CVB.A – converb *-A*

CVB.AI – converb *-Ai*

CVB.AL – converb *-Al*

CVB.ASH – converb *-ash*

CVB.CI – converb *-Ci*

CVB.PCI – converb *-pci*

CVB.SEL – converb *-sel*

DAT – dative

DEM – demonstrative

DENN – denominal noun

DENV – denominal verb

DER - derivational

DIST – distal

dur- durative

dyn - dynamic

F/F – feminine

F - focal

FIN.LIR – finite form *-liR*

GEN – genitive

HF – high focal

hon. – honorific

INS – instrumental
 INTRA – intraterminal
 LF – low focal
 LOCN – locative numeral
 M/M – masculine
 N – numeral
 NEG – negation
 NP – nominal phrase
 NUM – numeral-forming suffix
 OBL – oblique
 ORD – ordinal
 PL – plural
 POST – postterminal
 PRON - pronominal
 PROX – proximal
 PST – past
 PX3 – possessive suffix of third person
 REL – relational suffix
 SG– singular
 t – transformative
 tr. - transitive
 V – vowel
 VB – verb
 VN – verbal nominal
 VN.AR – verbal nominal -*AR*
 VN.I – verbal nominal -*I*
 VN.IR – verbal nominal -*IR*
 VN.LAQ – verbal nominal -*LAQ*
 VN.PIR – verbal nominal -*PIR*
 VN.Q – verbal nominal -*Q*
 VN.UCI – verbal nominal -*UCI*
 VP – verbal phrase
 . – separation between KSS graphs in regular blocks, or between categories encoded in one morpheme
 : – separation between KSS graphs in special blocks

... – unreadable section
 * – reconstruction
 ? – alone indicates the meaning of a word is unknown, after a reading or a gloss indicates tentativity
 ° – additional dot
_n – diacritic number
 - – separation between morphemes
 – – blank space in KSS inscriptions
 ~ – separation between variants
 / – separation between contrastive elements, elsewhere, indicates a non-attested element
 × – KSS graph not enlisted
 /x/ – phonemic
 [...] – omission of the present author
 [*text*] – addition of the present author
 [x] – phonetic
 [] – damaged KSS graph
 [/] – damaged section in a KSS inscription
 < – derives from
 > – results in
 <...> KSS Romanization
 ← – loaned from
 → – loaned into

I also use the following abbreviations for the names of languages, sources, reconstruction lists for previous pronunciation of sinograms, and dictionaries.

Languages

Al. – Alchuka
 AM – Middle Mongol in Arabic script
 B – Bulgar Turkic
 Ch. – Chinese
 CM – Common Mongolic
 EM – Early Mandarin according to Pulleyblank (1991)
 EMC – Early Middle Chinese according to Baxter & Sagart (2014)
 Ju. – Jurchen

Kh. – Khitan
Khal. – Khalkha Mongolian
Ki. – Kilen
KLS – Khitan Large Script
KSS – Khitan Small Script
LMC – Late Middle Chinese
LOK – Late Old Korean
LTNWC – Late Tang Northwestern Chinese according to South Coblin (1994)
Ma. – Manchu
MK – Middle Korean
MM – Middle Mongol
MSM – Modern Standard Mandarin
OC – Old Chinese according to Baxter & Sagart (2014)
OK – Old Korean
ONWC – Old Northwestern Chinese according to South Coblin (1994)
OT – Old Turkic
PhM – Middle Mongol in 'Phags-Pa script
PreKh. – Pre-Khitan
PM – Proto-Mongolic
PPM – Pre-Proto-Mongolic
PSM – Proto-Serbi-Mongolic
PTu. – Proto-Tungusic
SK – Khitan in sinograms
SM – Middle Mongol in sinograms
T – traditional sinograms
Tab. – Tabghach
UM – Middle Mongol in Uigur-Mongolian script
WM – Written Mongol

Primary sources

Khitan

Chala – Epitaph of Xiao Chala Xianggong

Daozong – Eulogy for Emperor Daozong

Dilie – Epitaph of Yelü Dilie
Diligu – Epitaph of Yelü Diligu
Dilu – Epitaph of Xiao Dilu
Gaoshi – Epitaph of Yelü Han Gaoshi
Gu – Epitaph of the Late Mme. Yelü
Han Dilie – Epitaph of Yelü Han Dilie
Hongyong – Epitaph of Yelü Hongyong
Hudujin – Epitaph of Xiao Hudujin
Huilian – Epitaph of Xiao Huilian
Jue – Epitaph of Yelü Jie
Langjun – Record of the Journey of the Younger Brother of the Emperor of the Great Jin Dynasty
Liang – Epitaph for the Prince of Liang
Nu – Epitaph of Yelü Nu
Renxian – Epitaph of Yelü Renxian
Renyi – Eulogy for Empress Renyi
Tuguci – Epitaph of Xiao Tuguci
Xiangwen – Epitaph of Yelü Xiangwen
Xu – Damaged Epitaph of Prince Xu
Yongqing – Epitaph of Princess Yongqing
Zhen – Epitaph of the Supreme General of Zhen
Zhonggong – Epitaph of Xiao Zhonggong
Zongjiao – Epitaph of Yelü Zongjiao

Chinese

ChLangjun – Chinese section of Langjun inscription
DZJ – Dasheng Zhongzong Jianjie 大乘中宗見解 *Dàshèng zhōngzōng jiànjiě*
EJ – Emituo Jing 阿彌陀經 *Ēmítuójīng*
JGJ – Jin'gang Jing 金剛經 *Jīn'gāngjīng*
Kbr – Khotanese Brāhmī materials
LS – Liao Shi 遼史 *Liáoshǐ*
QDGZ – Qidan Guo Zhi 契丹國誌 *Qìdānguózhì*
QZW – Qian Zi Wen 千字文 *Qiānzìwén*

Middle Mongol

HY – Huayi Yiyu

IV – Istanbul Vocabulary

LV – Leiden Vocabulary

Muq – Muqaddimat al-Adab

RH – Rasulid Hexaglot

SH – Secret History of the Mongols

ZY – Zhiyuan Yiyu

Secondary sources

C – Chinggeltei *et al.*, 1985

CWJ – Chinggeltei & Wu & Jiruhe, 2017

GQL – Ge & Qi & Liu, 2008

J – Janhunen, 2003a

JS – Ji, 1996

K – Kane, 2009

L – Liu, 2014

N - Nugteren, 2011

O – Ōtake, 2015a

O2 – Ōtake, 2015b

O3 – Ōtake, 2016b

R – Róna-Tas, 2017

S – Shimunek, 2017

W – Wu, 2007

W2 – Wu, 2012b

WF – Wittfogel & Feng, 1949

WJ – Wu & Janhunen, 2010

WR – Wu & Róna-Tas, 2020a

WR2 – Wu & Róna-Tas, 2020b

VR – Rybatzki, 2003

Reconstructions

P – Pulleyblank, 1991

SC – South Coblin, 1994

Dictionaries

CB – Casacchia & Bai, 2013

FL – Lessing, 1960

G – Giles, 1912

GC – Clauson, 1972

GK – Kara, 2009

H – Haenisch, 1939

PK – Kroll, 2017

Romanization, phonetic reconstruction and translation of Khitan language

Each Khitan example is presented in a four-line format.

The first line displays the Khitan Small Script text in linearized form.

The second line provides the romanization.

The third line contains the phonetic transcription. Romanization and phonetic transcription follow the system outlined in §2.3.1. A full list of romanization readings used here compared with readings used in Chinggeltei & Wu & Jiruhe (2017), Shimunek (2017), Wu & Janhunen (2010), and Kane (2009) is provided in Appendix B. This appendix also includes comments to explain readings that relevantly differ from the other romanization systems.

The fourth line presents morpheme-by-morpheme glosses in English.

At the end of the example a line for English translation is added. The translation provided here aims to be as literal as possible. When the structural differences between English and Khitan do not allow to produce a sensible literal translation, the text is adapted to fit English structures. In such cases, in order to preserve a visible trace of the process made from the original text to the adapted translation, a literal translation follows between round brackets. Words and expressions implied by the text are added in square brackets when needed to contextualize, or to make the sentence fit to English grammar.

In the comments, Khitan language is written in italic using the IPA symbols. In morpheme labels—also in *Italic*—caps indicate changing segments in allomorphs. For example, converbial morpheme *-Ai* implies allomorphs *-ai*, *-ei*, *-oi*, *-ui*. *A* stands for *a/e/o/u*, *C* stands for *tʃ/tʃʰ*, *E* stands for *e/o/(u)*, *K* stands for *k/q*, *Kʰ* stands for *kʰ/qʰ*, *R* stands for *r/n*, *T* stands for *t/tʰ*.

Romanization and phonetic transcription of other languages

Italics are used for romanization and phonetic transcription of other languages as well, except when specified here below.

a) Sinitic

Chinese proper names at the first occurrence are written in block letters using toneless pinyin, followed by sinograms, pinyin, and – when needed – translation, all between round brackets. In further occurrences, only toneless pinyin is used.

Chinese words and sentences are written in sinograms followed by pinyin.

When needed, Chinese words are followed by diachronic reconstructions in chronological order.

Old Chinese and Early Middle Chinese reconstructions are from Baxter & Sagart (2014), Late Tang Northwestern Chinese reconstructions are based on the work of South Coblin (1994), which collects sources and reconstructions of Common Shazhou dialect, Late Tang Chang'an dialect, and Colloquial Shazhou. Late Middle Chinese and Early Middle Chinese are from Pulleyblank (1991).

b) Mongolic

Romanization for Middle Mongol written in Sinograms, 'Phags-pa, and Arabic script follows Rybatzki (2003), with the substitutions *ǰ* vs. *j* and *č* vs. *c*, to increase uniformity with the system used for Middle Mongol in Uigur-Mongol script.

Romanization for Middle Mongol written in Uigur-Mongol script and Written Mongol (term here used to imply Classical and Modern Mongolian written in Uighur-Mongol script) follows Kara (2009).

Khalkha is written in Cyrillic followed by phonetic reconstruction in IPA.

Phonetic reconstruction of Proto-Mongolic was elaborated on Janhunen (2003a) with additions from Svantesson *et al.* (2005). Phonetic reconstruction of Proto-Serbi-Mongolic was derived from the Proto-Mongolic romanization. The systems used for Proto-Mongolic and Proto-Serbi-Mongolic phonetic reconstructions are explained in detail in §2.1.4 and §2.1.5, respectively.

c) Others

Old Turkic romanization follows Clauson (1972). In some cases I included alternative

romanizations as well.¹

Japanese is romanized in the Hepburn system.

¹ Alternative romanizations of Old Turkic were pointed out to me by prof. Khabtagaeva, to which I owe my gratitude for correcting my quotations of Turkic forms, supplying so my shortcomings in a field where I am not a specialist.

0. Preface

0.1 Purpose of this research

This thesis investigates selected aspects of Khitan verbal morphology. While previous scholarship has made valuable contributions to this area, no specialized monograph currently exists. The principal lacuna concerns our understanding of the grammatical categories encoded by verbal forms. Existing research has focused predominantly on causative morphemes, the classification of inflectional morphemes into finite forms, verbal nominals, and converbs, and gender agreement phenomena. By contrast, the TAME (tense, aspect, modality, evidentiality) categories – for finite forms and verbal nominals – and temporal and circumstantial relations – for converbs – expressed through inflectional morphology have received comparatively limited attention. The present study addresses this gap by examining TAME categories, and temporal and circumstantial relations, prioritizing analysis of those morphemes best attested in the available corpus.

0.2 Structure of the thesis

Chapter 1 establishes the historical, geographical, and philological foundations for this study. It begins with an account of the Khitan people's origins, the formation and territorial expansion of the Liao dynasty, and the sociopolitical context of Khitan civilization. The chapter then surveys the primary sources, providing brief descriptions of Khitan Large Script and Sino-Khitan materials, followed by a detailed exposition of Khitan Small Script, which constitutes the basis of the present analysis. The chapter concludes with a catalogue of the inscriptions examined, specifying the number of lines and textual blocks from which examples have been extracted. These examples are compiled alphabetically in Appendix A, forming the analytical corpus of this study.

Chapter 2 introduces the Khitan language from a linguistic perspective. The first section addresses phylogenetic classification, situating Khitan within the broader Mongolic and Para-Mongolic language families. The second section surveys Khitan phonology and morphology, with systematic comparison to Mongolic languages, particularly Middle Mongol.

Chapter 3 analyzes selected verbal nominal morphemes. The chapter opens with a presentation of the analytical framework, introducing the grammatical categories under investigation. Since certain morphemes exhibit both nominal and finite functions, categories relevant to finite verb forms are also addressed. The analysis proceeds by first examining examples that corroborate existing scholarship, then turning to evidence that yields novel findings.

Chapter 4 examines the one morpheme exclusively attested in finite function.

Chapter 5 examines selected converbial morphemes, following a parallel structure to Chapter 3.

After establishing the analytical framework and relevant grammatical categories, the chapter analyses examples confirming previous research before presenting new discoveries.

Chapter 6 synthesizes the research findings, identifies unresolved questions, and proposes directions for future investigation.

1. Introduction

1.1 Historical overview

Khitan (契丹 *Qìdān*) was the language spoken by the Khitan people, the founders of Chinese imperial dynasty Liao (遼 *Liáo*, 907–1125). According to *Wei Shu* (Book of Northern Wei) and *Liao Shi* (History of Liao), the Khitan people stemmed from the Xianbei (鮮卑 *Xiānbēi*) tribal confederation. The Xianbei confederation controlled the territories north to the Chinese dynasties from late 1st c. CE until 4th c CE. In 4th c., several tribes claimed independence from the confederation. One of these were the Yuwen (宇文 *Yǔwén*). In year 344, the Yuwen were defeated by the Qian Yan state (前燕 *Qián Yān*, 337–370), one of the Sixteen Kingdoms. After the defeat in 344, a part of the Yuwen – the Kumo Xi tribe (庫莫奚 *Kùmò Xī*) – fled to the Songmo region (松漠 *Sōngmò*), situated in the central part of nowadays Chifeng prefecture in south-eastern Inner Mongolia Autonomous Region. The Kumo Xi were defeated in 388 by the Tuoba Wei dynasty (拓跋魏 *Tuòbá Wèi*, 386–581). After this event the Khitans became independent from the Kumo Xi and settled on the upper course of the Liao river. Their homeland was located in the basins of nowadays Shira Muren and Laoha rivers. This territory is today shared by the prefectures of Chifeng and Tongliao in Inner Mongolia, and is part of the historical region of Manchuria. The history of predynastic Khitans is divided in three phases: the Eight Tribes (八部 *Bā bù*), during Tuoba Wei and Sui (隋 *Suí*, 581–618) dynasties; the Dahe confederation (大賀 *Dàhè*), from early 7th c. to 730's; and the Yaonian confederation (遥辇 *Yáoniǎn*), from the 730s to 907. Abaoji (阿保机 *Ābǎoji*, Kh. *Apokij*) of the Yelü clan (耶律氏 *Yēlǜ shì*, Kh. *Jaruud miri*) – a part of the Diela tribe (迭剌部 *Diélà bù*, Kh. *Telaq nour*) – became tribal chieftain (夷里堇 *yilijin*, Kh. *iriken*) in 901, and founded the Khitan state (契丹国 *Qìdān guó*) in 907. In 916 he founded the Liao dynasty (遼朝 *Liáo cháo*). At the height of their expansion, the Khitans ruled over a territory roughly corresponding to present-day Russian Far South-East, part of North Korea, North-East China, and Mongolia. The dynasty had nine emperors, namely Taizu (太祖 *Tàizǔ*), Taizong (太宗 *Tàizōng*), Shizong (世宗 *Shìzōng*), Muzong (穆宗 *Mùzōng*), Jingzong (景宗 *Jǐngzōng*), Shengzong (聖宗 *Shèngzōng*), Xingzong (興宗 *Xīngzōng*), Daozong (道宗 *Dàozōng*), and Tianzuo (天祚 *Tiānzù*). In 1124, the Khitan were defeated by the Jurchen of the Jin dynasty (金 *Jīn*, 1115–1234), and some of them fled westwards. In a territory comprising nowadays Xinjiang and parts of nowadays western Mongolia, Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan, under the guide of Yelü

Dashi (大石 Dàshì or 達實 Dàshì) who became Emperor Dezong (德宗 Dézōng), they founded the Western Liao dynasty (西遼 *Xi Liáo*, 1124–1201), replacing in that area the rule of the Turkic Qarakhanid dynasty (840-1212).



Figure 1. Map of the Liao Empire in the height of its expansion. Author: Davide Rizzi, elaborated from the map in Wittfogel and Feng (1949).

1.2 Sources

The extant sources are classified primarily according to script system: those written in Khitan and those written in Chinese. Khitan-language materials are further subdivided into Khitan Large Script (henceforth, KLS) and Khitan Small Script (henceforth, KSS) documents. While KLS and Chinese sources are treated briefly here for completeness, extended discussion is reserved for KSS materials, which constitute the empirical foundation of this study.

KLS is a sinoform logographic writing system² that, according to *Liao Shi* (chapter 2), was created in 920 CE. Chinggeltei, Wu & Jiruhe (2017: 107-126, henceforth CWJ) catalog 2,109 graphs, of which approximately 200 are identified as deciphered and presented alongside their KSS equivalents (CWJ: 341-353). CWJ (18-19), on which information reported here is based, document 18 major KLS documents, enumerated below. Each inscription is provided with the following information in sequence: date of discovery, title in English, sinograms, and toneless pinyin, date of composition, and number of lines and graphs. Until n. 11, items are listed in chronological order according to the discovery date. Items from n. 12 to n. 14 are chronologically arranged according to composition date, since discovery date was not available. Items n. 15 and n. 16 are listed in alphabetical order, since neither date was available. Lastly, sources not consisting in stone stelae are listed, that are wooden tablets (n. 17) and a manuscript on paper (n. 18).

1. 1935, Jing'an Temple Stele 大遼大橫帳蘭陵君夫人建靜安寺碑 *Da Liao da hengzhang Lanling furen jian Jing'an si bei* (1072), 40 lines: 70 graphs
2. 1939, Gu Taishi Inscription 故太師銘石記 *Gu Taishi mingshi ji* (1053), 40 lines: 1800 graphs
3. 1951, Epitaph of Xiao Xiaozhong 蕭孝忠墓誌 *Xiao Xiaozhong muzhi*, (1089), 18 lines: 540
4. 1964, Epitaph of Yelü Yanning 耶律延寧墓誌銘 *Yelü Yanning muzhiming* (986), 19 lines: 270 graphs
5. 1965, Epitaph of Duke Xiao 故北宰相蕭公墓誌銘 *Gu bei zaixiang Xiao gong muzhiming* (1090), 15 lines: 320 graphs
6. 1975, Epitaph of the Great Prince of the North 北大王墓誌 *Bei dawang muzhi* (1041), 27 lines: 780 graphs
7. 1987, Epitaph of the Deputy Military Governor 大橫帳節度副使墓誌 *Da hengzhang jiedu fushi muzhi* (1114), 37 lines: 1630 graphs

² This definition is provided for convenience, though the actual situation is more complex. For detailed discussion of KLS's nature, see Janhunen (2012: 108-109) and Miyake (2017b: 36).

8. 1993, Epitaph of Yelü Qi 耶律祺墓誌銘 *Yelü Qi muzhiming* (1108), 46 lines: ca. 2840 graphs
9. 2000, Epitaph of Yelü Changyun 耶律昌允墓誌 *Yelü Changyun muzhi* (1084), 30 lines: ca. 870 graphs
10. 2002, Epitaph of the Princess of Yongning Prefecture 故永寧郡公主墓誌銘 *Gu Yongning jun gongzhu muzhiming* (1092), 36 lines: 1486 graphs
11. 2010, Stele of Dorngovi 蒙古國東戈壁省出土石碑 *Mengguguo Donggebi sheng chutu shibei*, 7 lines: 150 graphs
12. Epitaph dated to the Second Year of Qingning period 清寧二年墓誌 *Qingning ernian muzhi* (1056)
13. Epitaph of Tulibu 耶律突里不郎君墓誌銘 *Yelü Tulibu langjun muzhiming* (1081), 21 lines: 780 graphs
14. Epitaph of the Court Attendant 大金國郎君墓誌 *Da Jin guo langjun muzhi* (1176), 16 lines: 390 graphs
15. Epitaph of Grand Preceptor Liuyin 留隱太師墓誌銘 *Liuyin Taishi muzhiming*
16. Epitaph of Yelü Zhun 大遼國常袞耶律準墓誌銘 *Daliao guo changgun Yelü Zhun muzhiming*
17. 1999, Wooden Tablets in Khitan Large Script 契丹大字木牘 *Qidan dazi mudu*, 1st tablet front 63 lines: 212 graphs, back 67 lines: 236 graphs, 2nd tablet 1 line 27 graphs
18. 1954, Manuscript Nova N 176 俄藏契丹大字手寫本 *Ezang Qidan dazi shouxieben*, 128 pages: ca. 15360 graphs

Sources in Chinese include *Liao Shi* (遼史 *Liáo shǐ*, History of the Liao, 1344, henceforth LS), *Qidan Guo Zhi* (契丹國誌 *Qìdān guó zhì*, Records of the Khitan State, ca. 1265-1274, henceforth QDGZ), the *Yanbei Lu* (燕北錄 *Yānběilù*, Annals of Yanbei, 10th-11th c.), and the *Yanbei Zaji* (燕北雜記 *Yānběizǎjì*, Miscellaneous Notes on Yanbei, 11th c.). In addition to containing various types of information on the Khitan, they include some Khitan words transcribed into sinograms and glossed in Chinese. Some of these have been identified in KSS sources and are useful both for reconstructing the pronunciation of KSS graphemes and for reconstructing the Liao Chinese pronunciation, i.e. the variety of Chinese spoken in north-eastern China at the time of the Liao.

1.2.1 Khitan Small Script

Khitan Small Script is a Sino-form script (cf. Janhunen, 2012:108; Miyake, 2017b: 36), that according to LS (64), was created by Yelü Diela in an unspecified year that is commonly reconstructed as 925 CE (cf. Kane, 2009: 3). This term refers to writing systems that use the graphic strokes that make up sinograms, producing a new system that cannot be understood based on knowledge of the latter. Specifically, KSS graphs are generally composed of a small number of strokes. Sometimes they resemble or are identical to sinograms, but their pronunciation has nothing to do with the pronunciation of the latter. KSS graphs are phonograms, and their pronunciation corresponds to single phonetic segments or syllables. Therefore, a graph can represent a vowel, a consonant, or syllables of the type VV, VC, CV, CVV, CVC, VCV, VCC, and perhaps CCV and VCCV as well. Graphs are combined in blocks of two to eight graphs. When composing blocks, they are arranged in horizontal pairs read from left to right. The pairs are arranged one above the other and are read from top to bottom. When the total number of graphs is odd, the last graph is placed below the last pair in central position. Some blocks representing words that were considered important have a special structure. There may be a pair of graphs arranged in a vertical pair, or the initial grapheme in central position followed by the rest of the graphs arranged according to the normal structure. Graphs may also occur individually. The blocks, each of which constitutes a word form, are arranged in columns read from top to bottom and from right to left.

The possible types of blocks are shown in Table 1.

Single graph block	Two graphs block	More than two graphs even block	More than two graphs odd block	Special block type 1	Special block type 2
𐰺	𐰺 𐰽	𐰺 𐰽 𐰽 𐰺	𐰺 𐰽 𐰽 𐰺 𐰺	𐰺 𐰽	𐰺 𐰽 𐰺
ai	ai.en	na.ha.añ.er	ja.al.ha.a.ai	xong:di	del:h.ar.i

Table 1. Types of KSS blocks and their romanization

CWJ (341–353) list 453 graphemes, for 313 of which they provide a romanisation and a phonetic reading.

CWJ (19-22) list 44 monumental inscriptions engraved on stone steles. CWJ (22-23) list 17 minor inscriptions engraved on objects, and carved or painted on walls of tombs and pagodas.

For each monumental KSS inscription, the following information is provided in sequence: year of

excavation, English title, Chinese title (in sinograms and toneless pinyin), year of composition, and number of lines and blocks. The latter two data points are unavailable for certain inscriptions. For more exhaustive inventories, see Apatóczy & Kempf (2017: 115-122), CWJ (9-17), and Wu & Róna-Tas (2019: 74-75).

The inscriptions listed below are organized into three categories. Group A comprises inscriptions with documented excavation dates. Group B contains inscriptions for which excavation dates are unknown, but institutional acquisition dates are recorded. Group C includes inscriptions lacking both types of chronological information. Within Groups A and B, entries are arranged chronologically; Group C follows alphabetical order.

Group A:

1. Before 1922, Record of the Journey of the Younger Brother of the Emperor of the Great Jin Dynasty 大金皇帝都統經略郎君行記 *Da Jin huang di dutong jinlüe langjun xingji* (1134), 13 lines: 96 blocks
2. 1922, Eulogy for Empress Renyi 仁懿皇后哀冊 *Renyi huanghou aice* (1076), 32 lines: 575 blocks
3. 1922, Eulogy for Emperor Xingzong 興宗皇帝哀冊 *Xingzong huangdi aice* (1055), 36 lines: 861 blocks
4. 1930, Eulogy for Emperor Daozong 道宗皇帝哀冊 *Daozong huangdi aice* (1101), lid 6 lines: 36 graphs, stone 37 lines, ca. 1130 blocks
5. 1930, Eulogy for Empress Xuanyi 宣懿皇后哀冊 *Xuanyi huanghou aice* (1101), lid 4 lines: 16 graphs, stone 30 lines: ca. 620 blocks
6. 1942, Epitaph of Xiao Zhonggong 蕭仲恭墓誌銘 *Xiao Zhonggong muzhiming* (1150), lid, 3 lines: 9 blocks. Stone, 50 lines: 2490 blocks
7. 1950, Damaged epitaph of Xiao Linggong 蕭令公墓誌銘殘石 *Xiao Linggong muzhiming canshi* (1057), 32 lines: 594 blocks
8. 1962, Epitaph of the Late Mme. Yelü 故耶律氏銘石 *Gu Yelü shi mingshi* (1115), 25 lines: 695 blocks
9. 1975, Damaged epitaph of Prince Xu 遼國許王墓誌殘石 *Liaoguo xuwang muzhi canshi* (1105), lid 1 Line: 6 blocks, stone, front 30 lines, left 4 lines, back 30 lines, total: ca. 2700 blocks
10. 1983, Epitaph of Yelü Renxian 大遼國尚父於越宋王墓誌銘 *Da Liao guo shang fu yu Yue Song wang muzhiming* (1072), 70 lines: ca. 5000 blocks

11. 1991, Damaged epitaph found near Haitangshan 海棠山墓誌殘石 *Haitangshan muzhi canshi* (Unknown date), 13 lines: 300 blocks
12. 1991, Epitaph of Yelü Zongjiao 大契丹國廣陵君王墓誌銘記 *Da Qidanguo Guanglin jun wang muzhimingji* (1053), 33 lines: 936 blocks
13. 1993, Epitaph of the Supreme General of Zhenguo 鎮國上將軍墓誌銘 *Zhenguo Shangjiangjun muzhiming* (1170), 51 lines: ca. 1500 blocks
14. 1994, Epitaph of the Prefect of Zhuozhou 涿州刺史墓誌殘石 *Zhuozhou Cishi muzhi canshi* (1108) Zhuo 涿, 26 lines: ca. 230 blocks
15. 1995, Epitaph of Yelü Dilie 南瞻部洲大遼國故迪烈王墓誌文 *Nanzhanbuzhou Da Liao guo Gu Dilie wang muzhiwen* (1092), 41 lines: ca. 1690 blocks
16. 1995, Epitaph of Yelü Han Gaoshi 韓耶律高十墓誌銘 *Han Yelü Gaoshi muzhiming* (Unknown date), 26 lines: ca. 750 blocks
17. 1995, Damaged epitaph of Prince Yelü Yongning 耶律永寧郎君墓誌銘殘石 *Yelü Yongning langjun muzhiming canshi* (1088), 43 lines: ca. 1060
18. 1996, Epitaph of Deputy Administrator Yelü 耶律副部署墓誌銘 *Yelü fubushu muzhiming* (1102), lid 27 lines, stone 27 lines, total: ca. 2000 blocks
19. 1996, Epitaph of Yelü Hongyong 耶律弘用墓誌銘 *Yelü Hongyong muzhiming* (1100), 32 lines: ca. 900 blocks
20. 1996, Epitaph of Yelü Han Dilie 耶律韓迪烈墓誌銘 *Yelü Han Dilie muzhiming* (1101), 34 lines: ca. 1350 blocks
21. 1997, Epitaph of Yelü Cite 耶律慈特墓誌銘 *Yelü Cite muzhiming* (1082), lid 2 lines: 15 characters, stone 28 lines: 915 blocks
22. 1997, Epitaph of the Imperial Consort of Song and Wei 故宋魏國妃墓誌銘 *Gu Song Wei Guo fei muzhiming* (1110), 24 lines: 642 blocks
23. 1997, Eulogy for the Imperial Grand Uncle 故太叔祖哀冊 *Gu Taishuzu aice* (1110), 25 lines: ca. 795 blocks
24. 1998, Epitaph of Yelü Zhixian 耶律智先墓誌銘 *Yelü Zhixian muzhiming* (1094), 27 lines: ca. 1000
25. 1999, Epitaph of Yelü Nu 耶律奴墓誌銘 *Yelü Nu muzhiming* (1099), stone front 24 lines, back 24 lines, total: ca. 1270 blocks
26. 2000, Epitaph of Shilu taishi 室魯太師墓誌碑 *Shilu taishi muzhi bei* (1100), 15 lines: 151 blocks

27. 2000, Epitaph of Xiao Tuguci 蕭圖古辭墓誌銘 *Xiao Tuguci muzhiming* (1068), 26 lines: 740 blocks
28. 2001, Epitaph for the Prince of Liang 梁國王墓誌銘 *Liang guowang muzhiming* (1107), 29 lines: 1280 blocks
29. 2003, Epitaph of Princess Yongqing 永清公主墓誌 *Yongqing gongzhu muzhiming* (1095), 32 lines: ca. 1330 blocks.
30. 2004, Epitaph of Mme. Han, second wife of the imperial son-in-law Xiao Temei-Kuoge 蕭特每-闊哥駙馬第二夫人韓氏墓誌銘 *Xiao Temei-Kuoge fuma di'er furen Han shi muzhiming* (1078), 32 lines: 840 blocks
31. 2004, Epitaph of Xiao Jushi 蕭局使墓誌銘 *Xiao Jushi muzhiming* (1175), lid 2 lines: 13 characters, stone 33 lines: ca. 1350 blocks
32. 2007, Epitaph for Yelü Xiangwen 耶律詳穩墓誌 *Yelü Xiangwen muzhi* (1091), front 39 lines: 1440 blocks, back 9 lines: 190 blocks

Group B:

33. 2002, Epitaph of Yelü Diligu 耶律迪里姑墓誌銘 *Yelü Diligu muzhiming* (1102), 31 lines: ca. 1020 blocks
34. 2007, Epitaph for Xiao Dilu 蕭敵魯墓誌銘 *Xiao Dilu muzhiming* (1114), lid 25 lines: 580 blocks, stone 26 lines: 520 blocks
35. 2009, Epitaph for Gu Shizhong 故侍中墓誌銘 *Gu Shizhong muzhiming*, 33 lines: 1700 blocks
36. 2009, Epitaph for Yelü Taishi, the son of Yelü Xiangwen 耶律太師墓誌銘 *Yelü Taishi muzhiming* (1101), 26 lines: ca. 1040 blocks
37. 2009, Epitaph for Wotelan 耶律斡特懶墓誌銘 *Yelü Wotelan muzhiming* (1099), 22 lines: ca. 1000 blocks
38. 2014, Epitaph of Xiao Chala Xianggong 蕭查拉相公墓誌銘 *Xiao Chala Xianggong muzhiming* (1113), 27 lines: ca. 800 blocks

Group C:

39. Epitaph for Gu Taishi 大遼國故太師墓誌銘 *Da Liao guo Gu Taishi muzhiming* (1073)
40. Epitaph for Xiao Hudujin Shenmi 蕭胡睹堇審密墓誌銘 *Xiao Hudujin Shenmi muzhiming* (1091), 39 lines: ca. 1480 blocks

41. Epitaph of Xiao Huilian 蕭回璉墓誌銘 *Xiao Huilian muzhiming* (1080), lid 3 lines: 14 blocks, stone, 32 lines: ca. 840 blocks
42. Epitaph for Yelü Jue 耶律玦墓誌銘 *Yelü Jue muzhiming* (1071), 46 lines: 2530 blocks
43. Epitaph of Yelü Pusuli 耶律蒲速里墓誌碑銘 *Yelü Pusuli muzhibeiming* (1105), lid 2 lines: 26 characters, stone 25 lines: 800 blocks
44. Epitaph for Yelü Tianni 耶律天你太師墓誌銘 *Yelü Tianni taishi muzhiming* (1109)

The titles of the minor KSS inscriptions are listed in alphabetical order according to their abbreviations. For each inscription the following information is provided in sequence: Abbreviation in Romanization and toneless pinyin, and full title in English, sinograms and toneless pinyin. The information provided here is based on the lists available in CWJ (22-23) and Wu & Róna-Tas (2019: 75-76).

1. *Ba er* 巴二: Writings on the wall of the Bar Hada Cave II, 巴拉哈达洞壁黑书（之二）, *Balahada dongbi heishu (zhi er)*
2. *Ba san* 巴三: Writings on the wall of the Bar Hada Cave III, 巴拉哈达洞壁黑书（之三）, *Balahada dongbi heishu (zhi san)*
3. *Ba yi* 巴一: Writings on the wall of Bar Hada Cave I, 巴拉哈达洞壁黑书（之一）, *Balahada dongbi heishu (zhi yi)*
4. *Bao* 寶: Inscription on the back of a Baodi Mirror, 宝坻镜北铭文, *Baodi jingbei mingwen*
5. *Guo* 櫛: Writings on a Muguo Fresco, 木椁壁画题字, *Muguo bihua tizi*
6. *Qing* 慶: Writings on a Qingling Fresco, 庆陵壁画题字, *Qingling bihua tizi*
7. *Shou* 壽: Inscription on a Shouchang Coin, 寿昌钱铭文, *Shouchangqian mingwen*
8. *Ta er* 塔二: Writings on the wall of the Wan Bu Hua Yan Jing Pagoda II, 万不华严经塔塔壁题字（之二）, *Wanbuhua yanjing tatabi tizi (zhi er)*
9. *Ta yi* 塔一: Writings on the wall of the Wan Bu Hua Yan Jing Pagoda I, 万不华严经塔塔壁题字（之一）, *Wanbuhua yanjing tatabi tizi (zhi yi)*
10. *Wan* 完: Inscription on the back of a Wanyantong Bronze Mirror, 完颜通铜镜镜背铭文, *Wanyantong tongjing jingbei mingwen*
11. *Wu* 烏: Writings on the cliff of Ulaanhada, 乌兰哈达石崖黑书, *Wulanhada shiya heishu*
12. *Yan* 硯: Writings on a Tricolored Glazed Inkstone and a Yellow Glazed Writingbrush Washer, 三彩釉研和黄釉笔洗黑书, *Sancaiyou yan he huangyou bixi heishu*

13. *Ye* 葉: Damaged Epitaph Found in Yemaotai, 叶茂台墓志残石, *Yemaotai muzhi canshi*
14. *Yu* 玉: Inscription on the Bottom of a Jade Cup, 玉魁底刻文, *Yukui kudi kewen*
15. *Yu er* 魚二: Inscription on a Fish-shaped Tally (II), 鱼苻 (之二), *Yufu (zhi er)*
16. *Yu yi* 魚一: Inscription on a Fish-shaped Tally (I), 鱼苻 (之一), *Yufu (zhi yi)*
17. *Yuan* 圓: Inscription on the back of a round bronze Mirror, 圆铜镜镜背铭文, *Yuantongjing jingbei mingwen*

1.2.2 The Corpus of the present study

KSS textual material for this study has been transcribed from the reproductions published in CWJ (866-1592). Selected passages are listed below alphabetically by inscription title (abbreviated), with corresponding line numbers. Block ranges are indicated after each line number using the format: hyphen + initial block number + slash + final block number.

Chala 6-37/46, 7-1-42, 8-1/49, 9-1/46, 10-1/41, 11-1/44

Daozong 1-1/10

Dilie 7-1/42, 8-1/45, 9-1/41, 12-1/48, 25-1/48

Diligu 3-1/36, 6-1/38, 7-1/38, 8-1/45

Dilu 7-1/23, 21-1/22

Gaoshi 1-1/25, 15-1/29, 16-1/29

Gu 6-1/36, 7-1/35, 9-1/32, 10-1/34, 25-1/22

Han Dilie 4-1/44

Hongyong 14-1/30

Hudujin 23-1/36

Huilian 4-1/39, 9-1/31

Jue 1-1/29, 2-1/50, 3-1/56, 4-1/56, 5-1/52, 7-1/57, 8-1/56, 10-1/56, 12-1/61, 16-1/58

Langjun 2-5/14, 3-1

Liang 3-1/51, 16-1/45

Nu 1-1/18, 12-1/32, 13-1/30, 14-1/31

Renxian 6-1/66, 20-1/64, 22-1/73, 23-1/72, 62-1/105

Renyi 3-1/15, 11-1/16

Tuguci 3-1/34, 4-1/38

Xiangwen 8-1/36, 10-1/32, 11-1-/38, 12-1/36

Xu 11-1/41, 52-1/39

Yongqing 25-1/47, 26-1/41, 31-1/32, 32-28

Zhen 4-1/29

Zhonggong 5-1/61, 6-1/57, 7-1/59, 8-1/60, 19-1/54, 20-1/57, 21-1/57, 22-1/60, 23-1/50, 24-1/50

Zongjiao 1-1/25, 11-1/32, 12-1/29, 19-1/30, 20-1/29

1.3 Historical Development of Khitan Studies

Prior to the 1920s, knowledge of the Khitan language was limited to approximately one hundred lexical items transcribed in Chinese characters and glossed in Chinese, preserved in historical texts including *Liao Shi*, *Qidan Guozhi*, *Yanbei Lu*, and *Yanbei Zaji*.

While a KSS inscription—the Langjun Inscription—had been known since antiquity, its linguistic identity had been misattributed by the modern period. Due to its Jin dynasty provenance, it was erroneously classified as Jurchen rather than Khitan (Zhao, 1618; Wylie, 1860).

The rediscovery of KSS began in 1922, when the Belgian priest Louis Kervyn excavated the Eulogy for Emperor Xingzong and the Eulogy for Empress Renyi in Barin Right Banner (Chifeng prefecture, Inner Mongolia) (Kervyn, 1923a, 1923b). Subsequent excavations have steadily expanded the corpus to its current extent (see §1.2.1).

KLS materials followed a similar trajectory of rediscovery. Although a KLS inscription at Jing'an Temple (靜安寺 *Jìng'ānsì*) near Chifeng had been identified as early as the nineteenth century, scholarly attention was only renewed following Yamashita's publication (1935) of this Jing'an Temple Stele. The second KLS inscription, the Gu Taishi Inscription, was discovered by Inaba (1939) in a Shenyang antique shop (Liaoning province). Continued excavations have since enlarged the KLS corpus to its present size (see §1.2).

The identification of these two scripts with the Small Script (小字 *xiǎozì*) and Large Script (大字 *dàzì*) referenced in *Liao Shi* (64, 2) was established by Jin Guangping (1962).

1.4 Research on Khitan Verbal Morphology

The discovery of new Khitan textual sources has generated extensive scholarship across various linguistic domains. For comprehensive surveys of the field, see Chinggeltei (2002), Kane (2009: 12-26, 2013), Wu & Janhunen (2010: 20-25), Janhunen (2012), Apatóczky & Kempf (2017), and Miyake (2017a). The present discussion focuses specifically on research addressing verbal morphology.

The foundational treatment of verbal morphemes appears in Chinggeltei et al. (1985: 140-145),

which established the categorical framework that has structured subsequent research: causative morphemes in derivational morphology, and finite forms, verbal nominals, and converbs in inflectional morphology. All finite forms were characterized as expressing past tense, and vowel harmony-governed allomorph pairs were identified, though grammatical gender had not yet been recognized. Chinggeltei (1992, 1999: 15-17) refined this framework, revising suffix pronunciations and the morpheme inventory.

Wu (2005, 2007) demonstrated the existence of grammatical gender in Khitan and its realization through agreement on numerals, adjectives, and verbs. Kane (2009: 144-158) integrated these findings on grapheme pronunciation and gender agreement into the established taxonomic structure, classifying previously identified but unclassified suffixes. Beyond the past tense category, Kane introduced a perfective category for certain converbs and clarified the overlap between finite forms and verbal nominals.

Ōtake (2015a) extended this overlap to additional morphemes and proposed the existence of number agreement on verbs. Ōtake (2015b) identified non-past finite form suffixes exhibiting gender agreement. Additional analyses of inflectional morpheme categories appear in Wu & Janhunen (2010) and Róna-Tas (2017).

1.5 Aims/Focus of the Present Study

Research on TAME categories (tense, aspect, modality, evidentiality), as well as on temporal and circumstantial relations, in Khitan verbal inflection remains in its early stages. To my knowledge, no systematic study has been devoted to this topic. Consequently, this thesis focuses on the expression of these categories. Given the scope limitations of a single study, I examine in depth only five of the fifteen inflectional morphemes identified here: two verbal nominals (*-Ar*, *-piR*), one finite form (*-liR*) and two converbs (*-Ai*, *-sel*).

2. The Khitan Language

The present chapter introduces relevant characteristics of the Khitan language. §2.1 deals with phylogenetical classification, while §2.2 treats typological classification. §2.3 is devoted to the phonological system, and §2.4 to morphology. Verbal inflection is introduced briefly in this section (§2.4.3), with detailed exposition reserved for the following chapters. As verbal inflection is the central concern of this thesis, each of the following chapters provides a dedicated treatment encompassing the methodological framework for the grammatical categories encoded by verbal inflectional morphemes, a review of previous scholarship, and analysis of attested examples. These are organized as follows: chapter 3 (Verbal Nominals), chapter 4 (Finite Forms), and chapter 5 (Converbs).

2.1 Phylogenetical Classification

Chinese historical sources indicate that the Khitan, Tabghach, Tuyuhun, Ruanruan, and Mongols all descended from the Donghu (东胡 *dōnghú* ‘Eastern Barbarians’). Khitan, Tabghach, and Tuyuhun descended from a part of the Donghu, namely the Xianbei. However, both the Donghu and the Xianbei confederations, were multi-ethnic political formations that almost certainly encompassed multiple languages, potentially from different language families. Furthermore, ethnogenetic descent does not guarantee linguistic continuity; language shift driven by political or social pressures is a well-documented phenomenon whereby ethnic groups adopt the languages of dominant populations.

2.1.1 Para-Mongolic Languages

The available evidence suggests that the Donghu confederation and its successor groups included at least some tribes speaking genetically related languages. One linguistic lineage evolved into Proto-Mongolic, the ancestor of Middle Mongol and the modern Mongolic languages. Other lineages developed into the national languages Khitan, Tabghach, Tuyuhun. Ruanruan might have been a predecessor of Proto-Mongolic, or else, a different lineage. Furthermore, we have traces of a language which was maybe a predecessor of Proto-Mongolic, observable in some loanwords in Manchu-Tungusic languages preserving some quite archaic traits (e.g. intervocalic velar occlusive *VGV*, and sequence *ti/t^hi*, see §2.1.5).

Khitan, Tabghach, and old Mongolic-related loanwords were collected by Janhunen (2003b) under the term Para-Mongolic (Janhunen, 2003b).

This term implies languages parallel to Proto-Mongolic lineage, while at the same time avoiding any specification of their subgrouping.

2.1.2 The Serbi-Mongolic Hypothesis

Over the past decade, the term “Serbi-Mongolic” coined by Shimunek (2017) has gained currency as a higher-level classificatory label implying a bifurcation into two primary branches. The first branch, Mongolic, descends from Proto-Mongolic and encompasses Middle Mongol and the contemporary Mongolic languages. The second branch, Serbi, derives its name from Xianbei – reconstructed from 鲜卑 *xiānbēi* (OC **sar-pe*)³ – and possibly from the later Xianbei successor confederation, the Shiwei (室韃 *shìwéi*, EMC **syit-hjw+j*), whose ethnonym may represent the phonological evolution of “Xianbei”.

Some scholars treat Serbi as a genetic subgroup in the strict sense. Shimunek (2017: 35), for instance, posits Proto-Serbi as the common ancestor of Khitan, Tabghach, and Tuyuhun.

2.1.3 Terminological Framework Adopted in This Study

The present study employs Serbi-Mongolic as an umbrella term encompassing all populations and languages derived from the Donghu confederation, i.e. Mongols, Khitan, Tabghach, Tuyuhun, Ruanruan, and Mongolic-related loanwords in Manchu-Tungusic. Languages of the Mongols constitute the Mongolic branch. On the other hand, in spite of historical evidence of common Serbi descents for Khitan, Tabghach, and Tuyuhun peoples, we currently have not sufficient lexical evidence to demonstrate that their languages constitute a cohesive genetic unit descended from Proto-Serbi. Unlike cases of linguistic punctuation (Dixon, 1997) – wherein a dominant language fragments into daughter languages across different geographical regions, as occurred with Latin or Middle Mongol – the Serbi languages appear to have diverged from the tribal complex individually at different chronological stages rather than through simultaneous fragmentation of a unified linguistic ancestor. As for Ruanruan, its taxonomical position with respect to the Mongolic and Serbi branches remains uncertain (see § 2.1.1).

³ The first similar reconstruction was by Pelliot (1921: 331), who reconstructed the word underlying 鲜卑 as **sārpi*.

2.1.4 Proto-Mongolic Phonetic Reconstruction

Proto-Mongolic reconstruction is here written in IPA. The reconstruction used here has two main sources, that are Janhunen's Proto-Mongolic (Janhunen, 2003a) and Svantesson *et al.*'s Old Mongolian (Svantesson *et al.*, 2005: 98-139).

Proto-Mongolic had seven vowels, i.e. **a, *e, *i, *o, *ø, *u, *y*

Proto-Mongolic had a twofold phonation contrast for occlusives and affricates, i.e. voiceless aspirated vs. voiceless unaspirated.

Proto-Mongolic consonant inventory included the occlusive phonemes **p, *tʰ, *t, *kʰ, *k*. The labial series had only the unaspirated member **p*. Velar occlusives **kʰ* and **k* had two allophones each depending on the vowel harmony class of words ([kʰ] and [k] in front vocalic words, and [qʰ] and [q] in back vocalic words). The system adopted here is phonetic—not phonemic—so allophones are explicitly noted.

There was one affricate series articulated in post-alveolar position, i.e. **ʃʰ* and **ʃ*.

Fricatives had no phonation contrast and included alveolar **s* and glottal **h*.

Sonorants included labial, alveolar, and velar nasals **m, *n, and *ŋ*, alveolar lateral approximant **l*, alveolar vibrant **r*, and palatal glide **j*.

Sonorants **ŋ, *l* and **r* could not occur in word-initial position.

Consonant clusters could consist only of two segments and were allowed only in medial position.

Consonant allowed to be in syllable final position were limited to **m, *n, *ŋ, *l, *r, *s, *p, *t*, and **k* [k/q].

2.1.5 Proto-Serbi-Mongolic Reconstruction

Proto-Serbi-Mongolic reconstruction is here written in IPA. The reconstruction used here is derived from the current knowledge on Proto-Mongolic, Khitan, Tabghach, Tuyuhun and Ruanruan.

Occlusive and fricative consonants had the same twofold phonation contrast that we observed from Proto-Mongolic, i.e. voiceless aspirated vs. voiceless unaspirated.

Vowels were eight, i.e. **a, *e, *u, *i, *ø, *u, and *y*.

Occlusive consonants included **pʰ, *p, *tʰ, *t, *kʰ, and *k*. Velar occlusives **kʰ* and **k* had allophones due to vowel harmony, i.e. [kʰ/qʰ] and [k/q]. Like specified for Proto-Mongolic, for Proto-Serbi-Mongolic as well allophones will be noted.

There was one affricate series in post-alveolar position, i.e. **ʃʰ* and **ʃ*.

There were an alveolar and a glottal fricative i.e. **s* and **h*.

Sonorants included nasals **m, *n, *ɲ, *ŋ*, alveolar approximant lateral **l*, alveolar lateral **r*, palatal

glide **j*.

Aspirated labial occlusive **p^h* was preserved in Khitan, Ruanruan and Serbi-Mongolic loanwords in Manchu-Tungusic languages (it was preserved as such in Jurchen and developed into *f*- in Manchu). In Middle Mongol it developed into **h*-. In Middle Mongol in Uigur Script it was already lenited into Ø-. In peripheral Mongolic languages it developed into *h*- (Shira Yugur, Bonan), *f*- (Monguor, Santa), and *x*- (Dagur). In all other modern Mongolic languages it was lenited into Ø-. There is no evidence for Tabghach and Tuyuhun.

Sonorants **ŋ*, **l*, and **r* were not allowed in initial position.

Palatal nasal **ɲ* was preserved in Khitan, Tabghach, Ruanruan, and Serbi-Mongolic loanwords in Manchu-Tungusic languages. In Proto-Mongolic it merged with **n*. There is no evidence for Tuyuhun.

As for sound sequences, Proto-Serbi-Mongolic preserved **tuu/*ti* (**tI*) and **t^huu/*t^hi* (**t^hI*).⁴

In all daughter languages the harmonic contrast **uu/*i* was neutralized merging **uu* into **i*.

⁴ Actually, nor Serbi languages nor Ruanruan provide us sufficient evidence to reconstruct these sequences. Khitan does not provide any evidence so far. On the one hand Tab. *pitikf^hin* ‘scribe’ and R *pit^hi* ‘inscription’ could prove that **ti* and **t^hi* were preserved. On the other hand R *fīlo* ‘stele’ could prove the contrary for Ruanruan, i.e. **ti* had developed into *fī*. In fact, these data are to be considered cautiously, since these words are all loanwords. Tab. *pitikf^hin* and R *pit^hi* are loanwords from Ch. 笔 EMC *pjit* MSM *bi* ‘paintbrush’, perhaps loaned through a Pre-Old-Tukic dialect. Ch. 笔 EMC *pjit* MSM *bi* is the source of OT *biti*:- ‘to write’ and *bitig* ‘inscription’ attested already in 8th c. CE (GC 299, 303). R *fīlo* ‘inscription’ is likely a loanword from Bulgar Turkic for ‘stone’. Unless we can determine when these loanwords entered the Serbi-Mongolic languages, we cannot establish whether they are evidence of unvaried **tI* and **t^hI* or **tI* > *fī* and **t^hI* > *f^hi* in native lexical stock. Tuyuhun has one certainly native word proving **t^h/_I* > *f^h*, i.e. *f^ho* ‘you’ < **t^hi* (cf. Vovin, 2015), but only one evidence out of 6 words attested in total, does not allow to draw any generalization. Evidence for this sound change is either internal to Mongolic (MM *čī* ‘you (sg.)’ vs. *ta* ‘you (pl.)’ < PPM **t-i* [2-PRON.SG] vs. **t-a* [2-PRON.PL]) (Janhunen 2003a, Nugteren 2011) or from Serbi-Mongolic loanwords into Manchu-Tungusic (see Poppe, 1966; Hölzl, 2017), e.g. Al. *tirkən* ‘twelve’ < **tir-* ‘two’ (cf. *op. cit.*).

2.2 Typological classification

Typologically Khitan shares most features with Mongolic languages. Features typical of Mongolic languages are:

- a) A certain degree of intolerance for sonorants as word-initial, at least for native lexicon. Proto-Mongolic had no *ŋ*-, *l*-, and *r*-, but permitted *m*-, *n*-⁵. Modern Mongolic languages have increased tolerance due to contact with languages such as Russian, Chinese, or Tibetan
- b) Morpho-phonetical constraints on the sounds co-occurring in the same word-form (vowel harmony, and consequential allophones of velar consonants)
- c) Agglutinative morphology. Word forms are built out of sequences of segmental isolative morphemes, i.e. one morpheme expresses only one grammatical category. An exception to this are Middle Mongol gender marked morphemes, which encode both TAME and gender.
- d) Morphemes are all suffixes (morphemes all follow the root or stem)
- e) The category of number exists, but is not obligatorily expressed (e.g. plural forms are not needed after numerals higher than ‘one’). Middle Mongol shows a certain degree of number agreement on verbal nominals.
- f) No gender category (with the exception of Middle Mongol)
- g) Exclusive use of left-branching syntax (A-N word order, i.e. adjectives, numerals, demonstrative pronouns, and relative clauses precede the nominal head; secondary clauses precede the main clause)
- h) More broadly speaking, Mongolic languages are head-final (besides dependent-head word order in NPs mentioned in (g), we find the same type of word-order in APs, i.e. noun-adposition, and in VPs, i.e. arguments-verb)
- i) Secondary clauses are formed by means of verbal nominals determining nominal heads (relative clauses), and converbs (coordinate and subordinate clauses). Other two common means of forming subordinate clauses are verbal nominals marked by nominal cases (quasi-converbs), and verbal nominals—usually marked by nominal cases—followed by postpositions.

The mentioned features will be considered below with respect to the Khitan languages. Where no particular remark is needed I will just note “confirmed”.

- a) Tolerance to initial sonorants is quite high. In native items, only *ŋ*- and *r*- are not allowed,

⁵ Recent advancements in Tabghach and Khitan studies allow us to state that Proto-Serbi-Mongolic permitted initial *ŋ*- as well.

- while *m-*, *n-*, and *ŋ-* are present. Initial *ŋ-* is allowed in Chinese loanwords. It remains unclear whether *l-* is attested only in Chinese loanwords, or is present in native items as well
- b) Vowel harmony is present, as well as harmony-conditioned velar occlusive allophones. The type of vowel harmony is closer to the Manchu type (high vs. low) than to the Mongolic and Turkic types (front vs. back). Further details are generally given in §2.3.3, and more specifically explained in §2.3.3.2
 - c) Khitan has a higher level of fusion on the parametric scale isolate-fusional (Comrie, 1981; Velupillai 2012), than most Altaic languages. This characteristic is specifically observable in the presence of cumulative morphemes with value 2, i.e. simultaneously two different grammatical categories. To date there are two examples available, i.e. ordinal markers and tense-aspect markers expressing gender category as well. A similar situation is found in Middle Mongol, although there verbal inflectionals are gender marked, while ordinal numerals are not
 - d) Confirmed
 - e) Plural marking is not needed after numerals, but it is not prohibited. It seems to be optional, maybe reflecting the emphasis the writer want to give to the plural category in certain situations. According to my analysis, number agreement markers on verbs identified in previous research cannot be confirmed yet. No number agreement markers on adjectives seem to exist. However, a phenomenon comparable to agreement is observable.
 Attributively used nouns tend to agree in number with the nominal head, e.g. 百令 女 *<mo.t p.ar> mo-t^h p^har* [female-PL person.PL] ‘wives’, 百令 子 列 出 *<mo.t b.h.añ> mo-t^h paq-añ* [female-PL child.OBL-PL] ‘daughters’, 千令 子 列 出 *<ai.d b.h.añ> ai-t paq-añ* [male-PL child.OBL-PL] ‘sons’
 - f) Khitan and Middle Mongol are the two exceptions to the overall absence of the category of grammatical gender within Altaic. For further details, see §2.4.2.4
 - g) Confirmed
 - h) Confirmed
 - i) Confirmed

2.3 Phonology

2.3.1 Romanization and Phonetic Transcription

The romanization used here is mainly based on the table in CWJ 341-353. When my romanization of a graph differs from the value given in CWJ, it will be specified in Appendix B.

The romanization system used here presents the following conventions:

- a) the fortis elements in the occlusive pairs are represented by <p>, <t>, <k>, and <q>
- b) the lenis elements in the occlusive pairs are represented by , <d>, <g>, and <h>
- c) the alveolar affricate pair is represented by <ts>/<dz> (fortis/lenis)
- d) the post-alveolar affricate pair is represented by <c>/<j> (fortis/lenis)
- e) the fricatives are represented by <f>, <s>, <sh>, <zh>, and <x>; the liquids, including a lateral approximant and a vibrant, are rendered respectively with <l> and <r>
- f) the nasals are rendered with <m>, <n>, <ñ>, and <ng>; the approximants are romanized into <i> and <u>; vii) the vowels are romanized into <a>, <e>, <i>, <o>, <u>, <i> and <ü>

In summary, for the sake of convenience in comparing data of this study with data in other studies, I followed the praxis—common in Mongolic linguistics—of romanizing fortis/lenis pairs by letters that in most European languages represent unvoiced/voiced opposition, e.g. p/b, t/d, k/g, ts/dz, and c/j.

Further conventions applied in the present study need more explanation, which is given here below. Like in other studies on Khitan—for instance Kane (2009), Wu & Janhunen (2010), and CWJ—I employ some letter combinations or diacritics for the sake of simplicity, e.g. <sh> for [ʃ], <zh> for [ʒ], ñ for [ɲ], etc.

Phoneme /q/, that here I render in phonetic transcription as [q], might have had a voiced fricative allophone [ɣ] or [ʁ]. Maybe for these reason the abovementioned studies in romanized it as <h>. Due to uncertainty on the rules of allophone distribution, in phonetic transcription I provisionally note [q] in all cases. Nevertheless, in romanization I choose continuity with previous studies since they are based on a correct intuition.

Unvoiced fricative phoneme /x/ might have had allophonic realizations [x/χ] in front-back opposition according to vowel harmony. This phoneme is mostly represented by graph 𐰢 <x>. The existence of front-back allophones is questioned by the fact that this graph is used in both front and

back words (whereas, for instance graphs 九 / ㄅ <g/h> [k/q], ㄑ / ㄑ <k/qa> [k^h/q^ha], and ㄒ / ㄒ <ge/ha> are clearly distributed according to a front-back contrast). I decided to provisionally transcribe /x/ as [x] in all cases, and to follow Kane's and WJ's romanization for ㄨ <x>, ㄨ <xa>, ㄨ <xe>, ㄨ <xo>, ㄨ <xu>, ㄨ <xua>.⁶

The approximant [j] is mainly rendered by <i> in prevocalic position, e.g. ㄢ <iau> [jau]. However, graph n. 20 ㄢ has two pronunciations, namely [j] (word-initial) and [ei] (word final), and it is romanized following WJ and CWJ, i.e. <y>.

The approximant [w] is mainly rendered by <u> in prevocalic position, e.g. ㄨ ㄢ ㄨ <tau.su.o.ui> [tauswoui]. In Chinese loanwords, the graph n.70 ㄨ is used in onset position. It is uncertain whether it represented [w] or [v]. It is romanized as following Kane, WJ, and CWJ, i.e. <w>.

In the phonetic transcription, I follow the phonetic system outlined in §2.3.2 and §2.3.3. The main difference with the romanization system lays in the fact that in the case of phonetic transcription the fortis/lenis opposition in occlusives and affricates follow the hypothesized phonation, i.e. voiceless aspirated vs. voiceless unaspirated. Thus, the pairs are p^h/p, t^h/t, k^h/k, q^h/q, ts^h/ts, and tʃ^h/tʃ.

The correspondences between letters used in romanisation and IPA symbols used in the phonetic transcriptions are summarized in Table 2 below, in alphabetical order.

Romanization	a	b	c	d	dz	e	f	g	h	i	ĩ
Transcription	a	p	tʃ ^h	t	ts	e	f	k	q	i ~ j	u

Romanization	j	k	l	m	n	ng	ñ	o	p	q
Transcription	tʃ	k ^h	l	m	n	ŋ	ɲ	o	p ^h	q ^h

Romanization	r	s	sh	t	ts	u	ü	w	x	zh
Transcription	r	s	ʃ	t ^h	ts ^h	u ~ w	y	w (or v?)	x	ʒ

Table 2. Romanization and transcription

Two other diacritics are ° (superscripted circle) and _n (subscripted number).

The circle indicates additional dot, e.g. ㄢ <jur> *ʃur* vs. ㄢ <jur°> *ʃur*. Mostly, the additional dot

⁶ CWJ changed ㄨ <x> to <h>.

implies gender change from feminine to masculine. The lexical meaning remains the same. On the other hand, there is still no common consensus on whether the additional dot implies a change in pronunciation.

In some cases, the additional dot does not mean gender change, but pronunciation change. In such cases the additional dot is not noted in romanization. The contrasting elements in a pair are simply romanized according to their reading, e.g. 𐰺 <pu> *p^hu* vs. 𐰺 <fu> *fu*.

The number serves to distinguish graphs with the same pronunciation, e.g. 𐰺 <ge> *ke* vs. 𐰺 <ge₂> *ke*. Like in this example, graphs distinguished by numbers may be allographs, i.e. slightly different ways of writing the same graph. There are also several cases, where graphs bear the same pronunciation, but their graphic origin is different, i.e. 𐰺 <al> *al* vs. 𐰺 <al₂> *al*.

2.3.2 Consonant Inventory

The proposed consonant inventory for Khitan comprises 25 phonemes, of which 21 are native and four occur exclusively in loanwords.⁷ The native inventory includes four fortis-lenis pairs of stops distributed across labial [p^h, p], dental [t^h, t], velar [k^h, k], and uvular [q^h, q] positions. Two additional pairs of affricates are attested: alveolar [tʃ^h, tʃ], restricted to Chinese loanwords, and post-alveolar [ʈʃ^h, ʈʃ]. The fricative series consists of five consonants, four of which are voiceless: labiodental [f] (Chinese loanwords only), alveolar [s], post-alveolar [ʃ], velar [x]. The only voiced fricative is post-alveolar [ʒ], restricted to Chinese loanwords. The sonorant class, uniformly voiced, includes a dental lateral approximant [l], an alveolar vibrant [r], four nasals—labial [m], dental [n], post-alveolar [ɲ], and velar [ŋ]—and two approximants, labio-velar [w] and palatal [j].

It remains uncertain whether the inventory might comprise voiced labio-dental fricative [v] as an influence of some Northwestern Middle Chinese dialect, and uvular fricative [χ]. Therefore, the inventory may be oscillating between 25 and 27, and foreign phonemes from four to five.

Regarding the fortis-lenis opposition, this analysis provisionally adopts the framework proposed by Svantesson et al. (2005) for Middle Mongol. Assuming comparable articulatory contrasts, fortis consonants are characterized as voiceless aspirated, and lenis consonants as voiceless unaspirated.

⁷ This picture is provisional. For a more complete perspective, see Takeuchi (2011), Ōtake (2016), and Wu & Róna-Tas (2020b) on velars and uvulars, Wu & Róna-Tas (2019) on labial stops, Wu & Róna-Tas (2020a) on dental stops, and Takeuchi (2015) on the whole consonant inventory.

	Labial	Labio-dental	Labio-velar	Dental	Alveolar	Post-alveolar	Palatal	Velar	Uvular
Occlusive	p ^h p			t ^h t				k ^h k	q ^h q
Affricate					(ts ^h ts)	tʃ ^h tʃ			
Fricative		(f) v?			s	ʃ (ʒ)		x	χ?
Lateral approximant				l					
Vibrant					r				
Nasal	m			n		ɲ		ŋ	
Approximant			w				j		

Table 3. Consonants

2.3.3 Vowel Inventory and Phonotactics

The vowel system proposed here consists of five short vowel phonemes distributed across three height levels: one low unrounded vowel [a], two mid vowels contrasting in rounding—rounded [o] and unrounded [e]—and two high vowels also distinguished by rounding—rounded [u] versus unrounded [i].⁸

It is unclear yet whether there were long vowels. While certain orthographic sequences of identical vowels represent spelling conventions for short vowels, others appear phonetically authentic. Attested sequences are <a.a>, <e.e>, <i.i>, <o.o>, and <u.u>. The precise phonological interpretation of these sequences remains unclear: they may represent short vowels (V), long vowels (V:), short vowels in hiatus (V.V), or vowels separated by approximants. For example, the sequence <u.u> may represent [u], [u:], [u.u], or [uwu].⁹ When there are comparative data from Mongolic suggesting the presence of short [u] in Khitan as well, I transcribe *u*. On the other hand, in cases where a sequence of two [u] cannot be ruled out, there is still uncertainty on the actual realization (long vowel, hiatus, or approximant). For the moment being, I keep such cases open to the different possible interpretations and transcribe *uu* by default. E.g. 𐰚 𐰽 <xeu.ur₂> *xeuur* ‘spring’ cf. MM *qabur* [q^hapur] ‘id.’ vs. 𐰚 𐰽 <ju.un> *fun* ‘summer’ cf. MM *jun* [tʃun] ‘id.’. In these two divergent cases, in the former we cannot firmly establish whether we should transcribe *xewur* (PSM *p is lenited into approximant [w]), *xeu:r* ([w] plus [u] form a secondary long vowel [u:]), *xeur* ([w]

⁸ This picture is provisional. For a more complete perspective, see the studies on Khitan vowel system in Ōtake (2017) and Róna-Tas (2017).

⁹ Vowel length in Khitan was explored by Ōtake (2015c, 2017), and Róna-Tas (n.d.).

disappears letting [e] plus short [u] form a secondary diphthong [eu]), thus I conventionally transcribe *xeuur*; in the latter, the Mongolic date suggests that <u.u> sequence in <ju.un> is an ortographic convention, where the actual pronunciation should have short vowel, thus *fun*. Six diphthongs are attested: [au], [eu], [ai], [ei], [oi], [ui], and [ia].

Vowel harmony rules regulate the combination of vowels within a word form. The type of Khitan vowel harmony is not clear yet. For the sake of convenience, I provisionally describe it as a vowel harmony system based on backness. Phonetically, three vowels are back [a, o, u] and two are front [e, i]. However, vowel harmony operates according to a tripartite classification: back [a, o], front [e], and neutral [i, u]. When the initial vowel of a word is back, subsequent vowels must be either back or neutral. When the initial vowel is front, subsequent vowels must be front or neutral. When the initial vowel is neutral, subsequent vowels may belong to any category.

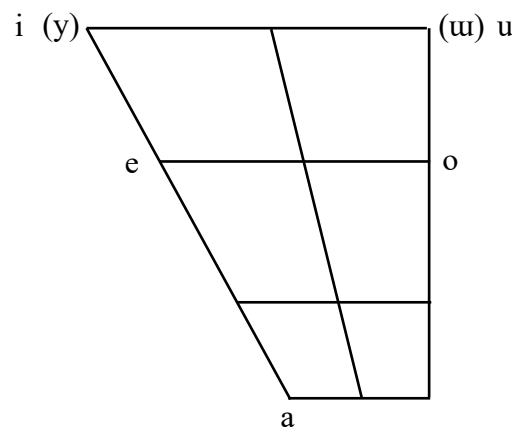


Figure 2. Vowels

2.3.3.1 Historical Development of Vowels

Proto-Serbi-Mongolic possibly had a symmetric eight vowel system comparable to Old Turkic and several modern Turkic languages distinguishing the two vowel harmony categories back [a, u, o, u] and front [e, i, ø, y].

The only merger common to Khitan and Proto-Mongolic is that of [u] into [i]. Two scenarios are possible: (i) [u] > [i] occurred at the Proto-Serbi-Mongolic stage prior to the divergence of daughter languages, or (ii) this merger developed independently in Mongolic and Khitan, potentially through areal convergence.

This merger causes the vowel harmony system of Serbi-Mongolic languages to introduce a third category, i.e. neutral, where [i] belongs.

A further merger, present in Khitan but not in Proto-Mongolic is that of [ø] and [y] with [u]. Follow

some examples to illustrate these sound changes. References for the words mentioned in examples are all collected in the word list at §2.5.

- a) PSM **u* > Kh. *u*; PM **u* > MM *u* [u] :

PSM **qu-r* ‘three’ > Kh. 𐰆𐰺𐰍 <h.ur> *qur* ‘id.’; PM **qur-pan* > MM *qurban* ~ *γurban* [q^hurpan ~ qurpan] ‘id.’;

PSM **sum* ‘arrow’ > Kh. 𐰆𐰺𐰍 <s.um> *sum* ‘id.’; PM **sum-un* ‘id.’ > MM *sumu(n)*¹⁰ ~ *sumun*¹¹ ‘id.’;

PSM **num* ‘bow’ > Kh. 𐰆𐰺𐰍 <n.um> *num* ‘id.’; PM **num-un* ‘id.’ > MM *numu(n)*¹² ~ *numun*¹³;

- b) PSM **ø* > Kh. *u* ; PM **ø* > MM *ö* [ø] :

PSM **tør* ‘four’ > Kh. 𐰆𐰺𐰍 ~ 𐰆𐰺𐰍 <t.ur ~ d.ur> *t^hur* ~ *tur* ‘id.’; PM *tør-pen* ‘id.’ > MM *dörben* ~ *dürben* [tørpen ~ tyrpen] ‘id.’;

PSM **øk-* ‘to give’ > Kh. 𐰆𐰺𐰍 <û> *u-* ‘id.’; PM **øk-* ‘id.’ > MM *ök-* ~ *ög-* [øk^h- ~ øg-] ‘id.’

PSM **søni* ‘night’ > Kh. 𐰆𐰺𐰍 <s.uñ> *sun* ‘night’; PM **søni* > MM *söni* ~ *süni* [søni ~ syni] ‘id.’

- c) PSM **y* > Kh. *u* ; MM *ü* [y] :

PSM **epyr* ‘chest, breast, front’ > Kh. 𐰆𐰺𐰍 <u.ur> *uur* ‘before’; MM *ebür* [epyr] ‘chest, breast, front’;

PSM **ehyl-* ‘cloud’ > Kh. 𐰆𐰺𐰍 <eu.ul> *euul* ‘id.’; MM *e’ülen* [eylen]; UM *egülen* ‘id.’

PSM **yni* ‘cow’ > Kh. 𐰆𐰺𐰍 *yn* ‘id.’; PM **yni-he-n* > MM *üne’en* ~ *üneyen* ~ *üniyen* [yneen ~ ynejen ~ ynijen] ‘id.’

- d) PSM **ap* > Kh *au* ; MM *ab* [ap] :

PSM **ap-* ‘take’ > Kh. 𐰆𐰺𐰍 <au.ul.ha> *au-ulqa-* [take-CAUS-] ‘to let take’, cf MM *ab-* ‘take’, *ab-qa’ul-* [take-CAUS-] ‘to let take’

The preceding examples include some graphs that can represent PSM **u*, as well as **ø* and **y*, e.g. 𐰆𐰺𐰍 <ur> *ur* represents **ur*, **ør* and **yr*, 𐰆𐰺𐰍 *ul* represents **ul* and **yl*. Example (d) included a consonant to vowel – and not vowel to vowel development. Nevertheless, it was included here to

¹⁰ H 137, in the original “Pfeil” ; N 505.

¹¹ HY, Muq (N 505).

¹² H 120, in the original “(Schieß-)Bogen”; N494.

¹³ HY, Muq (N 464).

exemplify graph 𐰢 in a back vocalic word, corroborating so the pronunciation *ul* rather than *yl*.

The vowels [u] and [y] are present, but exclusively in Chinese loanwords. These are attested by the fact that special graphs are used in Liao Chinese loanwords originally having [ɿ] (i assimilated to alveolar fricatives and affricates)/[ʮ] (i assimilated to retroflex fricatives), and [y]. It is unclear whether [ɿ] and [ʮ] were simply copied into Khitan, or were adapted as a phoneme more familiar for Altaic phonetics, since these assimilated vowels and retroflexes are typical of northern Sinitic, but fairly atypical for Altaic languages. However, as Gansu-Qinghai languages demonstrate, a high exposition to Sinitic influence can bring these phonemes to enter in the inventory of Altaic languages. At the current stage, where a definite answer is not possible yet, I provisionally subsume that these foreign phonemes were adapted into an Altaic-looking [u]. We cannot rule out that there may have been social variation, with speakers more exposed to Chinese pronouncing [ɿ]/[ʮ] and less exposed speakers pronouncing [u]. This matter needs further investigation.

2.3.3.2 Vowel Harmony

Vowel harmony rules were briefly mentioned in §2.3.3. However, the actual picture is more complex than that.

As a starting point, it is interesting to compare Khitan vowel harmony with Mongolic vowel harmony. Like we will be able to observe in §2.4.4 on phonetic developments from Proto-Serbi-Mongolic to Khitan compared with the analogous developments into Middle Mongol, we notice that Khitan anticipated some phenomena that took place in Mongolic only after the Middle Mongol stage, i.e. they are not observable in Middle or Classic Mongol, but in some, if not all, modern Mongolic languages.

The case in point here is labial harmony. Some modern Mongolic languages developed labial harmony, for instance Khalkha Mongolian vs. Oirat which did not. In Middle Mongol, and so we can assume the same for Proto-Mongolic, we had two main types of vowel harmony-conditioned morphemes: i) morphemes based on a non-labial archiphoneme *A* with two surface realizations [a] (back) and [e] (front); ii) morphemes based on a labial archiphoneme *U* with two surface realizations [u] (back) and [y] (front). In addition, there was a third type, where archiphonemes *A* and *U* were combined in a disyllabic morpheme. This type will be left aside for the present discussion.

By ‘development of labial harmony’ here is meant that *A*-based morphemes in some Mongolic languages, besides the two original allomorphs with [a] and [e], developed two further allomorphs

due to assimilation of allomorphs to preceding [o] (mid-high back labial) and [ø] (mid-high front labial) in adjacent syllables. Labial harmony is not selected by preceding [u] and [y], after which allomorphs with [a] and [e] occur. This evolution is illustrated for instance by comparison of Middle Mongol and Khalkha reflexes of Proto-Mongolic reflexive possessive suffix PM **-p^han/-p^hen*:

- a) MM *ama-'an*¹⁴ ‘one’s own mouth’ Khal. ам-аа [amaa] ‘id.’
- b) MM *kele-ben*¹⁵ ‘one’s own tongue’ vs. Khal. хэл-ээ [xɛlʒee] ‘id.’
- c) MM *dотора-'an*¹⁶ ‘one’s own inner part’ vs. Khal. дотор-оо [tɔtʰrɔɔ] ‘id.’
- d) MM *köl-iyen*¹⁷ ‘one’s own foot’ vs. Khal. хөл-өө [xɔlʒөө] ‘id.’

Khitan, at least two centuries before first Middle Mongol attestations, had already developed labial harmony. Some morphemes, besides allomorphs based on *a* and *e* exhibit allomorphs based on *o* and *u* as well, e.g. genitive 𐰇𐰏𐰢𐰏 <qa.ha.an> *q^haqā-an* [khagan.OBL-GEN] ‘of the khagan’, 𐰇𐰏𐰢𐰏 <em.en> *em-en* [place-GEN] ‘of the place’, 𐰇𐰏𐰢𐰏 <ong.on> *oŋ-on* [prince-GEN] ‘of the prince’, 𐰇𐰏𐰢𐰏 𐰇𐰏𐰢𐰏 ku.u₃.un *kuw-un* [person.OBL-GEN] ‘of the person’.

A second salient feature of Khitan vowel harmony is that unclear phonetic developments hinder exact prediction of allomorphs to be used in actual word forms, e.g. 𐰇𐰏𐰢𐰏 <ai.en> *aj-en* [father-GEN] ‘of the father’ vs. expected *𐰇𐰏𐰢𐰏 <ai.an> **aj-an*, 𐰇𐰏𐰢𐰏 <g.ur₂.en> *kur-en* [empire-GEN] ‘of the empire’ vs. expected *𐰇𐰏𐰢𐰏 <g.ur₂.un> **kur-un*.

A detailed analysis of Khitan vowel harmony system is beyond the scope of this study. For the moment being, I will limit myself to advance three preliminary observations: i) *e*-based allomorphs are more frequent than other types, especially on native items; ii) labial allomorphs occur mostly, although not exclusively, with loanwords; iii) categorization in two back vowels [a, o], one front vowel [e], and two neutral vowels [i, u] is reminiscent of Manchu vowel harmony system.

Provisionally, we could hypothesize that a process of vowel neutralization in non-stressed syllables like what happened in the evolution from Middle Mongol to modern Mongolic languages, had already affected Khitan before its attested stage. The development might have happened in three stages: 1) *e*-based allomorphs, due to neutralization of non-stressed vowels into *e* (or maybe *ə*), replaced all remnant allomorphs; 2) due to the massive introduction of loanwords, secondary *a*-based, *i*-based, *o*-based, and *u*-based allomorphs were created by analogy; 3) the secondary

¹⁴ H 6. Here and in the following three examples from Haenisch the hyphen is my addition to evidence morpheme boundaries.

¹⁵ H 1.

¹⁶ H 38

¹⁷ H 103

allomorphs were applied to some native words as well.

This matter is in need of further research.

2.3.4 Sound Changes from Proto-Serbi-Mongolic to Khitan

Here some sound sequences that can be reconstructed for Proto-Serbi-Mongolic are listed, comparing the sound changes happened in the Khitanic and the Mongolic lineages. Mongolic lineage is here exemplified by three diachronic stages, i.e Proto-Mongolic, Middle Mongol and Khalkha. When relevantly differing from Middle Mongol in sinograms, Arabic, and 'Phags-pa, data from Middle Mongol in Uigur-Mongolian script are added. Khalkha forms serve to show that often Khitan anticipated by many centuries sound changes that happened only in the modern phase of the Mongolic lineage. References for the words mentioned in examples are all collected in the word list at §2.5.

- a) PSM **apu*, **ap* > Kh. *au*; PM **apu*, **ap* > MM *abu*, *ab* [apu, ap] > Khal. *ава*, *ав* [aβə, aβ] :
 PSM **ap-* 'to take' > 𐰺𐰏 <au.> *au-* 'id.'; PM **ap-* 'id.' > MM *ab-* [ap-] 'id.' > Khal. *ав-* [aβ-] 'id.';
 PSM **t^hap* 'five' > 𐰺𐰏𐰤 <tau> *t^hau* 'id.'; PM **t^hap-un* > MM *tabun* [t^hapun] 'id.' > Khal. *тав(ан)* [t^haβ(ən)] 'id.'; MM *tab.tu'ar* [t^hap-t^huar] [five-ORD] 'fifth' > Khal. *тавдугаар* [t^haβtuga:r] 'id.';
 PSM **japu-* 'to go' > 𐰺𐰏𐰤 <y.au.> *jau-* 'id.'; MM *yabu-* [japu-] 'id.' > Khal. *яв-* [jaβ-] 'id.'
- b) PSM **epy* > Kh. *uu*; PM **epy* > MM *ebü*, *öbü* [epy, øpy], UM *ebü* > Khal. *өвө* [əβə] :
 PSM **epyl* 'winter' > Kh. 𐰺𐰏𐰤 <u.ul> *uul* 'id.'; MM *öbül* ~ *übül* [øpyl ~ ypyl], UM *ebül* 'id.' > Khal. *өвөл* [əβəl] 'id.';
 PSM **epyr* > Kh. 𐰺𐰏𐰤 <u.ur> *uur* 'former'; PM **epyr* > MM *ebür* 'bosom, front, southern slope' > Khal. *өвөр* [əβər] 'front, south'
- c) PSM **amu* > Kh. *amu*; PM **amu* > MM *amu* [amu] > Khal. *ама* [amə] :
 PSM **namur* 'autumn' > Kh. 𐰺𐰏𐰤𐰏𐰤 <n.am.ur₂> *namur* 'id.'; PM **namur* 'id.' > MM *namur* 'id.' > Khal. *намар* [namər] 'id.';
 PSM **amu-* 'to be calm, to be peaceful' > 𐰺𐰏𐰤𐰏𐰤𐰏𐰤𐰏𐰤 <am.ul.ha.añ> *amu-lqa-aṇ* [be.calm-CAUS-VN.AR.F] 'pacified, put to an end'; PM **amu-* 'to be calm' > MM *amu-* 'to finish, to be calm' > Khal. *амар-* [amə-r-] [be.calm-DER-] 'to rest'

- d) PSM **emy* > Kh. *umu*¹⁸; PM **emy* > MM *emü* [emy] > Khal. *өмө* [əmə] :
 PSM **emy*¹⁹ ‘front’ > Kh. 九 央 <um.ur₂> *umu-r* [front-DER] ‘first’; PM **emy-ne* [front-DER] ‘in front of, before’ > MM *emüne* ~ *ömüne* [emyne ~ ømyne] ‘front, south, opposite’ > Khal. *өмһө* [əmən] ‘front, in front of, south, before’
- e) PSM **ahu* > Kh. *au*²⁰; PM **ahu* > MM *a’u* ~ *awu* ~ *au* [au], UM *ayu* > Khal. *yy* [ʊ:] :
 PSM **fahu* ‘hundred’ > Kh. 𐰆𐰺 <jau> *fau* ‘id.’; PM **fahu-n* > MM *ja’un* ~ *jawun* [ʃaun], UM *jayun* ‘id.’ > Khal. *зүү(н)* [tsu:(n)]
- f) PSM **ehy* > Kh. *eu*; PM **ehy* > MM *e’ü* ~ *ewü* ~ *eü* [ey], UM *egü* > Khal. *үү* [u:] :
 PSM **ehyl* ‘cloud’ > Kh. 𐰆𐰺 <eu.ul> *eul* ‘id.’; PM **ehyl-en* ‘id.’ > MM *e’üle(n)* [eylen] ~ *ü:len* ~ *üilen* ‘id.’, UM *egüle(n)* > Khal. *үүл* [u:l];
 PSM **ehyr* ‘long time’ > Kh. 𐰆𐰺 <eu.ur₂> *eur* ‘age’; PM **ehyr-e* ‘long time’ > MM *e’üre* ‘long time’, WM *egüri* ‘long time, long ago, old, ancient’ > Khal. *үүрд* [u:r-t] ‘eternity, for ever’

From the preceding sound changes we can attempt the following generalizations, which remain, however, to be thoroughly tested, since not many examples are available yet.

- g) PSM **VK^hV* > Kh. *VK^h(V)*; PM **VK^hV* > MM *VqV* ~ *VkV* [VK^hV] > Khal. *VxV* [VXV] :
 PSM **jaq^ha* ‘dog’ > Kh. 𐰆𐰺 <ñ.aq> *jaq^h* ‘id.’ > PM **noq^hai* ‘id.’ > MM *noqai* [noq^hai] ‘id.’ > Khal. *нохой* [nəχɔi] ‘id.’
- h) PSM **VKV* > Kh. *VKV*; PM **VKV* > MM *VγV* ~ *VgV* [VKV] > Khal. *VrV* [VGV]
 PSM **naqa-* ‘maternal relative’ > Kh. 𐰆𐰺 ~ 𐰆𐰺 <na.ha. ~ na.a.> *naga-* ~ *naa-* ‘maternal relative’ > MM *nayaču* [naqaʃ^hu] ‘maternal uncle’ > Khal. *нагац* [nagats] ‘maternal relative’
- i) PSM **VhV* > Kh. *VØV*; PM **VhV* > MM *V’V* [VØV]; UM *VGV* [VKV] > Khal. *VV* [V:]
 PSM **fahu* ‘hundred’ > Kh. 𐰆𐰺 <jau> *fau* ‘id.’; PM **fahu-n* > MM *ja’un* ~ *jawun* [ʃaun], UM *jayun* ‘id.’ > Khal. *зүү(н)* [tsu:(n)]
 PSM **ehyl* ‘cloud’ > Kh. 𐰆𐰺 <eu.ul> *eul* ‘id.’; PM **ehyl* ‘id.’ > MM *e’üle(n)* [eylen] ~ *ü:len* ~ *üilen* ‘id.’, UM *egüle(n)* > Khal. *үүл* [u:l];
 PSM **ehyr* ‘long time’ > Kh. 𐰆𐰺 <eu.ur₂> *eur* ‘age’; PM **ehyr* ‘long time’ > MM *e’üre*

¹⁸ So far, I have found only one example for this development, so it remains in need for corroboration.

¹⁹ This reconstruction is tentative. As pointed out by Nugteren, MM *emü-ne* could be an assimilated nasalized form of **ebü-ne*, connected to the same root giving **ebür* ‘front, southern slope’ (N 329). Nevertheless, Khitan data seem to point to two different roots **epy-r* > *uur* ‘former’ and **emy-r* > *umur* ‘first’.

²⁰ So far, I have found only one example for this development, so it remains in need for corroboration.

‘long time’, WM *egüri* ‘long time, long ago, old, ancient’ > Khal. үүрд [u:r-t] ‘eternity, for ever’

Follow changes regarding segments.

j) PSM **n* > Kh. *n* ; PM **n* > MM *n* > Khal. н [n]

PSM **naq^ha* ‘dog’ > Kh. 伏 力 <ñ.aq> *naq^h* ‘id.’ > PM **noq^hai* ‘id.’ > MM *noqai* [noq^hai] ‘id.’ > Khal. нохой [nəχɔi] ‘id.’

PSM **nar* ‘sun’ > Kh. 𐰽 *nair* ‘day’; PM **nar-an* ‘sun’ > MM *naran* ‘id.’ > Khal. нар(ан) [nar(ən)] ‘id.’

PSM **y^hni* ‘cow’ > Kh. 𐰽 *y^hn* ‘id.’; PM **y^hni-he-n* > MM *üne’en* ~ *üneyen* ~ *üniyen* ‘id.’

PSM **je* ~ *ji* ‘one’ > 伏 𐰽 <ñ.e> *je*; PM **ni-ke-n*

k) PSM **p^h-* > Kh. *p^h-* ; PM **h-* > MM *h-* [h-]; UM Ø- > Khal. Ø-

PSM **p^ho-* ‘time’ > Kh. 𐰽 <po> *p^ho* ‘time, hour’; PM **ho-* ‘year’ > MM *hon* [hon], UM *on* ‘year’ > Khal. он [ɔn] ‘year (in dates)’;

PSM **p^hyr* ‘seed’ > Kh. 𐰽 𐰽 𐰽 <p.ur₂.s> *p^hur-s* [descendent-PL] ‘descendants’; PM **hyr-e* > MM *hüre* ~ *hüre-n* ‘seed, fruit’, UM *üre* ‘seed, fruit, effect’ > Khal. үр [ur] ‘seed, fruit, result’;

PSM **p^har* Kh. 𐰽 𐰽 <p.ar> ‘people’; MM *haran*, UM *aran* ‘man, person, people’ > Khal. ард [ar-t] [person-PL] ‘people, population’

2.4 Morphology

Khitan employs exclusively suffixing morphology, with all morphemes realized as post-stem concatenative elements. Functionally, morphemes divide into derivational and inflectional categories. Derivational morphemes generate new lexemes, while inflectional morphemes mark grammatical categories within an existing lexeme's paradigm.

2.4.1 Derivational Morphology

Derivational processes include denominal and deverbal verb formation. Two denominal verbalizers are attested: *-l-* and *-t-*. Morpheme *-L-* is represented by graph 𐰺 <l> *-l-*. Morpheme *-T-* is represented by graph 𐰻 <d> *-t-*. Further elements might be identified as denominal verbalizers, such as graphs 𐰽 <ur₂> *-ur-*, 𐰾 <s> *-s-*, and 𐰿 <j> *-ʃ-*. The grammatical categories of denominal verbalizers are still underexplored. For the moment being, we may compare some of them to Middle Mongol denominal verbalizers, due to the similar phonetic shape. In fact, *-l-* is reminiscent of MM *.lA-*, *-t-* of MM *.dA-*, *-s-* of *.sA-* or *.(i)s-*, and *-ʃ-* of MM *.ǰA-* or *.ǰi-*.

The deverbal verbal morphemes include two causative morphemes, i.e. simplex *-KA-* and compound *-L+KA-*. These are cognate with Middle Mongol causative morphemes *.GA-* and *.KA-* (after consonants) < PM **.KA-* (after sonorants) and **.K^hA-* (after obstruents), *. 'A-* and *. 'Ul-* (after vowels) < PM **.hA-* and **-hUl-*. Middle Mongol had also the compound *.l.GA-* < PM **.l.GA-* (cf. Janhunen, 2003: 11; Rybatzki, 2003: 65). This is rarely attested, and became more extensively used in Classical Mongol and modern Mongolic languages, often replacing *. 'Ul-* (cf. Rybatzki, 2003: 65).

Morpheme *-KA-* is represented by allomorphs 𐰽 <ha> *-qa-* (back), 𐰾 <ge> *-ke-* (front). Morpheme *-lKA-* is represented by allomorphs 𐰺 𐰽 <l.ha> *-lqa-*, 𐰽 𐰽 <al.ha> *-alqa-*, 𐰺 𐰽 <il.ha> *-ilqa-*, 𐰺 𐰽 <ol.ha> *-olqa-*, and 𐰺 𐰽 <ul.ha> *-ulqa-* (back), 𐰺 𐰾 <l.ge> *-lke-* and 𐰺 𐰾 <ul.ge> *-ulke-* (front).

Following the analytical framework adopted here, the Khitan causative—like its Mongolic counterparts—operates on valency rather than diathesis, adding one core argument to the verbal phrase. Under this analysis, whether a construction is interpreted as causative or passive depends on argument properties, particularly case marking and lexical semantics.

2.4.2 Nominal Inflection

Nouns possess an unmarked, unbound form traditionally analyzable as nominative singular but more accurately characterized functionally as unspecified for number and case.

The following sections provide overviews of the grammatical categories of nouns in Khitan.

Namely, §2.4.2.1 deals with number, §2.4.2.2 with case, §2.4.2.3 with possession, and §2.4.2.4 with gender. Section §2.4.2.5 is about inflection in numerals, while §2.4.2.6 is about inflection in adjectives. Following the tradition of Mongolic studies, numerals and adjectives are regarded as subclasses of the nominal word class. This is done because they present a main inflectional behavior in common with nouns, i.e. they can take nominal case morphemes. On the other hand, they present other behaviors specifically peculiar to their subclass. For this reason, they are dealt with in specific sections.

2.4.2.1 Number

Three plural markers partially exhibit semantic conditioning. The semantic classes delimited by plural morphemes are not fully transparent. Nevertheless, we may notice major tendencies. Most human referents take *-T*, with allomorphs 𐰇 <d> *-t*, 𐰇 <t> *-t^h*, 𐰇 <ad> *-at*, 𐰇 <od> *-ot*, 𐰇 <ud> *-ut*, e.g. 𐰇 𐰇 <ai.d> *ai-t* [male-PL] ‘fathers, males’, 𐰇 𐰇 <mo.t> *mo-t^h* [female-PL] ‘mothers, females’, 𐰇 𐰇 𐰇 <qa.ha.ad> *q^haq-a-at* [khagan.OBL-PL] ‘khagans’, 𐰇 𐰇 𐰇 <ja.ri.ho.od> *ʃfarioq-ot* [prime.minister-PL] ‘prime ministers’, 𐰇 𐰇 𐰇 𐰇 <y.ar₂.u.ud> *jaru-ut* [Yelü-PL] ‘the Yelü clan’s people’. Most non-human referents select *-s* represented by graph 𐰇 <s> *-s*, e.g. 𐰇 𐰇 <ai.s> *ai-s* [year-PL] ‘years’, 𐰇 𐰇 <ui.s> *ui-s* [affair-PL] ‘affairs’, 𐰇 𐰇 𐰇 <n.on.s> *non-s* [generation-PL] ‘generations’. Most human kin terms (excluding ‘father’ and ‘mother’) employs *-ner*, with allomorphs 𐰇 𐰇 <ñ.er> *-ner* and 𐰇 𐰇 <añ.er> *-qner*, e.g. 𐰇 𐰇 𐰇 𐰇 <ñ.iau.ñ.er> *niau-ner* [sibling-PL] ‘siblings’, 𐰇 𐰇 𐰇 𐰇 <na.ha.añ.er> *naga-qner* [maternal.relative-PL] ‘maternal relatives’.²¹ These three morphemes are all comparable to Mongolic. Morpheme *-T* is probably cognate with MM *-D* [t, t^h] < PM **-t* (consonant stems), *-s* with MM *-s* < PM **-s* (vowel stems), *-ner* with MM *-nAr* (non-lineal kin, deities) (Rybatzki, 2003: 66; Janhunen, 2003: 12). Unclear developments led to different selection criteria for PSM **-d* [t] and **-s* in the two lineages. On the one hand, Khitan selection criteria appear to be semantic, while on the other hand, Mongolic

²¹ This picture is provisional. For a more complete perspective, different pictures on plural morphemes are found in Wu (2007a), Ôtake (2016a), and CWJ 525-544. For further detail on semantic conditioning of plural morphemes, see Ôtake (2016b).

selection criteria are phonetic.

An additional morpheme *-añ* represented by graph 出 <añ> *-aqn* is for the moment being attested only with one stem, e.g. 孛力 <b.aq> *paq^h* ‘child’ → 孛列出 <b.h.añ> *paqañ* ‘children’.²²

2.4.2.2 Case

Six cases are distinguished: nominative, genitive, dative, locative, ablative, and instrumental. Nominative is formally unmarked and functionally indicates the subject. Additionally, it may indicate the predicative complement, and the object.

The genitive morpheme *-An* exhibits six allomorphs: 𐰺 <an> *-an*, 𐰽 <en> *-en*, 𐰾 <on> *-on*, 𐰿 <un> *-un*, 𐱀 <in> *-in*, 𐱁 <n> *-n*. Functionally, it marks possessors or, more broadly, determinants, and appears on subjects of relative clauses formed with verbal nouns. It may be compared with Middle Mongol genitive suffixes *-Un* (after consonants), *-yin* (after vowels), and *-U* (after *n*-stems), possibly traceable to a Proto-Mongolic form **-n* augmented by means of connective vowels *-U-* and *-i-*, and eventually reduced by means of reanalysis (fall of *-n* after *n*-stems) (see Janhunen, 2003: 14). Vocalism of the Khitan counterpart suggests that **-n* is probably the only original material in common between Khitan and Mongolic, whereas the vocalic material developed independently in the two lineages. This matter needs further future research. For the moment being, we can observe that *-en* and *-n* are apparently the older forms, since they occur with native words, whereas *-an*, *-on*, *-un*, and *-in* mostly occur with loanwords. One possibility is that originally there were allomorphs **-An* > **-an* (back), **-en* (front) (after consonants), and **-n* (after vowels). Later, due to vowel neutralization in non-stressed syllables **-an* and **-en* merged in *-en*. *-an*, *-on*, and *-in* emerged later by analogy with *-en*, under influence of foreign vocalism in loanwords.

The dative morpheme *-TE* (allomorphs 𐰽 <de> *-te*, 𐰾 <do> *-to*, 𐰿 <du₂> *-tu*, 𐱁 <t> *-t^h*) encodes location, goal of motion, and temporal reference. It may be compared with Mongolic dative. The most frequent Middle Mongol dative suffix was *-DUR*. Nevertheless, Khitan dative suffixes bear more resemblance to the rarer Middle Mongol variant *-DA*. This was probably a combination of a Proto-Mongolic dative **-t* plus Proto-Mongolic locative **-A* (cf. Janhunen, 2003a: 14-15). In Middle Mongol locative *-A* was frequent, and it had the peculiar feature of following only consonant stems.

Khitan data suggest that possibly Proto-Serbi-Mongolic already had secondary **-t-A* besides

²² Note that, unlike other suffixes, 出 <añ> *-aqn* causes the stem 孛力 <b.aq> *paq^h* to undergo lenition, e.g. 孛力 <b.aq> *paq^h* → 孛列出 <b.h.añ> *paqañ* vs. 孛力𐰽 <b.aq.i> *paq^h-i* [child-ADJZ] ‘young’, 孛力𐰿 <b.aq.iu₂> *paq^h-ju* [child-LOC] ‘at a young age’.

primary **-t*. Allomorph *-t^h* might be the reflex of the primary suffix, and incidentally, it is attested only on few native items. Allomorph *-te* would be the reflex of PSM **-d-A*. I tentatively propose that it might have followed an evolutionary path parallel to the one I hypothesize for genitive. **-dA* had allomorphs *-ta* (back) versus *-te* (front), that later merged into *-te* due to vowel neutralization in non-stressed syllables. Successively, innovative labial allomorphs *-to* and *-tu* emerged due to analogy and influence from the foreign phonology of loanwords.

Besides dative, location may be encoded by a specialized locative morpheme as well, i.e. *-ju* represented by graph 𠂔 <iu₂> *-ju*. The origin of this morpheme remains for the moment obscure.

The ablative morpheme *-tEi* (allomorphs 𠂔 𠂔 <de.i> *-tei*, 𠂔 𠂔 <do.i> *-toi*, 𠂔 𠂔 <du₂.i> *-tui*) marks source of motion.

The instrumental morpheme *-Er* (allomorphs 𠂔 *-er*, 𠂔 *-ur*) indicates means, motion through a place, and temporal reference.²³

2.4.2.3 Possession

A possessive morpheme *-En* (allomorphs 𠂔 *-en*, 𠂔 *-un*) marks the possessed entity (possessum), contrasting with the genitive marking of the possessor. Incidentally, possessive suffixes are graphically and phonetically identical with two allomorphs of the genitive morpheme. 𠂔 *-un* is identified as a third person possessive suffix in Wu (2018: 389), due to the syntactic position in that context indicating it could not be a genitive suffix. There should be a non-labial allomorph 𠂔 *-en*, indicated for instance by the common sequence used to introduce people's names, e.g. 𠂔 𠂔 X 𠂔 𠂔 𠂔 Y <i.ir₃ X ci.ur.eñ.en Y> *iir X t^hur-ep-en Y* [name X two-ORD.F-PX3] 'the name was X, his second (name) was Y', where the use of a possessive is more explainable than the use of a genitive. Actually, the question about whether this morpheme encodes third person or reflexive possession is underexplored yet. In this study, I provisionally treat it as a third person possessive morpheme. Four possible reflexive possessive suffixes are suggested in CWJ 574-577, 599. These are 𠂔 𠂔 <p.an> *-p^han*, 𠂔 𠂔 <b.en> *-pən*, 𠂔 𠂔 <ia.an> *-jaan*, and 𠂔 𠂔 ~ 𠂔 𠂔 <ha.an ~ a.an> *-qaan -aan*.²⁴ Further research is needed in order to confirm the status of these suffixes.

²³ My account is provisional. For a more complete picture on case suffixes, see Wu (2007) and CWJ 490-525.

²⁴ In CWJ's transcription: 𠂔 𠂔 <[p.an]-ban], 𠂔 𠂔 <[b.en]-bən], 𠂔 𠂔 <[ia.an]-iyan], and 𠂔 𠂔 ~ 𠂔 𠂔 <[ha.an ~ a.an]-'an ~ -a:n].

2.4.2.4 Gender

Nouns have the grammatical category of gender. Gender on nouns is covert, being overtly expressed through agreement on numerals, adjectives, and verbs. Nouns fall into two gender categories, conventionally termed masculine and feminine. Functionally, masculine is a marked category including only male beings, while feminine is an unmarked category including not only female beings, but all other kinds of referents as well, e.g. animates unspecified for gender, inanimates, abstract nouns, action nouns etc.

The main phonetic contrast in gender allomorphs is *r* (masculine) vs. *n* (feminine). This type of contrast is found in ordinal numeral, verbal nominal, and finite form morphemes.

In these morphemes, we find three types of vocalism. Ordinal morphemes either have *e* (2 to 4, and 6 to 10) or *o* (5).

E.g. 老二 <ci.ur.er ia> *ɣ^hur-er ia* [two-ORD.M elder.brother] ‘second elder brother’²⁵ / 老二 <ci.ur.ep> *ɣ^hur-er/ep mo ku* [two-ORD.F female person] ‘second wife’²⁶; 令公 <t.ad.o.or₂ n.on.en u.ur ai> *t^ha-toor non-en uur ai* [five-ORD.M generation-GEN former father] ‘ancestor of fifth generation’²⁷/ 令公 <t.ad.o.oñ b.aq qa.an x.ui pu.is.ñ.en i.ir₃ ci.eñ> *t^ha-tooñ paq^h q^haan xui p^huisiñ-en iir ɣ^hi-ep* [five-ORD.F child Han state lady-GEN title make-VN.AR.F] ‘the fifth daughter had (lit. made) the title of Lady of the State of Han’²⁸.

One type of vocalism found in verbal nominal morphemes involve an archiphonemic vowel surfacing as *a* (back), *e* (front), and *o* (labial), e.g. VN- -AR : 本 / 出 <ar/añ> -ar/-aq; 尔 / 当 <er/eñ> -er/-ep; 全 / 内 <or/oñ> -or/-op.

E.g. 田中 <sui.l.ha.a.ar ai u₂.du₃.l.ha.a.ar> *sui-lqa-ar ai utulqaar* [be.born-CAUS-VN.AR.M father Utulqaar] ‘[his] natural father (lit. the father that generated) was Utulqaar.’²⁹

²⁵ Huilian 1-17/18 (CWJ 406, 1566). In the original “次兄” *cì xiōng* ‘second elder brother’.

²⁶ Gaoshi 12-14/16 (CWJ 407, 1242). In the original “次妻” *cì qī* ‘second wife’.

²⁷ Chaozhi 4-34/37 (CWJ 1352). In the original “第五代之先祖” *dìwǔ dài zhī xiānzǔ* ‘ancestor of fifth generation’. 公 <n.on> *non* ‘generation’ always causes masculine gender agreement.

²⁸ Zongjiao 20-8/14 CWJ (1107). In the original “第五女韩国夫人之号在” *dìwǔ nǚ Hánguó fūrén zhī hào zài* ‘the fifth daughter had (lit. was at) the title of Lady of the State of Han’.

²⁹ Zhen 4-27/29 (CWJ 1117). In the original “生父幹特刺” *shēng fù Wòtèlà* ‘birth-giving father [was] Wotela’. For a

[illegible]

来化 𠵿 𠵿 欠伏 列 𠵿 𠵿 [...] 今 𠵿 来 亦 凡 亦 𠵿 𠵿 𠵿 𠵿 𠵿 𠵿 <ci.ur.er [].].ho.ñ h.ash.u
 [...] pu.u ci.ün g.ün ong.on i.ir3 ci.er> *ʃ^hur-er ...qoñ qafu [...]* *p^hu ʃ^hyn kyn oŋ-on iir ʃ^hi-er* [two-
 ORD.M ...qoŋ Qafu [...]] *P^hu ʃ^hyn prefecture prince-GEN title make-VN.AR.M*] ‘the second son was
 ...qoŋ Qafu [...] he had (lit. he made) the title of Prince of the *P^hu ʃ^hyn* prefecture.’³¹

覓金夾关 节化谷与 曲令 <sh.em.118.i cu.ur.ge.eñ go.t> *fem-...-i ʃ^hu-ur-ke-eŋ ko-t* [good-
 AGM.F-ACC] ‘to the house that accumulated good deeds’.³²

The third type of vocalism, found in verbal nominal and finite form morphemes, involves vowel *i*, eg. VN *-piR*: 付 乏 / 伏 <b.ir/iñ> *-pir/n*; VN *-iR*: 乏 / 伏 <i.r/iñ> *-ir/n*; *FIN* *-liR* 中 乏 / 伏 <l.ir/iñ> *-lir/n*.

E.g.

又关雨 毛 升 为 主 关 业 及 子 升 伏 <m.i.in ñe b.aq p.i p.o.ol.b.ñ> *miin je paq^h p^hi p^hol-pijn* [my
one.F child imperial.concubine become-VN.PIR.F] ‘One of my daughters has become Imperial
Concubine.’³³

才 又 及 州 兄 为 夫 相 丙 几 出 矣 又 关 伏 兴 兮 忝 伏 和 力 冬 中 又 <ia m.o.oñi sh.a.ir4.en
mo ku qar3.an2 sh.i ñ.iu2 pu.is.ñ.en na.as.l.ir2> *ia mooni fair-en mo k^hu q^haran fi ju p^huisij-en naas-
lir* [elder.brother Mooni court.attendant-GEN female person Q^haran fi ju lady-PX3 move-VN.LIR.M]
'he took (lit. he moved) the wife of [his] elder brother Court Attendant Mooni, his lady Q^haran fi
ju.'³⁴

Other types of phonetic contrast are used in adjective gender morphemes. Available data on this type of morphemes are not numerous yet, and any description cannot but be incomplete and preliminary. There exists one allomorph pair contrasting in gender, found on words for ‘big, great,

more complete discussion of the passage, see example (16) in §3.7.3.

³⁰ Xu Lid 4-4/6 (CWJ 980). In the original “甘露降” *gān lù jiàng* ‘a sweet dew descended’. For a more complete discussion of the passage, see example (7) in §3.6.

³¹ Renxian 6-45/47, 6-53/58 (CWJ 1029). In the original “次 … … [….] 富春郡王之号在” *cì* … … *Fùchūn jùn wáng zhī hào zài* ‘The second [son was] … …]. He had (lit. he was at) the title of Prince of the Fuchun prefecture’ For a more complete discussion of the passage, see example (13) in §3.7.2.

³² Zhonggong 4-28/30 (CJW 948). In the original “善积房” *shàn jī fáng* ‘house that accumulated good deeds’. For a more complete discussion of the passage, see example (5) in §3.4.

³³ Chala 10-36/40 (CWJ 1582). In the original “吾一女妃成为” *wú yī nǚ fēi chéngwéi* ‘One of my daughters became Imperial Concubine.’ For a more complete discussion of the passage, see example (4) in §3.8.3.

³⁴ Dilu 11-19/26, 12-1/2 (CWJ 1454). In the original “兄 … 郎君妻磐石女? 夫人续婚” *xiōng ... lángjūn qī Pán shí nǚ? fūrén xùhūn* ‘he acquired in wife the wife of his elder brother ... Court Attendant, Lady Pan shí nǚ(?)’. For a more complete discussion of the passage, see example (1) in §3.2.

elder', 'young', 'good', 'red' and 'blue, green'. Unfortunately, for the moment being the phonetic contrast involved is not describable, since one of the allomorphs—the feminine—is represented by an undeciphered graph, i.e. 欠 / 余 <ho/ho₂> -oq (M) vs. 夬 <118> ... (F).

The description of the other allomorph pair actually relies on two words, i.e. 'white' and 'black'.

The word for 'black' has feminine form 虫 火 <qar.iu₂> *q^har-ju* and masculine form 虫 夬 <qar.u> *q^har-u*. Recent discoveries suggest to give a different reading to logographs for 'white', i.e. undotted (F) 禾 <siu> *sju* vs. dotted (M) 禾 <su> *su* (Aruna, 2025). These two words give us hints for the existence of one allomorph pair -u/-ju (M/F). At this stage, however, it cannot be excluded that this is a mere coincidence, or a case of analogy between two items that are likely to be often used together contrastively (black vs. white). Moreover, the readings of logographs for 'white' should be further investigated, since we cannot yet rule out the word for 'white' to be a loanword from Chinese, in which case it would be puzzling (although not impossible) to find Khitan morphology.³⁵

Apparently, Khitan and Mongolic gender morphemes developed independently in each lineage, as no direct comparison is possible. There seems in some cases to be a common suffix root, namely *p in -piR and *l in -liR. Later, these suffixes were augmented with gender marked morphemes. Each lineage used different morphemes. Noteworthy, while in Khitan gender contrast is expressed by consonantal contrast, in Middle Mongol it is expressed by vowel contrast. Namely, in Middle Mongol gender marked morphemes we find vowels A and/or U (masculine) vs. i (feminine). Another interesting feature is that gender agreement targets do not fully coincide in the two lineages. In Khitan, gender agreement is expressed on ordinal numerals, verbal nominals, finite verbs, and adjectives. In Middle Mongol, gender agreement is expressed on finite verbs and possessive adjectives.

In Middle Mongol we find a contrast that is apparently absent in Khitan. In Middle Mongol verbal paradigm, gender agreement is found only on finite forms, e.g. MM terminative past -bA(i)/-bi, confirmative past -lU'A/li'i, resultative past -jU'U(i) ~ -ji' Ai/-ji'i (M/F), whereas number agreement is found only on some verbal nominals, e.g. MM futuritive -KU(i)/-KUn, perfective -GsAn/-GsAd, agentive -Gči/-Gčín (sg./pl.).³⁶

Unlike Middle Mongol, in Khitan gender agreement is expressed both in verbal nominal and finite

³⁵ See the entry for 'white' in Appendix C.

³⁶ Reference for this six contrasting pairs is found in Rybatzki (2003: 75-77). A rare finite form plural suffix fossilized in few forms is attested as well, i.e. MM -d (Rybatzki, 2003: 76).

Lastly, Khitan and Middle Mongol gender systems differ with respect to functionally marked categories. As we have seen, in Khitan masculine is functionally marked, including only male referents, whereas feminine is functionally unmarked, including all remnant referents. If the controller of gender agreement is plural and includes both males and females, the target takes the unmarked category, i.e. feminine.

2.4.2.5 Numerals

Cardinals consist of bare numeral stems: *ne* ‘one’, *ʃur* ~ *ʃ^hur* ‘two’, *qur* ‘three’, *tur* ~ *t^hur* ‘four’, *t^hau* ‘five’, *til* ‘seven’, *neim* ‘eight’, *is* ‘nine’, *ʃuri* ‘twenty’, *ʃau* hundred. Graphic and etymological details are given in §2.5.1.

‘Three’, ‘eight’, ‘nine’, and ‘ten’ select *-teR* (masculine 仝 𠂔 <d.er> *-ter*, feminine 仝 当 <d.eñ> *-ten*).

‘Eight’ and ‘nine’ select *-ireR* with allomorphs 𐌲 𐌵 <ir₃.er> *-irer* (masculine) 𐌲 𐌶 <ir₃.eñ> *-ireþ* (feminine).³⁷

A noteworthy feature is that, except for ‘five’, diachronically back and front numeral stems all take

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a front suffix, since morphemes *-eR* and *-teR* appear to have only front forms, e.g. *qur-er* ‘third’ ← PSM **qur* (back stem) ‘three’ vs. *tur-er* ← PSM **dör* (front stem) ‘four’; *jeim-ter* ‘eighth’ ← PSM **naim* (back stem) ‘eight’ vs. *is-ter* ‘ninth’ ← PSM **yers* (front stem) ‘nine’.

Stem allomorphy occurs with numeral ‘three’ as well. In this case the stem allomorph is selected by the ordinal morpheme. Apparently, morpheme *-eR* selects the stem allomorph *qur*, whereas morpheme *-teR* selects the stem allomorph *qo* with lowered vocalism ($u > o$) and without *r*, e.g. $\text{𐠶𐠦𐠸} <\text{h.ur.er}> \text{qur-er}$ vs. $\text{𐠶𐠦𐠸} <\text{h.od.er}> \text{qo-ter}$. This phenomenon may be a further corroboration of the diachronic status of *.r* in Mongolic numerals as a derivative suffix (see Janhunen, 2003a: 17). Specifically, *qur* might be phonetically conservative (original *u*) but morphologically innovative (addition of *.r*), whereas *qo* might be phonetically innovative (original *u > lowered o*) but morphologically conservative (no addition of *.r*).

The locative numeral morpheme *-taq* is recognizable, represented by graphs $\text{𐠶𐠦} <\text{d.h}> \text{-taq}$. To my knowledge, it is attested only on ‘nine’. Applied to cardinal numeral stems, this morpheme yields adverbial forms meaning ‘at N’, e.g. $\text{𐠶𐠦𐠶} <\text{is.d.h}> \text{is-taq}$ [nine-LOCN] ‘at nine (i.e., at the age of nine)’. At this stage, where only this form is available, we may note an opposition to the situation of ordinal morphemes, where front suffixes combine with back stems as well. In fact, since *is* ‘nine’ is a front stem, and graph $\text{𐠶} <\text{h}> q$ is typical of words with back vocalism, we might suggest that back suffix *-taq* combined with front stems as well. Eventual new data may help to better understand morphophonological phenomena involving numerals.

Morpheme *-taq* may share etymological origins with the Middle Mongol dative-locative *-DA-ki*. Rybatzki (2003: 69) analyzes the latter as an instance of double declension, where the second element *-ki* is a denominal nominal suffix indicating belonging or association (Rybatzki, 2003: 64). By analogy, Khitan *-taq* might be segmented as dative **-t* plus relational suffix **-q* related to MM *-ki* [k^hi] < **-K^{hi}* [$-k^hi/-q^hu$]. The existence of the relational suffix may be corroborated by some tribal names, e.g. $<\text{del.h}> \text{tel-q}$ [Tela-REL] ‘of the Tela tribe (lit. of the south, southerner)’.

2.4.2.6 Adjectives

As far as it is possible to tell with the yet small amount of data available, adjectives might be tentatively divided at least into two categories characterized both semantically and morphologically. One category are quality adjectives, while the other are adjectives denoting pertinence to identity groups such as families, tribal units, and peoples (for convenience, these will be termed “tribal adjectives”). Quality adjectives are target of gender agreement (see §2.4.2.4). Tribal adjectives

possibly have specific morphology. The observations resumed here are still preliminary, and need further research in order to be corroborated or refuted. Tentatively, we might identify an allomorph *-ir* marking singular number contrasting with an allomorph *-ijn* marking plural number, e.g. 万仔达 伏 <y.au₃.le.ñ> *jaule-ijn*; 万仔达 叉 <y.au₃.le.ir₂> *jaule-ir*. Furthermore, there seems to be a non-functionally marked allomorph *-i*. e.g. 万仔达 关 <y.au₃.le.i> *jaule-i*. Some evidence for the origin of these suffixes may be indicated by the apparent use of 关 <i> *-i* as an adjectivizer (a denominal nominal suffix specialized in forming adjectives), e.g. 关 ~ 叉 关 <kid.i ~ kid.ir₂.i> *k^hit-i ~ k^hitir-i* ‘belonging/related to the Khitan’ ← 关 <kid> *k^hit* ‘Khitan’, 丹力关 <b.aq.i> *paq^h-i* ‘childhood’s, little’ ← 丹力 <b.aq> *paq^h* ‘child’.

2.4.3 Verbal Inflection

Verbal inflection in the language yields three distinct categories: finite forms, verbal nominals, and converbs, each characterized by specific syntactic functions.

Finite forms act as predicates of main clauses. They encode aspecto-temporal categories, as well as gender. They agree in gender with their subject. To date, only one exclusively finite form morpheme has been identified, i.e. *-liR*.

Morpheme *-liR* has masculine allomorphs 尔叉 <l.ir₂> *-lir*, 尔叉 <al.ir₂> *-alir*, 用叉 <il.ir₂> *-ilir*, 平叉 <ul.ir₂> *-ulir*, and feminine allomorph 尔伏 <l.ñ> *-lin*.

Verbal nominals cover the same syntactical functions as nominals. They can function as arguments and attributes. They encode aspectual categories, as well as gender.

As arguments, they can act as predicates of content clauses. Eventually they can be lexicalized into proper nouns.

Like nouns, verbal nominals can inflect by case. A verbal nominal followed by a case morpheme can develop into a quasi-converb, i.e. a converb *in statu nascendi*.

In their attributive function, verbal nominals modify a nominal head, thereby serving as the verbal head of relative clauses. They agree in gender with the modified nominal head.

All Khitan verbal nominals have developed finite predicate function as well, where they act as predicate of main clauses, and agree in gender with their subject.

To date, seven verbal nominal morphemes have been identified: *-AR*, *-piR*, *-iR*, *-uci*, *-K*, *-i*, and *-lAK*.

Morpheme *-AR* has masculine allomorphs 本 <ar> *-ar*, 茶 <er> *-er*, 仝 ~ 北 <or ~ or₂> *-or*, 奕 <ur₂> *-ur*, and feminine allomorphs 出 <añ> *-ajñ*, 当 <eñ> *-ejñ*, 雨 <oñ> *-ojñ*.

Morpheme *-piR* has masculine allomorph 付 又 ~ 巾 <b.ir₂ ~ bir> *-pir*, and feminine allomorph 付 伏 <b.ñ> *-piñ*.

Morpheme *-iR* has masculine allomorph 又 <ir₂> *-ir* and feminine allomorph 伏 <ñ> *-ijn*.

Morpheme *-uci* has allomorphs 又 弱 ~ 仝 弱 ~ 只 弱 <u.ji ~ u₂.ji ~ u₃.ji> *-ufi* and 升 弱 <o₂.ji> *-ofi*.³⁸

Morpheme *-K* has allomorphs 刈 <h> *-q* (back) and 凡 <g> *-k* (front).

Morpheme *-i* is expressed by graph 关 <i> *-i*.

Morpheme *-lAK* has allomorphs 方 刈 <al.h> *-alaq*, 巾 刈 <l.h> *-laq*, 子 刈 <ol.h> *oloq*, 巾 凡 <l.g> *-leg*, and 平 凡 <ul.g> *-uleg*.

Converbs cover the syntactical function of adverbs. They can act as adverb proper, as well as predicates of secondary clauses. They can encode circumstantial relations. To date, seven converbial morphemes have been identified: *-Ai*, *-sel*, *-Ci*, *-Al*, *-ash*, *-A*, and *-pc^{hi}i*.

Morpheme *-Ai* has allomorphs 丰 <ai> *-ai*, 万 <y> *-ei*, 茶 <oi> *-oi*, and 失 <ui> *-ui*

Morpheme *-sel* has allomorphs 仝 北 <s.el> *-sel*, 冬 北 <as.el> *-asel*, and 卡 <us.el> *-usel*.

Morpheme *-Ci* has allomorphs 来 <ci> *-y^{hi}i*, 弱 <ji> *-y^{hi}i*, and 旁 来 <e.ci> *-ey^{hi}i*.

Morpheme *-Al* has allomorphs 方 <al> *-al*, 北 <el> *-el*, 子 *-ol*.

Morpheme *-ash* is expressed by graph 艾 <ash> *af*.

Morpheme *-A* has allomorphs 为 <a> *-a* and 旁 <e> *-e* ~ 旁 <e₂> *-e*.

Morpheme *-pc^{hi}i* is expressed by graph 付 来 <b.ci> *-pc^{hi}i*.

The last three converbial morphemes remain the most underexplored in the literature and fall outside the scope of the present study, which deliberately prioritizes the better-attested suffixes. Notably, Sumbule (2025) has recently offered the first systematic investigation of the functional meanings of the suffix *-ash*, opening promising avenues for future research.

Verbal nominals and converbs further appear in analytic constructions with specific auxiliary verbs encoding actional meanings.

Finally, a salient typological difference from Mongolic languages – which share this tripartite

³⁸ The graph 弱 <ji> has allographs 弱 <ji₂> and 弱 <ji₃>.

organization of the verbal inflectional paradigm – lies in the apparent lack of a distinction between indicative and imperative/volitive forms within the finite forms. This picture is, however, likely incomplete. By analogy with its Mongolic relatives, Khitan may well have possessed imperative/volitive forms specialized for deontic or dynamic modal categories. Given that such forms predominantly occur in direct speech, and that direct speech is exceptionally rare in Khitan written sources, no such forms have been identified in the corpus to date. If such forms did exist, two possibilities arise: 1) they are simply unattested in the corpus available to us; 2) they are attested but remain unrecognized.

3. Verbal Nominals

This chapter introduces the methodology applied to analyze Khitan verbal nominals (§3.1), and includes specific paragraphs devoted to each verbal nominal morpheme. Each of these paragraphs includes a section devoted to previous research and a section devoted to example analysis. Due to limitations of space I analyzed in depth only two out of seven morphemes. Firstly, I deal with morphemes that I analyzed more briefly: *-iR* (§3.2), *-uci* (§3.3), *-K* (§3.4), *-i* (§3.5), and *-lAK* (§3.6). Secondly, I deal with morphemes that I analyzed more deeply: *-AR* (§3.7) and *-piR* (§3.8).

3.1 Categories of Verbal Nominals

In this paragraph, the categories employed in analyzing Khitan verbal nominals are introduced. Verbal nominals are forms pertaining to the noun word class included in the verbal paradigm. Diachronically, they develop through grammaticalization of deverbal nominals, i.e. nouns made out of verbs by means of derivational suffixes.

When a deverbal nominal is grammaticalized into a verbal nominal, the derivational suffix becomes an inflectional suffix encoding specific grammatical categories.

Besides encoding grammatical categories, verbal nominals can cover different syntactical functions and can be classified according to semantic criteria. Section §3.1.1 is about syntactical functions, while §3.1.2 deals with semantic classification.

3.1.1 Syntactical Functions of Verbal Nominals

Verbal nominals can occur in three different syntactical functions:

- 1) Argument, i.e. the prototypical function of nouns
- 2) Attribute, i.e. the prototypical function of adjectives
- 3) Finite verbal predicate, i.e. the prototypical function of verbs

Like nouns, verbal nominals can take case suffixes. Case-marked verbal nominals may develop into quasi-converbs (forms on the path of grammaticalization into converbs), and ultimately, when they are no more synchronically transparent, into converbs.

They can also be followed by postpositions and auxiliary verbs.

In attributive function they become heads of relative clauses. The minimal structure of relative

clauses consists in the bare verbal nominal determining a nominal head, e.g. Khal. бичсэн хүн [piʃsən xun] ‘the man who wrote’. In this example, the head referent is the subject of the relative clause. The head referent may be the object as well, e.g. Khal. бичсэн ном [piʃsən ном] ‘the book which was written’. In the former case, the clause can be extended by adding an object, e.g. ном бичсэн хүн [ном piʃsən xun] ‘the man who wrote the book’. In the latter case, the clause can be extended by adding a subject, e.g. хүний бичсэн ном [xuni piʃsən nom]. Commonly, in Altaic languages an additional subject to a relative clause is marked by genitive case. Relative clauses can be further extended by means of additional complements and adverbials.

If they are used as predicative complements in nominal predicates, verbal nominals can develop finite predicate function. Several verbal nominals synchronically preserve all three syntactical functions. Eventually, some of them can fully develop into finite forms, losing nominal and adjectival functions.

3.1.2 Semantic Classification of Verbal Nominals

According to semantic criteria, verbal nominals can be classified in the following categories:

- i) result noun; ii) action noun; iii) actor noun; iv) patient noun.
- i) A result noun indicates the result obtaining after transgressing the crucial point of transformative events (see §3.1.3), e.g. ‘building’ = result of ‘to build’. As such, they include a postterminal notion (see §3.1.3). A resulting state can be an object (e.g. ‘building’), an abstract entity (e.g. ‘thought’ = result of ‘to think’), a situation (e.g. ‘meeting’ = result of ‘to meet’), or a quality (e.g. ‘frozen’ = result of ‘to freeze’).
 - ii) An action noun expresses the semantic content of a verb as if it were a compact entity (e.g. ‘the doing’ = ‘the act of doing’). Action nouns tend to be aspectually neutral. They may include a non-focal intraterminal notion.
 - iii) An actor noun indicates an actant who performs the action expressed by a verb, e.g. ‘writer’ = ‘person who writes’. Actor nouns tend to be connected with intraterminality.
 - iv) A patient noun indicates the undergoer of an action (e.g. ‘sight’ = ‘the thing that is seen’). The categories of resulting state and patient nouns may overlap. For instance, a ‘thought’ may be intended as the result of ‘to think’, like mentioned under category (i), as well as the object of ‘to think’ i.e. ‘the thing that is thought’. Like result nouns, they tend to include a postterminal notion.

3.1.3 Aspecto-temporal Terminology

The aspecto-temporal framework used here is mainly based on Johansson (2000).

Aspect is a combination of actional and viewpoint categories.

VPs fall into five actional categories according to three parameters: transformativity [$\pm t$], dynamicity [$\pm dyn$], and durativity [$\pm dur$].

The first two actional categories are achievement [$+t, +dyn, -dur$] and accomplishment [$+t, +dyn, +dur$]. The main feature of these two categories is transformativity, i.e. their internal phase structure [IPS] include a crucial point at which a transformation happens. The transformation is the passage from a dynamic situation to a resulting state. For instance, 'to build a house' is a dynamic situation that brings to the crucial point when the house is completed. The dynamic situation ends and the resulting state (the house being there) begins. In achievements and accomplishments, the crucial point comes at the end, thus these are called finitransformative. In achievements the dynamic situation is momentaneous, whereas in accomplishments it is durative. For instance, 'to break a stick' is an achievement, whereas 'to build a house' is an accomplishment.

The third actional category is initiotransformative. In initiotransformatives, the crucial point is at the beginning. They are composed of a momentaneous dynamic part, a crucial point and a stative part. For instance, 'to sit' may refer either to the dynamic or the stative part.

The fourth actional category is activity [$-t, +dyn, +dur$]. Activities are not transformative, thus their IPS does not include a crucial point. For instance, an activity like 'to run' does not imply a transformation point after which it obtains no more. Thus, the end point of activities is arbitrary, and not due to a transformation.

The fifth actional category is state [$-t, -dyn, +dur$]. States are not transformative and are not dynamic. Unlike activities, they continue without the need of constant input of energy

Actionality may be recategorized through operators called modes of action (Johanson, 2000: 55-57). They may be suffixes or auxiliary verbs. In this study some auxiliary verbs possibly functioning as modes of action are analysed. These are inchoative (begin to V), durative (continue to VB), terminative (cease to V), and completive (finish V-ing)

Viewpoint categories are intraterminality and postterminality. Viewpoint categories are encoded by viewpoint operators, that in Mongolic languages are suffixes and analytic constructions. Viewpoints are applied on VPs viewing a specific part of the IPS. Intraterminal operators (+INTRA) view an IPS within its limits (beginning, end). Postterminal operators (+POST) view an IPS after its *terminus*, i.e. end point. Operators may encode the category of focality as well. Focality is the

amount of psychological interest obtaining at the primary orientation point (the core of *nunc*). Progressives are high-focal intraterminals (+INTRA^{HF}), duratives and continuatives are low-focal intraterminals (+INTRA^{LF}), and habitives and general presents are non-focal intraterminals (+INTRA^{NF}). Statives and resultatives are high-focal postterminals (+POST^{HF}), perfects and constatives are low-focal postterminals (+POST^{LF}), and general pasts are non-focal postterminals (+POST^{NF}). Since non-focal postterminals view a situation as detached from *nunc*, the *nunc* is perceived as far from the transgression of the *terminus*. They are reanalyzed as +PST(–INTRA)(–POST), i.e. as pasts neutral to terminality.

Verbal inflectional morphemes, besides being viewpoint operators, encode tense categories as well. Mongolic languages have two tense categories, i.e. past and non-past. A past tense morpheme locates the situation before the primary orientation point, where as a non-past morpheme locates the situation including the primary orientation point.

3.1.4 Viewpoint-tense Systems

Verbal nominals and finite forms encode viewpoint and tense categories.

The viewpoint-tense system of verbal nominals is relatively simple, compared to the viewpoint-tense of finite forms, since in secondary clauses (where verbal nominals are employed), part of the aspectual interpretation is already provided by the relation existing between the secondary and the main clause. Thus, a minor quantity of contrasting forms is needed.

Verbal paradigms commonly include a postterminal item [+POST] viewing the situation after its end point; an intraterminal item [+INTRA] viewing the situation within its limits; a neutral item [–INTRA][–POST] which often is an action noun.

For instance, Middle Mongol verbal paradigm may be analyzed in such a threefold way. Middle Mongol verbal nominals include the postterminal item *-GsAn/d*, the intraterminal item *-’A(yi)*, and the neutral item *-KU*.

For a further example, Khalkha has a slightly different system: MM *-GsAn/d* became Khal. *-сан*⁴ [–sən] maintaining the postterminal function; MM *-’A(yi)* evolved into Khal. *-aa*⁴ [–a: , –e: , –o: , –ə:] and began to be used in combination with the copula, yielding the analytic form *-ж байгаа* [–ʃ pæ:ga:]³⁹, that became the new intraterminal item; MM *-KU* became Khal. *-x* [χ , x], maintaining the neutral function; a new verbal nominal *-дар*⁴ [–tək] emerged from a rarely attested MM deverbal

³⁹ This construction consists of the imperfective converb of the lexical verb followed by the *-aa*⁴ form of the copula *бай* ‘to be’. Its fusional form *-жагаа* [–ʃa:ga:] may be synchronically analyzed as a new synthetic form.

nominal *-dAG* to occupy a new position, i.e. low-focal intraterminal [+INTRA^{LF}]. As a result a new contrast originates between *-жагаа* (high focal intraterminal, i.e. progressive) vs. *-даг*⁴ (low focal intraterminal, i.e. habitual).

Diachronically, part of the area originally covered by the neutral element—habitativity—eventually came to be encoded by a new specialized element.

Lastly, in both languages the neutral element may refer to future time as well.

Finite forms are the main source of aspect-temporal information. In order to convey a larger amount of information, more contrasting items are needed. Therefore, the viewpoint-tense system of finite forms, is more complex than the system employed for verbal nominals. As a reference, I summarize the systems employed in a historical Mongolic language (Middle Mongol) and a modern Mongolic language (Khalkha). This summary was elaborated based on Brosig (2014). For further details, see that work.

Mongolic systems are divided in two main areas: postterminality and intraterminality. In postterminality, we generally find one general past which is actually a –PAST[+POST^{NF}] reanalyzed into a +PAST[–POST][–INTRA], i.e. a past tense neutral to terminality, e.g. MM *-ba/ii*, Khal. *-сан*⁴ [–sən]. It contrasts with a perfect, i.e. a non-past postterminal, –PAST[+POST^{LF}], e.g. MM *-GsAn/d*, Khal. *-сан байна* [–sən bæ:n], and a resultative, i.e. a non-past high-focal post-terminal, –PAST[+POST^{HF}], e.g. MM *-jU buyu*, Khal. *-aad*⁴ байна [–aat pæ:n]. In intraterminality, we have one general present, i.e. a non-past non-focal intraterminal, –PAST[+INTRA^{NF}], e.g. MM *-yU*, Khal. *-на*⁴ [–n]. It contrasts with an habitive present, i.e. a non-past low-focal intraterminal, –PAST[+INTRA^{LF}], e.g. MM *-mU(i)*, Khal. *-даг*⁴ [–tək], and a progressive present, i.e. a non-past high-focal intraterminal, –PAST[+INTRA^{HF}], e.g. MM *-n buyu*, Khal. *-ж байна* [–ʃ pæ:n].

Most of these markers are declinable to past tense, by means of past markers on auxiliaries.

The main tense opposition in Mongolic is non-past vs. past. Some non-past non-focal intraterminals can develop future tense connotation, e.g. MM *-KU je*, Khal. *-на*⁴.

3.2 Verbal Nominal -iR

Verbal nominal morpheme -iR has allomorphs 𠬞 <ir₂> -ir (masculine) and 𠬞 <ñ> -in (feminine).

Chinggeltei *et al.* (1985: 142) recognized 𠬞 (no reading) as a tense past suffix.

Kane (2009: 155) classified 𠬞 <ún> and 𠬞 <ñ> as allomorphs of “verbal noun in vowel + [n]”.

Wu & Janhunen (2010: 68, 91, 116) recognized 𠬞 <ún> as a paste tense finite suffix.

Róna-Tas (2017: 149) recognized 𠬞 <ñ> -iñ as a suffix. From his examples we notice that his interpretation was probably of -iñ as a verbal nominal suffix.

1)	公 𠬞	𠬞	几 只 𠬞	𠬞 𠬞	𠬞 𠬞
	n.o	mo	ku.u ₃ .un	ir ₄ .ir ₂	or ₂ .de
	no	mo	k ^h uw-un	ir-ir	or-te
	spouse	female	person.OBL-PX3	receive-VN.IR.M	place-DAT
	𠬞	𠬞 𠬞 𠬞	𠬞 𠬞 𠬞 𠬞	𠬞	
	ia	m.o.oñi	sh.a.ir ₄ .en	mo	
	ia	moonji	ʃari-en	mo	
	elder.brother	Moopni	court.attendant-GEN	female	
	𠬞	𠬞 𠬞	𠬞 𠬞 𠬞 𠬞	𠬞 𠬞 𠬞 𠬞	𠬞 𠬞 𠬞 𠬞
	ku	qar ₃ .an ₂	sh.i ñ.ñ.iu ₂	pu.is.ñ.en	na.as.l.ir ₂
	k ^h u	q ^h aran	ʃi ju	p ^h uisij-en	naas-lir
	person	Q ^h aran	ʃi ju	lady-PX3	move-VN.LIR.M

‘[...] instead of taking his own wife he took the wife of his elder brother the Court Attendant Moonji, his Lady Q^haran ʃi ju.’

Dilu 11-14/26, 12-1/2

In example (1), the block 𠬞 𠬞 <ir₄.ir₂> *ir-ir* [receive-VN.IR.M] ‘received’ is followed by the block 𠬞 𠬞 <or₂.te> *or-te* [place-DAT] ‘in the place’. Such construction occurs in Tuguci 4-9/10 as well (see example (34) in §4.1.1). The two passages refer to the same people and events. As will be explained under example (34), these passages give clue to decipher the meaning of *or* as ‘place’. In this way we can explain *or-te* as ‘in the place’, and *ir-ir or-te* as ‘instead of receiving, lit. in the place of receiving’. In other words, it may be a construction encoding substitutive relation (see

circumstantial relations in §5.1). Unfortunately, out of 23 occurrences of *or-te* in CWJ corpus, we find only these two examples of the sequence *ir-ir or-te*. Nevertheless *or-te* following VN *-iR* is relatively frequent (13 out of 23), suggesting a codified construction. At the same, for the moment being, interpretation of the remnant 11 occurrences is hindered by a quite obscure context, so we can rely only on these two examples.

Verbal nominal *ir-ir* allows two different analyses: 1) *ir-ir* functions attributively modifying *or-te*; 2) *ir-ir* is a noun followed by *or-te* taking the function of a postposition.

Since substitutive relation (instead of) imply that the event expressed by verb never happened, we have a modality contrast between the secondary clause headed by *ir-ir* (irrealis) and the main clause headed by 力 冬 中 又 <na.as.l.ir2> *naas-lir* [move-FIN.LIR.M] ‘he moved (tr.)’ (realis).

Irrealis modality is often connected to non-focal intraterminality (general knowledge and habitual events) and future tense. Thus, such an interpretation opens the possibility that VN *-ir* might pertain to non-focal intraterminality.

2)	又	山	兀 安 力	巫 立 哭
	GREAT	ñig	g.ur ₂ .en	qa.ha.an
	...	ɲik	kur-en	q ^h aq-a-an
	great.F	golden.F	empire-GEN	khaghan-GEN
	力	雨 弱	互 分	兀 用 中 考 及
	101	cauji	hur ₂ .u	g.ing l.iau.u
	...	ʃ ^h auʃi	quru	kiŋ lɟau
	younger.brother	army	commander	jinglüe
	court.attendant			
	杂 本	乃 今	邦 为 哭	哭
	ci.ar	am.s	REGION.a.an	ui
	ʃ ^h ar	ams	...a-an	ui
	recently	border	region-GEN	affair
	not.be-VN.IR.F			
	中 立	又 为 哭	引 坐 哭	又 出 及
	l.iang ₂	sh.a.an	ja.d ₃ .i	m.añ.ir ₂
	lɟaŋ	ʃan	ʃati	maɲ-ir
	sen-i			

liang mountain southern.slope.ADJZ hunt-VN.IR.M go-VN.I

尙 矣 尙	並 考 中 用 矣	火 火 矣	凡 丙 水	令 文 考	百 火 生
ta.ang.en	ki.ên l.ing.de	h.ui.tʃ	g.iu.ung	t.ie.en ₂	y.iu ₂ .d ₃
taŋ-en	k ^h jen liŋ-te	xui-tʃi	kjuŋ	t ^h jen	ju...
Tang-GEN	Qianling-DAT	reach-	building	hall	?
		CVB.CI			
止 升 火 关	尺 伏	否	北 中 列 芬		
p.o ₂ .ui.i	dau.ñ	NOT ₂	or.l.hu.er		
p ^h owii	taw-ijŋ	...	or-laŋ-er		
?	see-VN-IR.F	NEG	can-VN.LAK-INS		

‘The Younger Brother of the Khagan of the Great Jin Empire, Campaign Commander, Military Commissioner, and Court Attendant went hunting on the southern slope of Liang mountain in the border region, where recently there had not been any matter. He arrived to the Qianling Tombs of the Tang dynasty, and since the buildings and halls (had collapsed?) and one could not see anything, ...’

Langjun 1-1/16, 2-1/14, 3-1

In example (2), there are three VN -iR: 土 伏 <eu.ñ> *ew-ijŋ* [not.be-VN.IR.F], 又 出 又 <m.añ.ir₂> *maŋ-ir* [hunt-VN.IR.M] and 尺 伏 <dau.ñ> [see-VN.IR.F].

Blocks from 又 <GREAT> ... ‘great’ to 又 为 夫 <sh.a.ri₄> *fari* ‘court attendant’ form a NP consisting in the subject of the period 尙 <101> ... ‘younger brother’ plus modifiers (‘of the Khagan of the Great Jin Empire’) and appositions (‘Campaign Commander, Military Commissioner, and Court Attendant’).

The first verb occurring in the period is *ew-ijŋ* ‘not being’. Since *ew-ijŋ* is a feminine form, it cannot be a finite form taking ‘the Younger Brother’ as a subject. *Ew-ijŋ* is feminine because it has attributive function modifying and agreeing in gender with 中 並 又 为 矣 <l.iang sh.a.an> *ljaŋ fan* ‘Liang mountain’. *Ew-ijŋ* takes a subject (i.e. it heads a relative clause), that is 矣 <ui> *ui* ‘matter’. Thus, we may translate the phrase as ‘the Liang mountain where there had not been any matter, lit. the not-having matter Liang mountain.’ The second verbal predicate ends the first period. It is composed by two verbs, the former being *maŋ-ir* ‘hunting’ and the latter being *seŋ-i* ‘he went’. As we can see *maŋ-ir* is masculine, agreeing in gender with the subject ‘the Younger Brother’. *Seŋ-i*

also takes the same subject, but this is not shown in agreement since VN *-i* does not encode gender. We may interpret *majn-ir* as a predicative complement to ‘the Younger Brother’ and *sep-i* as the verbal predicate, and translate the phrase as ‘he went hunting, lit. he went as one who hunts’.

Upon this interpretation, *majn-ir* functions as an argument. It implies that the event of ‘hunting’ is open, happening while ‘he goes’, or after ‘he goes’. In both cases we have an intraterminal notion, focal and realis in the former case (while he went he hunted), or non-focal and irrealis in the latter case (he went in order to hunt when would arrive at destination).

Sep-i is a verbal nominal in finite function concluding the first period.

This example includes two clauses out of the second period, since they were sufficient for the present analysis.

From 仍 尙 有 <ta₂.ang.en> *t^han-en* [Tang-GEN] ‘of the Tang dynasty’ to 又 次 來 <x.ui.ci> *xui-ŋ^hi* [reach-CVB.CI] ‘when he arrived’ we have a secondary clause headed by a CVB *-Ci*. The second predicate is a modal construction encoding dynamic modality (specifically, ability). The lexical verb is 又 伏 <dau.ñ> *tau-in* [see-VN.IR.F] ‘see’, while the modal verb is 又 伏 不 能 <or₂.l.h.er> *or-laq-er* [can-VN.LAK-INS] ‘being able to’. Between the two verbs there is the negation adverb 不 <336> ... ‘not’.

The analysis of the clause between 九 兩 水 <g.iu.ung> *kjun* ‘building’ and *or-laq-er* is somewhat hindered by the obscure blocks 百 火 坐 止 升 火 关 <y.iu₂.d₃ p.o₂.ui.i> *jut p^howii* ‘?’. Their general meaning should be ‘to collapse, to fall in ruin’, as suggested by the corresponding 頽然 *tuírán* ‘[halls and corridors] were so ruined that ...’ (ChLangjun 2-6/7). Nevertheless, I was not able to assign a specific meaning to each word, nor to analyze these words morphologically. Therefore, I provisionally translated ‘had collapsed’ with a question mark.

Consequently, it is difficult to tell whether this block sequence concludes or continues the period.

The block 止 升 火 关 <p.o₂.ui.i> *p^howii* with final graph 关 <i> suggests a morphological segmentation into *p^howii-i* [?-VN.I], with *-i* corresponding to VN *-i*. At the same time VN *-i* can both function as verbal nominal or finite verb. Moreover, suffix *-i* might be a denominal adjectivizer as well.

I tentatively analyzed the period as continuing after *p^howii*, without resolving its grammatical function. Two interpretations are then possible: 1) *kjung thjien* ‘buildings and halls’ is the object of the construction *tau-in* ... *or-laq-er* ‘not being able to see’ which would then be a predicate used impersonally with a non-specified subject, i.e. ‘since one could not see the buildings and halls’; 2) *taw-in* ‘seeing’ is the subject of ... *or-laq-er* ‘being not possible’, i.e. ‘since one could not see anything, lit. since seeing was not possible’.

In each case *taw-in* functions as an action noun, i.e. it expresses the act of seeing, so it might be

aspectually neutral, which would fit with the previously mentioned notion of non-focal intraterminality.

3.3 Verbal Nominal -uci

Verbal nominal morpheme -uci has allomorphs 𐪎 𐪎 ~ 𐪎 𐪎 ~ 𐪎 𐪎 <u.ji ~ u₂.ji ~ u₃.ji> -*ufi*, and 𐪎 𐪎 <o₂.ji> -*ofi*.⁴⁰

Chinggeltei *et al.* (1985: 141) recognized all these suffixes as allomorphs of a verbal nominal morpheme.⁴¹ They read 𐪎, 𐪎, 𐪎 as [u] (front harmony), and 𐪎 as [ʊ] (back harmony). They identified further variants for the first graph of the suffix, namely 𐪎 [u], 𐪎 [ou], 𐪎 [iue]. At that time, graph n. 153 𐪎 had not been deciphered yet.

Chinggeltei (1992: 327) recognized the allographs 𐪎, 𐪎, 𐪎 [su ~ sun] as representing a verbal nominal morpheme.

Chinggeltei (1999: 15) recognized the same elements reading them [su].

Kane (2009: 153-154) described 𐪎 <ji> as a converbial suffix meaning “after”, together with allomorph 𐪎 <ci>. Kane (2009: 41, 53, 94) suggests that 𐪎 <ji> may form actor nouns as well.

CWJ 583-584 describe 𐪎, 𐪎, 𐪎 [uʃ ~ uɖʒ] as a verbal nominal morpheme. They pointed out that it takes case suffixes, corroborating that it is a verbal nominal. They compared it with Written Mongolian agentive verbal nominal -*Gč̆i*, adding further comparison with Dagur [a:ʃ / ə:ʃ / o:ʃ] and Mongghul/Mangghuer [ɖzin].⁴² Noteworthily, they point out that while in Mongolic the agentive verbal nominals mainly indicate human referents⁴³, in Khitan they may indicate human referents as well as actions.

A distinction should be made between verbal nominal morpheme -uci represented by allomorphs 𐪎 𐪎 ~ 𐪎 𐪎 ~ 𐪎 𐪎 <u.ji ~ u₂.ji ~ u₃.ji> -*ufi*, and 𐪎 𐪎 <o₂.ji> -*ofi*, and converbial morpheme -Ci represented by allomorphs 𐪎 <ji> -*fi*, 𐪎 <ci> -*fi*, and perhaps 𐪎 𐪎 <e.ci> -*efi* (see §4.1).

⁴⁰ The graph 𐪎 <ji> has allographs 𐪎 <ji₂₃

⁴¹ Chinggeltei *et al.* (1985:141) use the allograph 𐪎 <ji₂

⁴² The term 土族语 *tǔzúyǔ* is used, which includes both Mongghul and Mangghuer, without specifying the dialect.

⁴³ Poppe (GWM §357) specifies that in Written Mongol, besides designating agent nouns, this verbal nominal can sometime express the process of an action, e.g. WM *yabuγč̆i* ‘going, goer, one who goes, process of going’, *kelegč̆i* ‘saying, one who says, process of saying’, *kelegč̆in* or *kelegč̆id* ‘those who say’. I owe my gratitude to Prof. Khabtagaeva for this remark and for pointing out to me these examples. In addition, in Khalkha this morpheme is often used to form names of tool or instruments.

3)	仕 中 凡 和	尤 安	非 朱	小	十
	ñ ₂ .l.g.en	um.ur ₂	po.do	del	WEST
	jelek-en	umur	p ^h o-to	tel	...
	Tianzong-GEN	first	time-DAT	south	west
	无	兮 中 及 豹	丕	全 各 火	止 及 雨 中 关
	tau	SEAL.l.u.ji ₂	tai	s.eng.un	p.o.ondo.l.i
	t ^h au	...-l-ufi	t ^h ai	sejun	p ^h o-nto-li
	five	ritual-DENV-VN.UCI	grand	field.marshal	become-?
In the first times of Tianzong, he became Grand Field Marshal of the Southwest with Five Seals.					

Dilie 8-19/28

无 兮 中 及 豹 <tau SEAL.l.u.ji₂> t^hau ...-l-ufi [five ritual-DENV-VN.UCI] means ‘who was bestowed with Five Seals’. It is part of the title ‘Grand Field Marshal of the Southwest with Five Seals’. Functionally, it is a phrase modifying the nominal head 丕 全 各 火 <tai s.eng.un> t^hai sejun ‘Grand Field Marshal’. K 195 after translating t^hau ...-l-ufi as ‘five seals’ suggests the literal meaning ‘possessor of the five seals (?)’. This is a remarkable suggestion, since it is probable that 兮 ‘seal’ plus 中 <l> -l- represents a denominal verb (see derivational suffix -l- in §2.4.1). We may translate verb 兮 中 <SEAL.l> ...-l- as ‘to make seals, to have seals’. Verbal nominal 兮 中 及 豹 <SEAL.l.u.ji₂> ...-l-ufi may be interpreted as an actor noun meaning ‘one who has seals’.

4)	中 祜 升 弱	谷 及 关	为 出	万 央 雨 公	又 雨
	l.she.o ₂ .ji	ge.ir ₂ .i	a.añ	y.au.o.oñ.er	m.in
	lef-otfi	keir-i	a-añ	jawo-oñ-er	min
	mourn-VN.UCI	grief-ADJZ	be-VN.AR.F	go-VN.AR.F-INS	?
	立 凡 当	网 中 立 中	夫 及 弱 和	辰	仅
	WRITE.g.eñ	COMPOSE.l.ha.ai	ir ₄ .u.ji.en	har ₃	227
	...k-eñ	...-lqa-ai	ir-ufi-en	qar	...
	write-VN.AR.F	compose-CAUS-VN.AI	receive-VN.UCI-GEN	mountain	?

夫及弱有	土伏谷	令平及矣	弱平立本
ir ₄ .u.ji.en	eu.ñ.er	t.ul.u.ur ₂	jau.ul.ha.ar
ir-ufi-en	eu-ijn-er	tuluur	ɟau-ulqa.ar
receive-VN.UCI-GEN	not.be-VN.IR.F-INS	?	separate-CAUS-VN.AR.M

‘After the mourners had been in grief, they had an epitaph composed, and the addressee’s tomb ... composed. For the death of the recorded addressee ... separated.’

Dilu 36-14/17 (example from R 149)⁴⁴

Example (4) includes two different VN *-uci*, namely 中 祚 升 弱 <l.she.o₂.ji> *lef-ofi* [mourn-VN.UCI] ‘mourners’ and 夫及弱有 <ir₄.u.ji.en> *ir-ufi-en* [receive-VN.UCI-GEN] ‘of the receiver’. *Lef-ofi* covers the function of subject of the predicate 谷 及 关 为 出 百 央 及 肉 谷 <ge.ir₂.i a.añ y.au.o.oñ.er> *keir-i a-an yawo-on-er* ‘after having been in grief’. WJ 115 suggested that 中 祚 及 <l.she.u.> is a verb stem meaning ‘to mourn, to lament’, and that 中 祚 升 弱 <l.she.o₂.ji> may be a converb, probably analyzing the form into *lesho-ji* [mourn-CVB.CI]. Another possible segmentation, which I follow here, is *lesh-oji* [mourn-VN.UCI]. Upon this analysis, it may be interpreted as a verbal nominal, and specifically an actor noun functioning as subject of a clause, i.e. ‘the mourners, lit. the ones who mourn’.

Verbal nominal 夫及弱有 <ir₄.u.ji.en> *ir-ufi-en* [receive-VN.UCI-GEN] occurs twice and it indicates the tomb owner, ‘the [epitaph’s] addressee, lit. ‘the receiver [of the epitaph]’. It is in genitive form of VN *-uci* of verb *ir-* ‘to receive’. The first time it occurs in the NP *ir-ufi-en har* ‘the tomb of the [epitaph’s] addressee, lit. the mountain of the receiver’. The second time it occurs in the NP 立 凡 及 夫及弱有 土伏谷 <WRITE.g.ir₂ ir₄.u.ji.en eu.ñ.er> ...*k-ir ir-ufi-en ew-ijn-er* ‘for the death of the recorded addressee’. Verbal nominal *ir-ufi-en* is modified by verbal nominal <WRITE.g.ir₂> ...*k-ir* ‘written, recorded’. <WRITE.g.ir₂> ...*k-ir* ‘written, recorded’ is a VN *-ir* in attributive function. *Ir-ufji-en* ‘of the addressee’ by means of genitive case expresses possession of following VN *-ir*, *ew-ijn-er*, which by means of instrumental case functions as a beneficiary complement ‘for the death’. As a result, the NP may be translated as ‘for the death of the recorded addressee, lit. for the death of the recorded receiver’. In both occurrences *ir-ufi-en* may be analyzed as an actor noun, i.e. ‘receiver, lit. the one who receive’.

⁴⁴ See footnote n. 14.

3.4 Verbal Nominal -K

Verbal nominal morpheme -K has allomorphs 𐪎 <h> -q (back) and 𐪏 <g> -k (front).

Chinggeltei *et al.* (1985: 140-141) recognise the suffixes 𐪎 [ɣ(ɑ)] (back) and 𐪏 [k(ə)] (front) as allomorphs of a verbal nominal morpheme. They compare it with Written Mongol futuritive participle -KU, adding further comparison with Bonan [kə], Dagur [ku], Mongghul/Mangghuer [ku], Santa [k'u], and Shira Yughur [ɣə].

Chinggeltei (1992: 327, 1999: 15) confirms the preceding account.

Kane (2009: 155-156) describes the allomorphs 𐪎 <hu> (back), 𐪏 <gi> (front), 𐪐 <ho> (back labial) as forming verbal nouns and adjectives.

CWJ 600 list the allomorphs 𐪎 [ɣ] and 𐪏 [k].

A more plausible relation than that suggested in Chinggeltei *et al.* (*op. cit.*), could be with Mongolic imperfective verbal noun, i.e. MM -'A ~ -'Ai, UM -G*ai*.⁴⁵ In Pre-classical Mongol and Written Mongol this suffix expresses an unfinished action which started in the past and continues into the present, e.g. WM *yabu-ɣa* 'someone who has started going and is still going', UM *yabu-ɣai* 'someone who has gone and is still going'.⁴⁶

5)	𐪎 金 夫 关	𐪏 化 当	𐪐 令	𐪑
	sh.em.118.i	cu.ur.ge.eñ	go.t	ü
	ʃem-...-i	ʃu-ur-ge-eɲ	ko-t	y
	good-AGM.F-ACC	together-DENV-CAUS-VN.AR.F	house-DAT	?
	𐪑	𐪒 住 非	𐪓 奈	𐪔 比 𐪕
	291	p.224.282	ia.LUCK	k.el.g
	...	p ^h ...	ia...	k ^h el-k
	eternal	?	luck	say-VN.K
'It is said that to the house that collected good, ... eternal ... luck.'				

Zhonggong 4-28/35

In example (5) the verbal nominal 𐪔 比 𐪕 <k.el.g> *k^hel-k* [say-VN.K] 'it says' functions as a finite verb. This verb serves to quote a sentence from the Chinese classic text *Yijing* (Ōtake, 2015b: 4). It

⁴⁵ I owe my gratitude to prof. Khabtagaeva for this remark.

⁴⁶ Poppe (GWM §362-363).

may be interpreted as a form reporting a general truth, suggesting that VN -*K* may include a intraterminal non-focal notion, i.e. it may indicate general or habitual facts.

3.5 Verbal Nominal *-i*

Verbal nominal morpheme *-i* is represented by 关 <i> -i.

Kane (2009: 149) lists the suffix 关 <i> as one of the six allomorphs of the “converb in vowel + i”.

Ōtake (2015b) mentions the masculine allomorphs 关 -ī, 𠂇 -ej, 𠂇 -ūj, 𠂇 -r, 𠂇 -ūr, and the feminine allomorph 𠂇 -ń as representing a non-past finite morpheme. Some of these allomorphs are ambiguous in that 关 -ī, 𠂇 -ej, 𠂇 -j are mentioned as converbial suffixes as well.

It is possibly cognate with Middle Mongol rare non-past tense finite morpheme *-i*. This form is termed *Nomen Praesentis* by Poppe (GWM §357), and is used as attribute, object and predicate, e.g. WM *ayis-ui* ‘approaching’, *od-ui* ‘going, departing’, *bol-ui* ‘becoming’, *γar-ui* ‘exceeding’.⁴⁷

6)	𠂇 𠂇 𠂇	𠂇 𠂇	𠂇 𠂇 𠂇 𠂇	𠂇 𠂇 𠂇 𠂇	𠂇 𠂇
	y.gu.de	t.gu	sh.em.118.i	cu.ur.ge.eñ	go.er
	iku-te	teku	ſem-...-i	ʧ ^h u-ur-ke-eɲ	kor
	Yijing	so	good-AGM.F-ACC	together-DENV-CAUS-VN.AR.F	house
	𠂇	𠂇 𠂇	𠂇 𠂇 𠂇	𠂇 𠂇	
	ü	ci.eñ	p.224.282	ia.LUCK	
	y	ʧ ^h i-eɲ	p ^h ...	ia...	
	?	make-VN.AR.F	?	luck	
	𠂇 𠂇 𠂇 𠂇	𠂇 𠂇 𠂇 𠂇	𠂇 𠂇	𠂇 𠂇	𠂇
	maud.a.añ.en	cu.ur.ge.eñ	go.er	ü	
	mau-ta-aɲ-en	ʧ ^h u-ur-ke-eɲ	kor	y	
	bad-DENV-VN.AR.F-PX3	together-DENV-CAUS-VN.AR.F	house	?	

⁴⁷ I owe my gratitude to prof. Khabtagaeva for this addition. Segment *u* before *i* is a connective vowel.

来 当	业 住 非	列 艾 力	爻 关
ci.eñ	p.224.282	h.ash.a	x.i
ʃ ^h i-en	p ^h ...	qaʃa	x-i
make-VN.AR.F	?	misfortune	say-VN.I

‘In the *Yijing* it is said that the house that collected good ... made ... luck, and the house that collected its bad ... made ... calamity.’

Nu 34-14/24, 35-1/5

In example (6), verbal nominal 爻 关 <x.i> *x-i* [say-VN.I] ‘it says’ functions as a finite verb. Like 叔 北 <k.el.g> *k^hel-k* [say-VN.K] ‘it says’ in (5), it serves to quote the same sentences from *Yijing* (Ōtake, 2015b: 2). Verb 爻 <x.> *x-* has a similar meaning to verb 叔 北 <k.el.> *k^hel-* ‘to say’. VN *x-i* may include, like *k^hel-k*, a non focal intraterminal notion.

3.6 Verbal Nominal -LAK

Verbal nominal morpheme -LAK has allomorphs 方 列 <al.h> -*alaq*, 𐎠 列 <l.h> -*laq*, 子 列 <ol.h> *oloq*, 𐎠 𐎡 <l.g> -*leg*, 𐎠 𐎡 <ul.g> -*uleg*.

It is probably related to Proto-Mongolic deverbal nominal morpheme *-lGA⁴⁸, yielding WM *-lGA, forming process or abstract names, names of objects, names of household items, and found in almost all Mongolic languages.⁴⁹

7) 久 並 本	及 子 列	𐎠
da.ha.ar	o.ol.h	ñair
taqaar	o-olaq	jair
burying	become-VN.LAK	day
𐎠 𐎡	𐎠 𐎡 𐎠	𐎠 𐎡 𐎠
292.u	sh.eu.us	on.a.ñ
...u	jeuus	ona-añ
sweet	dew	fall-VN.AR.F
‘The day when the burying was done, a sweet dew fell.’		

Xu Lid 4-1/6

In example (7), verbal nominal 及 子 列 *o-olaq* [become-VN.LAK] ‘become’ has attributive function. In previous studies it was analyzed as an instance of morpheme -K, segmenting thus block 及 子 列 <o.ol.h> into *ool-q* [close-VN.Q], and based on ChXu Lid 1-1/2 掩 閉 *yǎnbì* ‘to close the coffin’, it was translated as ‘closed’ (C 140; Chinggeltei, 1992 (reprinted in Chinggeltei, 2010: 319); and K 155). Comparing with other examples we may say that the stem is in fact *o-* ‘to become’.

Ch. 掩 閉 *yǎnbì* corresponds to 久 並 本 及 子 列 <da.ha.ar o.ol.h> *taqaar o-olaq*. I tentatively propose an alternative translation to ‘the coffin was closed’ (K 155), i.e. ‘the burying was done, lit. the burying became’.

O-olaq ‘became’ is the head of a relative clause whose subject is *taqaar* ‘burying’. At the same time, *o-olaq* modifies the nominal head 𐎠 <ñair> *jair* ‘day’. As a result, the full NP is ‘the day when the burying was done’.

⁴⁸ Janhunen, 2003: 11. In the original *.lGA.

⁴⁹ Poppe (GWM §161); Khabtagaeva, 2009: 286. I express my gratitude to prof. Khabtagaeva for this remark.

This example suggests that, within the viewpoint system of verbal nominals in attributive function (see §3.1.4), VN *-lAK*, may belong to the postterminal realm.

3.7 Verbal Nominal -AR

Verbal nominal morpheme -AR has 8 allomorphs. Within these, 4 are marked for feminine gender, and 4 are marked for masculine gender. The feminine allomorphs are 出 <añ> -*añ*, 当 <ẽñ> -*ẽñ*, 肉 <oñ> -*on*, and 杏 <uñ> -*un*, while the masculine allomorphs are 本 <ar> -*ar*, 𠂇 <er> -*er*, 仝 ~ 𠂇 <or ~ or₂> -*or*, and 𠂇 <ur₂> -*ur*.

Chinggeltei *et al.* (1985: 142-145) recognised finite past tense suffixes 𠂇 (no reading), and 𠂇 ~ 𠂇 [uei ~ kuei], and verbal nominal suffixes 出 (no reading), 当 (no reading).

Chinggeltei (1999; Chinese translation, Chen, 2012: 15) had finite form suffixes 𠂇 [wai]⁵⁰ and 𠂇 [wei], and verbal nominal suffixes 出 [sa], 当 [sə]. He defined [wai] and [wei] as allomorphs of the same morpheme, the former occurring in words with posterior vocalism, and the latter in words with anterior vocalism. The same he did with [sa] and [sə], where [sa] occurs in words with posterior vocalism, and [sə] in words with anterior vocalism.

Kane (2009: 144-146) had the finite past tense suffixes 𠂇 <ar>, 𠂇 <er>, 当 <én>, and 仝 <or>.

They are allomorphs of the same morpheme. 𠂇 <ar> occurs in words with posterior vocalism, 𠂇 <er> and 当 <én> in words with anterior vocalism, and 仝 <or> after syllables whose nucleus is [o]. Moreover, 𠂇 <er> indicates masculine gender agreement, whereas 当 <én> indicates feminine gender agreement.

Kane (2009: 155) had the verbal nominal suffixes 出 <án>, 当 <én>, 肉 <ón>, 𠂇 <ún>, 公 <n>, and 伏 <ń> as well, being allomorphs of the same morpheme. We can observe that, at this stage, a certain degree of overlapping between finite and verbal nominal categories was recognised. Suffix 出 <án> occurs in words with posterior vocalism, 当 <én> in words with anterior vocalism, 肉 <ón> follows syllables whose nucleus is [o], 𠂇 <ún> follows stems ending with a consonant, while the rule under which 公 <n>, and 伏 <ń> occur are uncertain.

The overlap is extended in Ōtake (2015a), where 𠂇 -*a:r*, 𠂇 -*e:r*, 出 -*a:n*, 当 -*e:n* all cover both finite and verbal nominal function, being allomorphs of the same morpheme. Suffixes 𠂇 -*a:r* and 𠂇 -*e:r* indicate masculine gender agreement, where as 出 -*a:n*, 当 -*e:n* indicate feminine gender agreement. Suffix 𠂇 -*a:r* and 出 -*a:n* occur in words with posterior vocalism, whereas 𠂇 -*e:r* and 当 -*e:n* occur in words with anterior vocalism. He recognised the allomorph of plural number

⁵⁰ For the sake of clarity, I added square brackets to readings of Chinggeltei (1999).

agreement 𠂇 𠂈 -e:ɤ as well.

Chinggeltei & Wu & Jiruhe (2017: 585–590, 598, 600) had the suffixes 𠂇 [ar]⁵¹, 𠂈 [ər], 𠂉 [an], 𠂊 [ən ~ en], 𠂋 [on ~ ɔn], 𠂌 [(i)n], 𠂍 [un~unj] and being allomorphs of the same morpheme and covering both finite and verbal nominal function. They explicate the adjectival function of this morpheme, and suggest that it may also have action noun function, as suggested by proper names and reign titles containing this morpheme. They suggest that this morpheme encodes past tense and perfect aspect. Suffixes 𠂇 [ar], 𠂈 [ər] indicate masculine gender agreement, whereas 𠂉 [an], 𠂊 [ən ~ en], 𠂋 [on ~ ɔn], 𠂌 [(i)n], 𠂍 [un~unj] indicate feminine gender agreement. The vowel changes are due to vowel harmony. The contrast a/ə ~ e as posterior/anterior is mentioned. Labial harmony rules are probably implied, but they are not explicated.

In this research, it is held that the allomorphs of morpheme -AR are 𠂇 <ar> -ar, 𠂈 <er> -er, 𠂉 ~ 𠂊 <or ~ or₂> -or, 𠂋 <ur₂> -ur, 𠂌 <añ> -aŋ, 𠂍 <eñ> -eŋ, 𠂎 <oñ> -oŋ, 𠂏 <uñ> -uŋ. In this way, there is one allomorph corresponding to each gender and vowel harmony category. A-allomorphs occur in words with posterior vocalism, e-allomorphs in words with anterior vocalism, o-allomorphs follow syllables whose nucleus is [o], and u-allomorphs follow syllable whose nucleus is [u]. However, as CWJ (600) implies by means of a question mark besides 𠂏 <uñ> -uŋ, solid evidence is still needed on the status of this ending.

VN -AR occurs in nominal, adjectival and finite functions. In nominal function, it can take case suffixes. Possibly these cases might be treated as quasi-converbs. Lastly, it possibly occurs in analytic constructions with special aspectual meaning.

3.7.1 Verbal Nominal -AR as Argument

This section analyzes examples where verbal nominals with -AR morpheme function as arguments.

8) 𠂉 𠂊	𠂋 𠂌 𠂍	𠂎 𠂏 𠂐 𠂑	𠂒 𠂓
d.ilt	g.ing.en	l.iu sh.eu	sair.e ⁵²
tilt ^h	kiŋ-en	lju ʃeu	ye
south	capital-GEN	lieutenant	Yue

⁵¹ For the sake of clarity, I added square brackets to readings of Chinggeltei & Wu & Jiruhe (2017).

⁵² Here, 𠂒 <sair> ‘month’ stands for 𠂒 <üe>.

凡 火	杰 尔	公 存 矢	立 凡 当
g.ui	ong.on	n.ar ₂ .de	WRITE.g.eñ
kui	on-on	nar-te	...k-ep
state	prince-GEN	tomb-DAT	write-VN.AR.F

‘Epitaph (lit. the writing on the tomb) of the Lieutenant of the Southern Capital and Prince of the Yue State.’

Zhonggong 1-1/9

The passage in example (8), in CWJ 946 is glossed with “南 京 之 留 守 越 国 王 之 墓 志” *nán jīng-zhī liúshǒu Yuè guó wáng-zhī mù zhì* [south capital-of lieutenant Yue state prince-of tomb record].

The block 立 凡 当 <WRITE.g.eñ> ...*k-ep* [write-VN.AR.F] ‘written’ stands for 立 凡 当 月 卒 <WRITE.g.eñ TEXT.u₂> ...*k-ep* ...*u* ‘the written text’, found for instance in Linggong 1-11/12, Zongjiao 1-1/13, and Renyi 3-14/15 (see example (12)).⁵³ In the latter expression, <WRITE.g.eñ> ...*k-ep* has attributive function, modifying the following noun. Since the modified is an inanimate referent, i.e. ‘text’, the verbal nominal takes feminine gender agreement.

In example (8), <TEXT.u₂> ...*u* is omitted, thus <WRITE.g.eñ> ...*k-ep* functions as a noun, meaning ‘the writing, the written (thing)’. This passage is the title of the epitaph, and consists in a NP, the head of which is the verbal nominal, i.e. ‘Writing on the tomb of the Lieutenant [...]’. Since writing a text is an accomplishment (finitransformative durative IPS), the verbal nominal <WRITE.g.eñ> ...*k-ep* may be considered as a result noun, i.e. the result obtaining after transgressing the crucial point of completing a text.

Analogous examples can be observed in examples (9), (10), and (18).

9) 百 方 立 方	立 凡 尔	立 凡 当	令 勾
y.al.ha.al	RECORD.g.er	RECORD.g.eñ	t.ug ₂
jalqa-al	...k-er	...k-ep	t ^h uk
?-CVB.AL	write-VN.AR.M -VN1.M	write-VN.AR.F	say

‘(...) he recorded. The record says ...’

Renxian 69-25/28

The passage in example (9), in CWJ 1081 is glossed with “... 志 志 曰” ... *zhì zhì yuē* [... record

⁵³ In Renyi 3-15, the allograph 冂 <TEXT₂> is used.

record say]. Due to the similarity with the following example, (9) and (10) are discussed jointly after example (10).

10) 万方立方	立九尔	—	立九当	令勾
y.al.ha.al	WRITE.g.er		WRITE.g.eñ	t.ug ₂
jalqa-al	...k-er		...k-en	tuk
?-CVB.AL	write-VN.AR.M		write-VN.AR.F	say
‘(...) he recorded. The record says ...’				

Dilie 36-31/34

The passage in example (10), in CWJ 1185 is glossed with “ 志 曰” *zhì yuē* [... record say].

Examples (9) and (10) are identical except for the space in the middle of (10). They both come after an obscure section. Fortunately, not much context is needed to understand these instances. In (9), the passage introduces the epitaph’s conclusion, while in (10), it introduces a poem. The first half of the passages conclude long periods in which the scribes are introduced, of the type ‘the scribe X ... wrote’. The block 立九尔 <WRITE.g.er> ...*k-er* ‘he wrote’ is in the function of finite form, and has masculine gender agreement with its subject, i.e. the scribe. The following block 立九当 <WRITE.g.eñ> ...*k-en* starts a new sentence. The beginning of a new sentence is corroborated by the space between the two blocks in (10). The change of ending *-er* (masculine) to *-en* (feminine) indicates a change of syntactic function (finite verb vs. argument). Verbal nominal <WRITE.g.eñ> ...*k-en* functions as an argument meaning, like in example (8) ‘the text, lit. the writing, the written (thing)’. In conclusion, we have ‘The scribe wrote. [His] text says: ...’

11) 令化尔	全尔和	尔化	尔	尔化立出	尔用尔	尔尔
t.ur.oi	s.on.en	u ₃ .ur ⁵⁴	ai	sh.or ₂ .ha.añ	sh.il.u	u ₃ .e
t ^h ur-er ⁵⁵	non-en ⁵⁶	uur	ai	forqaan	filu	ue
four-ORD.M	generation	former	father	forqaan	filu	counsel

⁵⁴ More frequently written 尔化 <u.ur>.

⁵⁵ In *Xiangwen*, 尔 <er> is regularly replaced by 尔 ~ 尔 <oi ~ oi₂

⁵⁶ 全尔和 <s.on.en> is clearly an error for 公尔和 <n.on.en> (WJ 140). In fact, further in the same text this word is written correctly.

无 卡 升 火	令 金 中 咨 当	全 岑	凡 岑	主
tau.us.o2.ui	t.em.l.ge.eñ	s.ui ^{o57}	g.ui ^o	ong
tauso-wi	tem-elke-eɲ	sui	kui	oŋ
advance-CVB	confer-CAUS-VN.AR.F	Sui	state	prince

‘His great-great-grandfather (lit. the ancestor of fourth generation) was the Counsel Shulan Shilu. The [title] conferred [to him] after he advanced was Prince of the State of Sui.’

Xiangwen 2-7/18

The passage in example (11), in WJ 140-141 is translated as “[his] forefather of the fourth generation [was] Counsel Sh.ho.ha.a.án Sh.il.u, [who] was granted [---]’ ‘[he had the title of] Prince of the State of Sui”.

In CWJ 1471, it was glossed with “第四代之先祖述澜释鲁于越...封隋国王” *dìsì dài-zhī xiānzǔ Shùlán Shìlǔ yúyuē ... fēng Suí guó wáng* [fourth] generation-of ancestor Shulan Shilu counsel ... confer Sui state prince]

The block 令金中咨当 <t.em.l.ge.eñ> *t^hem-elke-eɲ* stands for 令金中咨当 关化 <t.em.l.ge.eñ i.ir₃> *t^hem-elke-eɲ iir* ‘the conferred title’ found for instance in Jue 4-36/37, 5-35/36 (see examples (16) and (17)). In the latter expression, verbal nominal *t^hem-elke-eɲ* ‘conferred’ has attributive function, modifying the following noun *iir* ‘title’. In example (11), *iir* is omitted, thus *t^hem-elke-eɲ* functions as an argument, namely the subject of a zero-copula nominal predicate, where 全岑凡岑 杰 <s.ui^o g.ui^o ong> *sui kui oŋ* ‘Prince of the State of Sui’ is the predicative complement. Verbal nominal *t^hem-elke-eɲ* acquires the meaning ‘the conferment, the conferred (thing)’. Since conferring a title may be analyzed as an achievement (finitransformative momentaneous IPS), *t^hem-elke-eɲ* may be considered as a result noun. It indicates the situation obtaining after transgressing the crucial point of conferring a title, i.e. Counsel forqaap Jilu had a new title.

3.7.2 Verbal Nominal -AR with Case Marking

12) 中 升 升 弱	咨 关 关	为 出	万 央 及 肉 咨	又 雨
l.she.o2.ji	ge.ir ₂ .i	a.añ	y.au.o.oñ.er	m.in
lef-oŋi	keir-i	a-aɲ	jawo-oɲ-er	min
mourning-VN.UCI	grief-ADJZ	be-VN.AR.F	go-VN.AR.F-INS	reign

⁵⁷ WJ 141 has 岑 <ui^o>, CWJ 1471 has 岑 <ui₂>.

重 凡 当	网 中 巫 中
RECORD.g.eñ	COMPOSE.l.ha.ai
...k-ep	...-lqa-ai
record-VN.AR.F	compose-CAUS-CVB.AI
‘... after the mourners had been in grief (lit. had gone being in grief), the reign let [someone] compose the epitaph [and] ...’	

Dilu 35-24, 36-1/6

The passage in example (12), in CWJ 1462 is glossed with “... ... 道 墓 志 使 撰” ... *dào mù zhì shǐ-zhuàn* [... way tomb record CAUS-compose].

In example (12), we have a VN -AR marked with instrumental case, i.e. 万 央 及 内 公

<y.au.o.oñ.er> *yawo-on-er* [go-VN.AR.F-INS] ‘by going, lit. with the going’. This verbal nominal may be analyzed as a quasi-converb indicating a relation of anteriority to the following clause, i.e. ‘after going’. I translated the sentence 中 祚 升 弱 公 及 关 为 出 万 央 及 内 公 l.she.o₂.ji ge.ir₂.i a.añ y.au.o.oñ.er> *lef-ofi keir-i a-añ yawo-on-er* with ‘after the mourners had been in grief, lit. had gone being in grief’. The sequence *a-añ yawo-on-er* may be analyzed as an analytic construction encoding a certain actional recategorization. This construction will be investigated under example (25) in §3.7.5.

13) 和化公	[].[].欠伏	列艾及	止央全和	又止冬
ci.ur.er	[].[].ho.ñ	h.ash.u	p.ur2.s.en	m.ha.as
ʃ ^h ur-er	...qoŋ	qaʃu	pur-s-en	maqa-as
two-ORD.M	...qoŋ	qaʃu	descendant-PL-GEN	prince-PL?
关化全公	达	及全公	今及和亦	
i.ri.s.er	le	o.or.er	pu.u ci.ün	
iri-s-er	le	o-or-er	p ^h u ʃ ^h yn	
title-PL-INS	only	be-VN.AR.M-INS	p ^h u ʃ ^h yn	
凡亦	杰尔	关化	和公	
g.ün	ong.on	i.ir3	ci.er	
kyn	oŋ-on	iir	ʃ ^h i-er	
prefecture	prince-GEN	title	make-VN.AR.M	

‘The second [son] was ...kun qafu. Upon having only titles (lit. becoming only through titles) of the Young Princes, he covered (lit. he made) the position of Prince of the Pu 𐎑𐎶yn Prefecture.

Renxian 6-45/58

Example (13) will be analyzed more in depth under example (26) in §3.7.4, where the focus is on the VN -AR in finite function 𐎕𐎕 <ci.er> 𐎕^{hi}-er [make-VN.AR.M] ‘he made’. There, a large portion of text is analyzed. Here, we analyze the example more briefly, focusing on the VN -AR marked by instrumental case 𐎕𐎕𐎕 <o.or.er> *o-or-er* [become-VN.AR.M-INS].

We have the verbal nominal *o-or* in masculine form, agreeing with its subject, followed by the instrumental case, i.e. *o-or-er* ‘by becoming, lit. with the becoming’.

I translated the sequence 𐎕𐎕𐎕𐎕𐎕𐎕𐎕 ‘after having only titles (of ...), lit. by becoming only through titles (of ...)’. Similarly to example (12), instrumental-marked VN *o-or-er* may be analyzed as a quasi-converb indicating anteriority relation to the following clause.

In conclusion to this section, let us compare quasi-converbial morpheme -AR-INS with a converbial morpheme -Ai.

In section §5.4, we will be able to observe that -Ai is able to indicate several circumstantial relations, and it probably pertains to the category of contextual or narrative converbs.

Moreover, it is a very frequent form, apparently the most often used converb. It often appears to indicate anteriority relation.

Although to express anteriority relation one can employ CVB -Ai, sometimes—more rarely—the form -AR-INS, a transparent innovative form, is employed instead. This fact suggests us that -AR-INS may be regarded as an innovative form specifically encoding anteriority relation, arisen to supply the ambiguity of older converbs with less specific functional meaning.

Nevertheless, more examples need to be analyzed to confirm this definition.

I conclude this section with a note on gender agreement. It is typologically noteworthy that verbal nominals may agree in gender with their subject even when they function as quasi-converbs.

3.7.3 Verbal nominal -AR in Attributive Function

Attributive function of VN -AR was well known from previous studies. One of the most quoted examples is the following.

14) 主 后 介 日	相 当	日
xong tai xeu.un	sui.eñ	ñair
xoŋ t ^h ai xeu-un	suj-eŋ	ɲair
empress.dowager	be.born-VN.AR.F	day
‘The day on which the Empress Dowager was born.’		

Renyi 10-1/5

The passage in example (14) in C 505, L 734, and CWJ 883 was glossed with 皇太后之诞日 “*huáng tài hòu-zhī dàn rì*” [empress.dowager-GEN be.born day]. This is one of the most famous examples used in several studies to show the usage of morpheme -AR in adjectival function (C 145; Chinggeltei, 1992 (reprinted in Chinggeltei, 2010: 320); Chinggeltei, 1999 (Chinese translation in Chen, 2012: 15); K 155; CWJ 588). C, Chinggeltei (1992), and CWJ translated 相 当 日 <sui.eñ ñair> *sui-eŋ ɲair* as “生日” *shēngrì* ‘birthday’, Chinggeltei (1999) translated it as “诞日” *dànrì* ‘birthday (hon.)’, and K translated as ‘birthday’. This expression can indeed be interpreted as a lexicalized locution meaning “birthday, lit. the born day”.

Analyzing the full phrase from a syntactical point of view, verbal nominal *suj-eŋ* ‘born’ is the predicate of a relative clause, whose subject—in genitive case analogously to Mongolic syntax—is 主 后 介 日 <xong tai xeu.un> *xoŋ t^hai xeu-un* ‘of the Empress Dowager’. The nominal head modified by the relative clause is *ɲair* ‘day’. Consequently, I opted for a literal translation, i.e. ‘the day on which the Empress Dowager was born’. The verb *sui-* ‘to be born’ may be analyzed as an achievement (finitransformative momentaneous IPS). Within the viewpoint system of verbal nominal in attributive function, verbal nominal *suj-eŋ* ‘born’ may be considered as pertaining to the postterminal realm, i.e. it expresses the transgression of the crucial point of being born.

15) 兴 宗 用 全 当 — 主 至 有 戈 雨 关 关 主 介 日 承 有				
x.i.ing s.ung ₂	hong di.en	zh.in i.i	hong heu.un	har ₃ .en
xij suŋ	xoŋ ti-en	ʒin i	xoŋ xeu-un	qar-en
Xingzong	emperor-GEN	Renyi	empress-GEN	mountain-GEN

凡 丙 火 凡	仍 当	屋 为 火	五 凡 当	目 今
g.iu.ung.du ₂	ta ₂ eñ	cal.a.iu ₂	WRITE.g.eñ	TEXT ₂ .u ₂
kjuŋ-tu	ta-eŋ	ʃ ^h ala-ju	...k-eŋ	...u
palace-DAT	put-VN.AR.F ⁵⁸	stone-LOC	write-VN.AR.F	text
‘Inscription (lit. written text made on stone) placed at the tomb (lit. the palace of the mountain) of Empress Renyi of Emperor Xingzong.’				

Renyi 3-1/15

In C 503, the passage in example (15) is glossed with “兴宗 皇帝之 仁懿 皇后 … 宫 … … 志 铭” *Xīngzōng huángdìzhī Rényì huánghòu ... gōng ... zhì míng* [Xingzong emperor-of Renyi empress ... palace ... record inscription].

In L 733, it is glossed with “兴宗 皇帝之 仁懿 皇后之 山之 宫 … … 志 铭” *Xīngzōng huángdìzhī Rényì huánghòuzhī shānzhī gōng ... zhì míng* [Xingzong emperor-of Renyi empress-of mountain-of palace ... record inscription].

In CWJ 881, it is glossed with “兴宗 皇帝之 仁懿 皇后之 山之 宫于 … … 志 铭” *Xīngzōng huángdìzhī Rényì huánghòuzhī shānzhī gōngyú ... zhì míng* [Xingzong emperor-of Renyi empress-of mountain-of palace ... record inscription].

As anticipated under example (8), in the expression 五 凡 当 目 今 <WRITE.g.eñ TEXT₂.u₂> ...k-eŋ ...u, 五 凡 当 <WRITE.g.eñ> ...k-eŋ ‘written’ is the modifier and 目 今 <TEXT₂.u₂> ...-ŋ ...u ‘text’ is the modified. Unlike examples (8), (9), and (10), verbal nominal <WRITE.g.eñ> ...k-eŋ ‘written’ in (13) has attributive function.

As we have seen in under example (8), ‘to write a text’ may be analyzed as an accomplishment (finitransformative durative IPS). Verbal nominal <WRITE.g.eñ> ...k-eŋ ‘written’ expresses the transgressing of the crucial point of writing a text, i.e. the text was completed. In the viewpoint system of verbal nominals in attributive function it may pertain to the postterminal realm.

This example includes another verbal nominal in attributive function, that is 仍 当 <ta eñ> *t^ha-eŋ* [put-VN.AR.F] ‘put, placed’. Verbal nominal *t^ha-eŋ* modifies the nominal head 屋 为 火 <cal.a.iu₂> *ʃ^hala-ju* [stone-LOC] ‘on the stone’. This verbal nominal function as the head of a relative clause that starts from blocks 3/1-2 兴 宗 用 今 当 <x.i.ing s.ung> *xīngsūŋ* ‘Xingzong’. Including the

⁵⁸ I would like to thank prof. Wu Yingzhe for this gloss. The possibility that verb stem *t^ha-* means ‘to put’ with a possible connection to MM *talbi-* ‘to put’ was pointed out by him in personal communication during my student exchange period at Inner Mongolia University (May 2024-January 2025).

nominal head the relative clause may be literally translated as ‘on the stone that was placed at the palace of the mountain of Empress Renyi of Emperor Xingzong’. The action ‘to place a stone in a location’ may be analyzed as an achievement (finitransformative momentaneous IPS). Verbal nominal *t^ha-ep* may be regarded as indicating the transgressing of the crucial point, i.e. the stone is at its place, thus it may pertain to the postterminal realm.

16) 生生丰	来习平	爻为夫	生丰	列夫
ab ab ai	ci.iuk.ul	sh.a.ri ₂	ab ai	h.118
ap ap ai	ʃ ^h iukul	ʃari	ap ai	q...
great.grandfather	ʃ ^h iukul	court.attendant	grandfather	Q...
门九才乃	天余分中並力本	尺安爻	几卡	尺茶
du g.ia.am	HEAVEN u ₂ .du ₃ .l.ha.a.ar	dau.ur ₂ .ir ₂	ku.us	u ₃ .er
tu kjam	... utulqaar	tauur-ir	k ^h uus	u-er
chief.supervisor	Chongxi	middle-ADJZ	strength	give-VN.AR.M
佃中並力本	丰	余分中並力本		
sui.l.ha.a.ar	ai	u ₂ .du ₃ .l.ha.a.ar		
sui-lqa-ar	ai	utulqaar		
be.born-CAUS-VN.AR.M	father	Utulqaar		
‘The great-grandfather was the Court Attendant ʃ ^h iukul. The grandfather was the Chief Supervisor Q... He offered service during the Chongxi period. His natural father (lit. generating father) was Utulqaar.’				

Zhen 4-12/29

In CWJ 1117, the passage in example (16) was glossed “曾祖父 ... 郎君 祖父 ... 都监 重熙 中 ... 授 生父 斡特拉” *zēngzǔfù ... lángjūn zǔfù ... dū jiān chóngxī zhōng ... shòu shēng fù wòtèlā* [great-grandfather ... court.attendant grandfather ... chief.supervisor Chongxi middle ... bestow bear father Wotela].

From the block 生生丰 <ab ab ai> *ap ap ai* ‘great grand-father’ to 爻为夫 <sh.a.ri₂> *ʃari* ‘court attendant’, there is a zero copula sentence. From 生丰 <ab ai> *ap ai* ‘grandfather’ to 门九才乃 <du g.ia.am> *tu kjam* ‘chief supervisor’, there is another zero copula sentence. From 天 <HEAVEN> to 尺茶 <u₃.er> *u-er* ‘he gave’ we have a VP headed by the finite verb 尺茶 <u₃.er> *u-*

er ‘he served’ (on the expression *k^huus u-er* ‘he served, lit. he gave strength’). The sequence 佗 中 立 为 本 中 分 中 立 为 本 <sui.l.ha.a.ar ai u2.du3.l.ha.a.ar> *sui-lqa-ar ai utulqaar* is the third zero copula sentence. The subject is the NP *sui-lqa-ar ai* while the predicative complement is *utulqaar* ‘Utulqaar (proper name)’. The noun *ai* ‘father’ function as nominal head modified by verbal nominal in attributive function *sui-lqa-ar* ‘generated’, which agrees with its head in masculine gender. The verb stem *sui-* means ‘to be born’. By augmenting it with the causative morpheme, we obtain *sui-lqa-* ‘to give birth, to generate’. Thus, the NP *sui-lqa-ar ai* means ‘his natural father, lit. the birth-giving father, the generating father’. The VN *sui-lqa-ar* may be analyzed as a minimal relative clause consisting of the sole predicate. We may analyze the verb *sui-lqa-* ‘to give birth, to generate’ as an achievement (finitransformative momentaneous IPS). The NP *sui-lqa-ar ai* may pertain to the postterminal realm, as it indicates the transgressing of the crucial limit, i.e. the child is born.

Note that an analogous example taken from Songwei 4-35/26 is analyzed in O 370. Similarly to the interpretation given here, *sui-lqa-ar ai*⁵⁹ was glossed with [生む-PST.M 父] *umu-PST.M chichi* [give.birth-PST.M father] and translated as 生んだ父 *unda chichi* ‘lit. birth-given father’. A further analogous example taken from Hongyong 2-1/12 is analyzed in CWJ 587. Similarly to above mentioned interpretations, *sui-lqa-ar* was interpreted “使之生下的” *shǐ zhī shēngxiàde* ‘that generated him, lit. that let him be born’, and *sui-lqa-ar ai* was interpreted “生父” *shēngfù* ‘birth-giving father’.

17) 佗 用 立 为 出	百	今 考 中 文 考	今 考 伏
sui.il.ha.a.añ	mo	s.iau l.ie.en ₂	pu.is.ñ
sui-ilqa-añ	mo	sjau ljen	p ^h uisijñ
be.born-CAUS-VN.AR.F	mother	Sjau Ljen	lady
‘[His] natural mother was Lady Sjau Ljen ⁶⁰ .’			

Jue 8-10/14

The passage in example (17), in CWJ is glossed with “生 母 小 连 夫人” *shēng mǔ Xiǎo Lián fūrén* [give.birth mother Xiao Lian lady].

Example (17) shows the same structure of the last zero copula sentence in example (16), albeit the subject is feminine, i.e. ‘mother’, so as modifying verbal nominal we have the feminine 佗 用 立 为

⁵⁹ According to Ōtake’s romanization: *sūjlas-ār ai*.

⁶⁰ Lady Sjau Ljen was the mother of the tomb owner.

出 <sui.il.ha.a.añ> *sui-ilqa-añ* instead of masculine 佗 𠂔 𠂔 𠂔 𠂔 <sui.l.ha.a.ar> *sui-lqa-ar*.⁶¹

The phrase 佗 𠂔 𠂔 𠂔 𠂔 𠂔 was already analyzed in O 370 as the feminine parallel of 佗 𠂔 𠂔 𠂔 𠂔 𠂔 in order to show attributive use of morpheme *-AR* and the rules regulating selection of allomorphs.

18) 𠂔 𠂔	𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔 𠂔 𠂔
ir ₂ .e	g.ui	ong.on	bai.is.de	h.ui.ri.s.el
ire	kui	oŋ-on	paiis-te	xuiri-sel
now	kingdom	prince-GEN	position-DAT	reach-CVB.SEL
𠂔 𠂔 𠂔 𠂔 𠂔 𠂔 𠂔 𠂔 𠂔 𠂔		𠂔 𠂔	𠂔 𠂔	
k.ai fu ng.i tu.ung s.a.am sǐ		b.in	g.ui	
k ^h ai fu ŋi t ^h uŋ sam suu		pin	kui	
commander.unequalled.in.honour		Bin	state	
𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔 𠂔 𠂔	
g.ung	t.ge.eñ	abad.de	d.em.l.ge ₂ .er	
kuŋ	t ^h eke-eŋ	apat-te	tem-elke-er	
duke	die-VN.AR.F	self-DAT	confer-CAUS-VN.AR.M	
‘Now, since he has reached the grade of Kingdom Prince, he has been posthumously appointed (lit. he was appointed on his dead self) to Commander Unequalled in Honour and Duke of the Kingdom of Bin’				

Zhonggong 5-41/57

The passage in example (18), in CWJ 949 is glossed with “今 国 王之 … 至 开 府 仪 同 三 司 𠂔 国 公 薨 身 于 封” *jīn guó wángzhī ... zhì kāi fǔ yí tóng sān sī Bīn guó gōng hōng shēnyú fēng* [now state prince-of ... commander.unequalled.in.honour Bin state duke deceased body-at confer].

This period is divided into two main parts. The former part is a converbial clause headed by 𠂔 𠂔 𠂔 𠂔 𠂔 <x.ui.ri.s.el> *xuiri-sel* ‘since he has reached’. The predicate takes the locative complement <g.ui ong.on bai.is.de> *kui oŋ-on paɪs-te* ‘to the position of Kingdom Prince’. The latter part is the

⁶¹ The causative of 佗 <sui> ‘to be born’ has the two variants 佗 𠂔 𠂔 𠂔 𠂔 ~ 佗 𠂔 𠂔 𠂔 𠂔 <sui.il.ha.a. ~ sui.l.ha.a>. It is not certain whether they imply a different pronunciation. In the transcription I provisionally preserve the orthographic variation with *suilqa-* ~ *suilqa*.

main clause headed by the finite form 仝金中忝忝 <d.em.l.ge₂.er> *tem-elke-er* ‘he was conferred’. This predicate agrees in masculine gender with its subject. The object is 叔平令安关劣水今为乃北丹雨凡央凡太 <k.ai fu ng.i tu.ung s.a.am s.ĩ b.in g.ui g.ung> *k^hai fu ŋi tuŋ sam suu pin kui kuŋ* ‘Commander Unequalled in Honour and Duke of the Kingdom of Bin’. It is followed by a locative complement NP, that is 令峇当 因矢 <t.ge.eñ abad.de> *t^heke-eŋ apat-te*. The NP consists in verbal nominal *t^heke-eŋ* ‘dead’ in attributive function, modifying *apat-te* ‘on the self’. The fact that *apat* ‘self’ takes feminine gender agreement suggests that it was considered functionally unmarked, i.e. it may be applied to beings of both genders. Finally, we obtain ‘on his dead self, lit. on the dead self’. This may be an expression with the meaning of ‘after death, posthumously’.

As a result, the main clause means ‘he was posthumously appointed to Commander Unequalled in Honour and Duke of the Kingdom of Bin.’

The verb *t^heke-* ‘to die’ may be analyzed as an achievement (finitransformative momentaneous IPS). The NP *t^heke-eŋ apat-te* ‘on the dead self’ indicates the transgressing of the crucial point of dying, so, verbal nominal *t^heke-eŋ* ‘dead’ may be regarded as pertaining to the postterminal realm.

19) 仝 平	列 艾 及 杏	凡 丹 忝	令 又 央	令 峇 万
ab ai	h.ash.u.uñ	da ₂ .al ₂ .er	pu sh.iu ₂	t.ge.y
ap ai	qaʃuujŋ	taler	p ^h u ʃu	t ^h eke-ei
grandfather	Qaʃuujŋ	Taler	deputy.administrator	die-CVB.AI
仝 金 中 峇 当	关 化	凡 今 并		
t.em.l.ge.eñ	i.ir ₃	shĩ s.iang		
t ^h em-elke-eŋ	iir	ʃuu sjaŋ		
confer-CAUS-VN.AR.F	name	military.governor		
‘[His] grandfather was the Deputy Administrator Qaʃuujŋ Taler. The title conferred [to him] after he had died, was Military Governor.’				

Jue 4-30/39

The passage in example (19), in CWJ 1534 is glossed with “祖父 曷主隐 铎鲁幹 副 枢 再 封号 使 相” *zǔfù Hezhǔyǐn Duolǔwo fù shū zài fēng hào shǐxiàng* [grandfather Hezhuyin Duoluwo

deputy.administrator again confer title military.governor].

There are two zero copula sentences, one from 主 中 <ab ai> *ap ai* ‘grandfather’ to 令 又 央 <pu sh.iu₂> *p^hu fu* ‘deputy administrator’, and the other from 令 央 万 <t.ge.ei> *t^heke-ei* ‘after dying’ to 凡 今 将 <shī s.iang> *fu sjan* ‘military governor’. As anticipated under example (11), the NP 令 央 中 央 当 关 化 <t.em.l.ge.eñ i.ri> *t^hem-elke-en iir*—the subject of the second sentence—means ‘the conferred title’, and consists of verbal nominal *t^hem-elke-en* ‘conferred’ in attributive function modifying the nominal head *iir* ‘title’ that, being an abstract referent, takes unmarked, i.e. feminine, gender agreement. Note that the second sentence is another way of conveying the meaning of 令 央 当 国 矢 空 金 中 央 央 <t.ge.eñ ab.ad.de d.em.l.ge₂.er> *t^heke-en apat-te tem-elke-er* ‘he was posthumously conferred (title X), lit. he was conferred (title X) on his dead self’ found in example (18). In fact, *t^heke-ei tem-elke-en iir* means ‘his posthumous title, lit. the title that he was conferred after he died’. The title *fu sjan* ‘military governor’ is the predicative complement. A similar formula is found also in Jue 5-34/39, reported below in example (20).

As seen under example (11), ‘to confer a title’ is an achievement. The VP *t^hem-elke-en iri* ‘the conferred title’ implies that the crucial point of the achievement has been transgressed, i.e. the title was conferred. Thus, the verbal nominal *tem-elke-en* ‘conferred’ may be regarded as pertaining to the postterminal realm.

20) 今 将 凡 央 央	付 列 出	圣	又 及	中 丙 伏	今 今 为	公 及
s.iang g.ung.un	b.h.añ	jur ^o	m.o	l.iu.ñ	pu s.a	n.u
sjan kuj-un	paq-aj	ʃur	mo	ljujn	p ^h u sa	nu
chancellor-GEN	son.OBL-PL	two.M	great	Ljujn	P ^h u Sa	Nu
们 凡 才 圣	凡 为 央	央 各 央	可 央 央	央 央 化 今 比		
du g.ia.im	or ₂ .a.an	ci.eng.un	bai.is.de	x.ui.ri.s.el		
tu kjaim	oraan	ʃenjun	paiis-te	xuiri-sel		
chief.supervisor	after	changwen	position-DAT	arrive-CVB.SEL		

无 卡 升 火	令 金 中 凡 当	关 化	圣 化 由	令 欠 无 关
tau.us.o ₂ .ui	t.em.l.ge.eñ	i.ri	xe.ri.320	t.ho sh.i
t ^h auuso-wi	t ^h em-elke-eŋ	iri	xeri<320>	t ^h oq ʃi
advance-CVB.AI	confer-CAUS-VN.AR.F	name	? ⁶²	regional.governor

‘The sons of the Chancellor were two. The elder one was the Chief Supervisor Ljuin P^hu Sa Nu. Later, after he reached the position of *changwen*, the title conferred [to him] after he advanced was [...] Regional Governor.’

June 5-19/40

The passage in example (20), in CWJ 1534 was glossed with “相 公之 孩子 二 大 留 隐 菩 萨 奴 都 监 后 敝 稳 ... 至 ... 封 号 ... 度 使” *xiàng gong-zhī háizi èr dà liúyǐn pú sà nú dū jiān hòu chǎngwěn ... zhì ... fēng hào ... dù shǐ* [chancellor-of child two great Liuyin Pu Sa Nu chief.supervisor after *changwen* ... reach ... confer title ... Regional Governor].

Example (20) is a further example of the same VP analysed in example (19), *tem-elke-eŋ iir* ‘the conferred title’. Nevertheless, the context contains some difference. Whereas in (19) we had ‘the posthumous title, lit. the title conferred after dying’, in (20) we have 无 卡 升 火 令 金 中 凡 当 关 化 <tau.su.o₂.ui t.em.l.ge.eñ i.ri> *t^hauuso-wi t^hem-elke-eŋ iir* ‘the title conferred after he advanced [in position]’. I have included this example in order to show the variety of contexts in which this expression is attested. However, the aspectual analysis remains the same as under example (17).

21) 又	令 考 分	玳 刂	采 关	凡 亥 木	谷 谷 谷
GREAT	t.iau.du ₃	xu.177	qid.i	g.ur ₂ .en	d.ge.er
...	t ^h jautu	xu...	k ^h it-i	kur-en	teke-er
great.F	?	Liao	Khitani-ADJZ	state-GEN	die-VN.AR.M
全 及	中 火 水	玳	凡 亦	无 欠	全 并 凡 亦
s.o	l.iu ₂ .ung	xu	g.ün	sh.ang	s.iang g.ün
so	ljun	xu	kyn	ʃaŋ	sjaŋ kyn
left	dragon	tiger	army	superior	general

⁶² There are not sufficient clues to translate <xe.ri.320>. We may formulate two hypothesis: it may be a qualification indicating a specific type of regional governor, or it may be the name of the region administered by the regional governor.

忠 用	中 聿	九 次 來 相	九 文 []
tz.ing	l.iang	g.ung ci.en	g.ie.[]
ʃiŋ	ljaŋ	kuŋ ʃ ^h en	kje...
loyal	bright	meritorious.person	concurrently

□□ □□ □□	□□ 火	公 存 矢	五 九 当
□□ □□ □□	□.□.un	n.ar ₂ .de	WRITE.g.eñ
	...un	nar-te	...k-ep
	<i>changwen</i>	tomb-te	write-VN.AR.F

‘Epitaph [lit. text on the tomb] of the lately Left Supreme General of the Army of the Dragon and Tiger, Loyal Bright Meritorious Person and [...] Changwen of the Great Liao State.’

Jue 1-1/22, cf. W 270

The passage in example (21), in CWJ 1532 is glossed with “大 ... 契丹 国之 故 左 龙 虎 军 上 将 军 贞 亮 功 臣 兼 ... 敞 稳 墓 志” *dà ... Qìdān guó-zhī gù zuǒ long hǔ jūn shàng jiāngjūn zhēn liàng chén jiān ... chǎngwěn mù zhì* [great ... Khitan state-of deceased left dragon tiger army superior general loyal bright meritorious subject ... *changwen* tomb record].

We have already seen verbal nominal 令 客 当 <t.ge.eñ> *t^heke-ep* ‘dead’ in adjectival function in example (18). I include the following example in order to show the variety of contexts in which this form occurs.

In (18) we had *t^heke-ep* in feminine gender, since the modified nominal head was the functionally unmarked *apat-te* ‘on the self’. In (21) the modified nominal head is the Changwen, a human male, so we have the masculine gender form, 公 客 客 <d.ge.er> *teke-er* [die-VN1.M] ‘dead’. This usage of verb *teke-* ~ *t^heke* ‘to die’ is fairly frequent with both male and female heads (in case of female heads the marker is *-ep*), and can be translated as ‘the late X (lit. the deceased X)’. Its function is to introduce the titles and names of a tomb owner. In this case as well we may classify this attributively used verbal nominal in the postterminal realm.

22) 中 女 安 火 矢	令 勺	包	年 今	弱 相
l.un ng.iu ₂ .de	t.gu	hur ₃	ai.s	ji.en
lun ŋju-te	teku	qur	ai-s	ʃen
<i>Analects</i> -DAT	thus	three.F	year-PL	through

𠂔 𠂔	𠂔 𠂔 𠂔 出	𠂔 𠂔	𠂔	𠂔 𠂔 𠂔 𠂔 𠂔
ai.en	y.au a.aŋ	mo.er	336	au.ul.u.ul.g
aj-en	jawa-aŋ	moer	...	auulu-uлек
father-GEN	go-VN.AR.F	way	NEG	change-VN.LAK

𠂔 𠂔 𠂔 𠂔 𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔 𠂔	𠂔 𠂔
ci.i.is.d.b.ñ	mo.er	k.el.u ₃ .ji	x.i
ʃ ^h is-te-pij	moer	k ^h el-uʃi	x-i
blood-DENV-VN.PIR.F	way	say-VN.UCI-VN5	say-VN.I

‘In the Analects it is said thus: not to diverge from the way walked (lit. gone) by the father for three years, is called the filial way.’

Yongqing 25-42/47, 26-1/10

The passage in example (22), in L 821 was glossed “論語於曰三年之內父之道如果說沒有改變可以孝謂矣...” *Lùn yǔyú yuē sān nián zhīnèi fùzhī dào rúguǒ shuō méiyǒu gǎibiàn kěyǐ xiào wèi yǐ* [Analects-at say three year during father-of way if say NEG-have change can filiality call CONF].

O2 8 translated as “『論語』に曰く：「三年間父が行った道（習慣）を改めないのは孝道と
言うべきである。」と云う。” “*Rongo*” *ni iwaku*: ‘*San nenkan chichi ga okonatta michi (shūkan)*
o aratamenai nowa takamichi to iubekidearu’ to *iu*. ‘In the Analects it is said: Not to change for
three years the way (custom) carried out by the father, can be called the filial way.’

CWJ 1329 glossed “论语于曰三年中父之礼在道不改孝道谓谓” *Lùn yǔyú yuē sān nián zhōng fùzhī lǐ zài dào bù gǎi xiào dào wèi wèi* [Analects-at say three year within father-of custom be.at way not change filial way call call].

This passage is a citation of the *Analects* (chapter *Xueerpian* 学而篇). The original Chinese is “三年無改於父之道，可謂孝矣。” *Sān nián wú gǎi yú fù zhī dào, kě wèi xiào yǐ*. ‘Not to change the way of the father for three years, that can be called filiality.’ (O2 8).

𠂔 𠂔 𠂔 出 <y.au a.añ> *jau aap* were analyzed by L and CWJ as two blocks and glossed respectively with [ritual if] and [be.at way].

In O2 it was reanalyzed as one single block, i.e. *𠂔 𠂔 𠂔 出 <*y.au.a.añ> *jawa-aŋ*⁶³, a VN -AR of

⁶³ O2 transcribes it as *yaw-ān* and glossed it with [行う -PST.F]. 行う *okonau* means ‘to perform, to conduct oneself, to carry out’.

verb 百央 <y.au.> *jau-* ‘to go’.

The sequence 中为百央为出百央 <ai.en y.au.a.ã mo.er> *aj-en jawa-aj moer* [father-GEN go-VN.AR.F way] means ‘the way walked (lit. gone) by the father’, and translates 父之道 *fù zhī dào* ‘the way of the father’ in the *Analects*.

This sequence is a nominal head preceded by a relative clause. The nominal head is *moer* ‘way’, and it is modified by verbal nominal *jawa-aj* ‘gone’. The noun *aj-en* ‘of the father’ is the subject of the relative clause, which commonly takes genitive case. We may literally translate this sequence as ‘the way that was walked by the father’.

The passage refers to the Confucian rule of behavior after the death of one’s father.

The verb *jaw-* ‘to go’ may be analyzed as an activity (non-transformative dynamic IPS). As such it does not have a crucial point, but it may have an arbitrary termination point. Verbal nominal *jawa-aj* here indicates that the termination point has been transgressed, i.e. the father has departed, his way has come to an end. The verbal nominal may be considered as pertaining to the post-terminal realm.

3.7.4 Verbal Nominal -AR as Finite Verb

23)	付冬	券列	黍	中矢	付存才央	
	b.as	e.h	is	ai.de	b.ar ₂ .ia.an	
	pas	e-q	is	ai-te	barjaan	
	also	DEM.PROX-ADJZ	nine.F	year-DAT	right	
	及化	覓为夫空	全各必	止及子比	天	
	u.ur	sh.a.ir ₄ .d	s.eng.un	p.o.ol.el	HEAVEN	
	uur	fair-t	sejun	p ^h ol-el	...	
	division	court.attendant-PL	field.marshal	become-CVB.AL	heaven	
	邦为央	与安	屈及弱矢	及比	口	非朱
	REGION.a.an	101.ur ₂	KNOW.u.ji.de	o.or ₂	323	po.do
	...a-an	...ur	...-ufi-te	o-or	...	p ^h o-to
	region-GEN	together	know-VN.UCI-DAT	become-VN.AR.M	that	time-DAT

又 火 又 刃	为 本	全 有	又 火 又 刃	为 丰	非
sh.iu ₂ m.ir	a.ar	s.en	sh.iu ₂ m.ir	a.ai	po
fu mir	a-ar	isen	fu mir	a-ai	p ^h o
secretary	be-VN.AR.M	long.time	secretary	be-CVB.AI	time

‘Also, he, in the ninth year [of Xianyong period, i.e. 1073 CE], after becoming Field Marshal of the Court Attendants of the Right Division, became Joint Administrator of the Heaven Region. At that time, he was Secretary. After being Secretary for a long time, the time ...’

Nu 13-30, 14-1/23

CWJ 1194 glossed the passage in example (23) with “又该九年于右院郎君详稳除天疆同知授该时于枢密在乙辛枢密在时” *yòu gāi jiǔ niányú yòu yuán lángjūn xiángwěn chú tiān jiāng tōng zhī shòu gài shíyǔ shū mì zài yīxīn shū mì zài shí* [again this nine year-at right division court.attendant field.marshal appoint heaven border.region together know confer that time-at secretary be.at Yixin secretary be.at time].

I suggest that, in this instance, the block 全有 <s.en> *isen* ‘longevity’, instead of standing as the proper name Yixin, rather stands for its literal meaning, specifically covering adverbial function with the meaning ‘for a long time’.

In (23) there are two VN -AR in finite function. One is 及北 <o.or₂> *o-or* ‘he became’, and the other is 为本 <a.ar> *a-ar* ‘he was’.

Verbal nominal *o-or* heads the main clause 天疆为央为安屋及弱矢及北 <HEAVEN REGION.a.an 101.ur₂ KNOW.u.ji.de o.or₂> ... *a-an ...ur ...-ufi-te o-or* [heaven region-GEN together know-VN.UCI-DAT become-VN.AR.F] ‘he became Joint Administrator of the Heaven Region’. As it is frequent in Khitan, the dynamic copula *o-* ‘to become’ takes the predicative complement in dative case, underlining the transformative notion of its IPS, where transition to a new state is expressed in spatial terms, like a goal of motion. The VP <101.ur₂ KNOW.u.ji.de o.or₂> ...*ur ...-ufi-te o-or* ‘he became Joint Administrator’ may be analyzed as indicating the transgression of the crucial point of ‘becoming’.

Verbal nominal *a-ar* heads the finite sentence 口非朱又火又刃为本 <323 po.do sh.iu₂ m.ir a.ar> ... *p^ho-to fu mir a-ar* [that time-DAT secretary be-VN.AR.M] ‘at that time (i.e. when he had become Joint Administrator) he [also] was Secretary’.

The following section, after block 14/23 <po> *p^ho* ‘time’ becomes rather obscure. However, we can read the beginning, that is 全有又火又刃为丰 <s.en sh.iu₂ m.ir a.ai> [long.time secretary be-

CVB.AI] ‘after being Secretary for a long time’.

Verb *a-* ‘to be’ is a stative copula, and as such it is a non-transformative non-dynamic IPS.

The clause <323 po.do sh.iu₂ m.ir a.ar> ... *p^ho-to fu mir a-ar* ‘at that time he was secretary’ may be analyzed as viewed in an intraterminal perspective. During the time span covered by the stative situation ‘to be X’, the punctual event of ‘becoming Y’ is inserted.

The following sentence has the function of bringing forward the narration, passing from a intraterminal perspective *a-ar* ‘he was X’ to a postterminal perspective *a-ai* ‘after being X’.

24)	又 全 和	九 安	全 考 夫	伏 力	丰	灰
	GREAT s.en	um.ur ₂	s.iau.118	ñ.aq	ai	SIX
	... isen	umur	sjau-...	jaq ^h	ai	...
	Shouchang	first	blue-AGM.F	dog	year	six
	艾 丁	全 考 夫	业 及	丹	伞 用 凡 欠	凡 亦
	sair juri	s.iau.118	p.o	ñair	z.ing g.ang	g.ün
	sair tʃuri	sjau-...	p ^h o	ñair	tsij kaŋ	kyn
	month twenty	blue-AGM.F	monkey	day	Jing.river	army
	全 文 门 凡	叔 百 凡 央 力 乃	杂 化 当 和	曲 公 伏		
	s.ie du shi	k.y g.ui na.am	ci.ur.eñ.en	go.n.ñ		
	sie tu ʃi	k ^h ei kui nam	tʃ ^h ur-ep-en	konijɲ		
	governor	kingdom.founder.baron	two-ORD.F-GEN	Konijɲ		
	业 扎	关 化	伏 : 力	土 安	口	灰 矢
	p.or ₂	i.ir ₃	ñ:aq	eu.ur ₂	SEVENTY	SIX.de
	p ^h or	iir	jaq ^h	euur	...	...-de
	childhood	name	jaq ^h	age	seventy	six-DAT
	几 卡	及 平 凡 矢 关	羽 平 立 丰	全 为 丰	冈 为 丰	
	ku.us	u.ul.g.de.i	jau.ul.ha.ai	s.a.ai	COMPOSE.a.ar	
	k ^h uus	u-ułek-tei	tʃau-ulqa-ai	sa-ai	...a-ar	
	strength	give-VN.LAK-ABL	separate-CAUS-CVB	sit-CVB.AI	compose-VN.AR.M	

𠂔 𠂔 𠂔	𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔 𠂔	𠂔 : 𠂔
– b.aq.i	b.aq	qa.an	g.ia n.u	ci:er
paq ^h -i	paq ^h	q ^h aan	kja nu	ʃ ^h i-er
child-ADJZ	child	q ^h aan	Kja Nu	make-VN.AR.M

‘In the twentieth day *jiashen* [yang blue monkey] of the sixth month of the first year *jiaxu* (yang blue dog) of Shouchang period [1095], the Governor of the Army of Jing river, Kingdom-founder Baron, with second name Konijn and childhood name *paq^h*, at the age of seventy-six, when he was already resting [lit. sitting] after being dismissed from offering service, composed. His son *Q^haan Kja Nu* made. ’

Yongqing 31-21/32, 32-1/28

The passage in example (24), in L 823-824 was glossed “壽昌元甲戌年六月廿甲申日靜江軍節度使開國男第二個名觀寧孩子名捏褐歲七十六於... ..署衙撰[]孫韓家奴寫” *Shòucháng yuǎn jiǎ xū nián liù yuè niàn jiǎ shēn rì jìng jiāng jūn jié dù shǐ kāi guó nán dì'èrgè míng guānníng háizi míng niēhè suì qīshí liù yú ... shǔyá zhuàn [] sūn hán jiā nú xiě* [Shouchang first *jia xu* year six month twenty *jia shen* day Jing river army governor found kingdom baron second.name Guanning child name Niehe age seventy six-at ... office compose [] nephew Han Jia Nu write].

In CWJ 1331 it was glossed “寿昌元甲戌年六月二十甲日静江军节度使开国男字管宁名捏褐岁七十六于... ..在撰[]孙子韓家奴題” *Shòucháng yuǎn jiǎ xū nián liù yuè niàn jiǎ shēn rì jìng jiāng jūn jié dù shǐ kāi guó nán zì guānníng míng niēhè suì qīshí liù yú ... zài zhuàn [] sūnzi hán jiā nú tí* ‘Shouchang first *jia xu* year six month twenty *jia shen* day Jing river army governor found kingdom baron style Guanning name Niehe age seventy six-at ... be.at compose [] nephew Han Jia Nu inscribe’.

With respect to L, CWJ modified the translation of the block 𠂔 𠂔 𠂔 <s.a.ai> from 署衙 *shǔyá* ‘office’ to ‘在’ *zài* ‘to be at/in/there’.

In (24) there are two verbal nominals in finite function, i.e. 𠂔 𠂔 𠂔 <COMPOSE.a.ar> ...*a-ar* [compose-VN.AR.M] ‘he composed’ and 𠂔 : 𠂔 <ci:er> ʃ^h*i-er* ‘he made’.

I added glosses to the elements 𠂔 𠂔 𠂔 𠂔 𠂔 𠂔 𠂔 𠂔 <ku.su u.ul.g.de.i jau.ul.ha.ai> *k^huus u-ulek-tei ʃau-ulqa-ai*.

The structure 𠂔 𠂔 𠂔 <ku.su u.> *k^huus u-*, literally ‘to give strength’ is widely spread over KSS texts, and is clearly understood as meaning ‘to give official service, to cover a official position, to serve’.

made [the inscripton]’ may be analyzed as accomplishments (finitransformative durative IPSs). In this context they clearly mean that the crucial point has been transgressed, and that the resultant state, i.e. the text and the inscription being complete, is visible. These events are near to the primary orientation point, i.e. the time when the inscription is engraved. The composition must have taken place little before, and the making of the inscription coincides with the primary orientation point. In this case, they appear as focal postterminal.

Nevertheless, another interpretation is possible. If we imagine that the composer set the text in a future time when people will read it, it may have possibly intended these forms as non-focal postterminal, i.e. general past detached from the primary orientation point, that in this case is not the composing time, but the reading time.

Further examples need to be analyzed to clear this point.

25) 列化当	万念全文	[/]	[][]出谷	公企企伏
h.ur.eñ	y.ang s.ie		[][] .añ.er	n.em.d.ñ
qur-eṇ	jaṇ sje		...-aṇer	nemdṭṇ
three-ORD.F	Jaṇ Sje		maternal.uncle?-PL	?
才	万女		雨念又去及	用中
ia	101.un		ca.ang sh.eu.u	il.bir
ia	...-un		tʰaṇ ʃeu	ilpir
elder.brother	younger.brother-GEN		tʰaṇ ʃeu	tribal.judge
又 [] 夫 []	丹力	业安全	弱	来当
sh.[] .ir4.[]	b.aq	p.ur2.s	146	ci.eñ
ʃ...ir-?...	paq ^h	p ^h ur-s	146	tʰi-eṇ
court.attendant?-GEN?	child	seed-PL	NEG	make-VN1.F
‘The third daughter (or wife?) was Jaṇ Sje. She has given (lit. has made) no children to (lit. of) the Tribal Judge, Court Attendant tʰaṇ ʃeu of the ... Maternal Uncles.’				

Xuguo 52-15/29

The passage in example (25), in L 942 is glossed with “... ... (中残) 横帳之長壽 子 ” ... (zhōngcán) héngzhàngzhī chángshòu ... zǐ ... [... (damage) ... horizontal.tent-of longevity ... child ...].

In CWJ 1004 it is glossed “第三 杨 洁? (中残) ... 兄 弟 之 长 寿 夷 离 毕 ... 子 嗣 未 有”
dīsān Yáng Jié? (zhōngcán) ... xiōng dìzhī Cháng Shòu yílǐbì ... zǐsì wèi yǒu [third Yang Jie?
(damage) ... elder.brother younger.brother-of Chang Shou tribal.judge ... male.heir not.PST have].

The block 𠂔 𠂔 𠂔 <h.ur.ẽ> *qur-en* ‘third (F)’ might refer to the ‘third daughter’ or to ‘the third wife’. Since the passage is damaged, we have no indication as to whether the list of people in which this passage is included—reaching up to 𠂔 𠂔 𠂔 <d.ur.ẽ> *tur-en* ‘fourth (F)’ (Xuguo 52-30)—is a list of daughters or wives.

The damaged block 𠂔 𠂔 𠂔 𠂔 <[] .aĩ.er> is easily restorable into 𠂔 𠂔 𠂔 𠂔 <na.ha.aĩ.er> *naqa-aĩer* [maternal.relative-PL] ‘maternal relatives’, the latter being often followed—like here—by ‘brothers’ to indicate ‘the brothers of the maternal relatives, i.e. the maternal uncles’, an expression used to indicate the Xiao clan.

The obscure block 𠂔 𠂔 𠂔 𠂔 <n.em.d.ĩ> is inserted between ‘maternal relatives’ and ‘brothers’. For the moment, I will leave it without comment.

The damaged block 𠂔 𠂔 𠂔 𠂔 <sh.[] .ri₂.[]> should stand for 𠂔 𠂔 𠂔 𠂔 / 𠂔 <sh.a.ri₂.en/de> *fari-en/de*. The Tribal Judge and Court Attendant 𠂔 𠂔 𠂔 𠂔 was Jan Sje’s husband. The last graph might be 𠂔 <en> representing genitive suffix *-en*, or 𠂔 <de> representing dative suffix *-te*.

I agree with CWJs’ gloss 𠂔 𠂔 𠂔 𠂔 <b.qo p.ur.s> *p^haq^h* with 子嗣 *zǐsì* ‘sons’ on the fact that the two blocks are to be understood as an hendiadys, and therefore it is to be translated with a single word. However, there is no indication that the meaning is as specific as 子嗣 *zǐsì* ‘sons’. It is probably a generic ‘children’.

It is not clear why the block 𠂔 𠂔 <ci.ẽ> *ĩ^h-en*, often used to mean ‘to write’, could also take the meaning ‘to have’ as suggested by the gloss 有 *yǒu* ‘to have, to exist’. It is more logical to presume that verb 𠂔 <ci.> *ĩ^hi-* had the primary meaning of ‘to make’. This meaning fits with both contexts, namely ‘to make an inscription, i.e. to write an inscription’ and ‘to make a child, i.e. to bear a child’. That the verb is a finite form is clearly indicated by the beginning—with the following block 𠂔 𠂔 𠂔 <d.ur.ẽ> *tur-en* ‘the fourth (F)’ (Xuguo 52-30)—of a new sentence devoted to a new person, i.e. the fourth daughter or wife. The verb has VN *-AR* in feminine form. Its subject is the third daughter (or wife) Jan Sje.

Summarizing, we may translate the second clause as ‘she did not make (i.e. bear) children of/to the Tribal Judge, Court Attendant 𠂔 𠂔 𠂔 𠂔 of the ... Maternal Uncles’. The variant ‘of’ derives from the

genitive interpretation *fair-en*. It would be a genitive used in an ablative sense, i.e. ‘out of’. The variant ‘to’ derives from the dative interpretation *fair-te*.

The events referred to in this passage are presumably near to the present, since soon after it, the composition date of the epitaph is mentioned (Xu 53-25/38). According to the usual structure of KSS epitaphs, this means that this passage is part of the account of the descendants, which come before the mention of the composition date, which on its turn opens the epitaph’s conclusion. It is likely that the person referred to, Jan Sje, was alive at the primary orientation point, i.e. the moment of the epitaph’s composition. Thus, 止安全 乃 未 当 <p.ur₂.s 146 ci.eñ> *p^hur-s ... ʃ^h-en* might possibly be intended as a focal postterminal referring an information linked with the *nunc*. In this case, we might intend it as ‘she has not made children, i.e. she has not had children, she has not given children (to the Tribal Judge, Court Attendant ʃaŋ ʃeu)’.

Let us test this hypothesis versus a further example.

26) 令 化 公	次 用 伏	万 央 凡 芬	令 丰 关 未 安 全 并
t.ur.er	x.ing.ñ	y.au g.e	t.ai.i ci.ng s.iang
t ^h ur-er	xinjin	jau ke	t ^h ai ʃ ^h ing sjang
four-ORD.M	Xinjin	Jau Ke	grand prime.minister
止 安 全	乃	未 公	
p.ur ₂ .s	146	ci.er	
p ^h ur-s	...	ʃ ^h i-er	
child-PL	NEG	make-VN.AR.M	

‘The fourth [son] was the Grand Prime Minister Xinjin. He had (lit. made) no children.’

Han Dilie 4-31/40

The sentence in example (26), in L 861 was glossed with “第四個 興寧 姚 哥 大 丞 相 ... 寫” *dìsìgè Xīngníng Yáo Gē dà chéng xiàng ... xiě* [fourth Xingning Yao Ge grand prime.minister ... write].

CWJ 1252 glossed it with “第四 兴你 姚 哥 大 丞 相 子 嗣 未 在” *dìsìgè Xīngnǐ Yáo Gē dà chéng xiàng zǐsì wèi zài* [fourth Xingni Yao Ge grand prime.minister male.heirs NEG.PST be.there].

With respect to L, CWJ added glosses to two previously non-glossed words, i.e. 子嗣 *zǐsì* ‘sons’ to 止 安 全 <p.ur₂.s> *p^hur-s*, 未 *wèi* ‘not (in the past)’ to 乃 <146>.

Here too, as in example (25), we maintain the translation ‘children’ instead of ‘sons’.

The gloss 未 *wèi* “not (in the past)” provides a temporal interpretation. However, it is not a temporal interpretation of the suffix *-er*, but rather of the adverb of negation. Based on an interpretation of Chala, in CWJ the two graphemes 𠂔 <146> and 𠂕 <336> are regarded as two different negations, the first referring to the past and the second to the present, in a way comparable to MM *es* ‘perfective negation’ and *ül* ‘imperfective negation’. We have not sufficient evidence to confirm this. For the moment being, I prefer to regard them as simple allographs of the same negation.⁶⁷ Therefore, in the present approach, the past interpretation is to be attributed to the verbal morpheme rather than to the negation adverb.

At this point, let us recall example (25) 𠂔 𠂕 𠂔 𠂕 𠂔 𠂕 [...] 𠂔 𠂕 𠂔 𠂕 𠂔 𠂕 <h.ur.eñ y.ang s.ie [...] b.aq p.ur2.s 146 ci.eñ> *qur-ep jan sje [...] paq^h p^hur-s ... ɣ^hi-ep* ‘The third daughter was Jang Sje. She did not give (lit. make) children [...]’, and compare it with example (26), 𠂔 𠂕 𠂔 𠂕 𠂔 𠂕 𠂔 𠂕 𠂔 𠂕 [...] 𠂔 𠂕 𠂔 𠂕 𠂔 𠂕 <t.ur.er x.ing.ñ y.ang g.e [...] p.ur2.s 146 ci.er> *t^hur-er xinjin jan ke [...] p^hur-s ... ɣ^hi-er* ‘The fourth son was Xinjin Jau Ke [...]. He had (lit. made) no children.’

Interpretations of 𠂔 <ci> *ɣ^hi-* as ‘to write’ (L 861) or ‘to be there’ (CWJ 1252) imply a change of subject. In the former case the subject might be the chronicler e.g. ‘the chronicler did not write (about) the children’, while in the latter case it should be the children e.g. ‘there were no children’. If we observe the morphology of the arguments, we realize that the syntactical structure of these two sentences is much simpler than that.

The fact that the verbs agree with the topic, i.e. feminine 𠂔 <ci.eñ> *ɣ^hi-ep* when the topic is a woman, versus masculine 𠂔 𠂕 <ci.er> *ɣ^hi-er* when the topic is a man, indicates that these topics are also the subjects of these verbs. For this reason, I preferred the translation ‘to make’, which not only can be understood as ‘to write’ when the context allows it, but can also—in contexts such as those analysed here—be understood as “to generate”.

Unlike (25)—which is about a descendant of the tomb owner—this passage is about an old ancestor of the tomb owner. Thus, in contrast with (25), where the situation *paq^h p^hur-s ... ɣ^hi-ep* ‘she has not had children’ appears as connected to the *nunc*, in (26), the situation *p^hur-s ... ɣ^hi-er* ‘he had no children’ appears as far in the past, detached from the *nunc*.

Such an example suggests us that VN *-AR* in finite function does not encode focality.

⁶⁷ For further details on the interpretation of these two graphs, refer to Appendix B.

The verb *tʰi-* ‘to make’ is used in another kind of locution as well. See example (18).

27) 丙	几	王 岑 雨	丙	未 舅 弱	泰 凡 今
mo	ku	di.ge.in	mo	ci.iuk.ji	is.g.s
mo	k ^h u	Tikein	mo	tʰukʈʰi	iskis
female	person	Tikein	female	tʰukʈʰi	Iskis
力 出 公 未		州 欠	中 未	伏 未 余 伏	
na.ha.añ.er.en		oñi.ho	ai.en	ñ.ar.ho ₂ .ñ	
naqa-añer-en		oñ-oq	aj-en	ñarqoñ	
maternal.relative-PL-GEN		small-AGM.M	male-GEN	ñarqoñ	
令 用 分		今 将 凡 水	圣 中 伏	今 泰 伏	
t.il.du ₃		s.iang g.ung	xe.l.ñ	pu.is.ñ	
t ^h iltu		sjaŋ kuŋ	xelij	p ^h uisij	
T ^h iltu		chancellor	Xelij	lady	
圣 未		令 东 及 雨	将 力	出 央	
jur.en		t.ad.o.oñ	b.aq	qa.an	
tʃur-en		t ^h a-dooŋ	paq ^h	q ^h aan	
two.F-GEN		five-ORD	child	Q ^h aan	
父 央		今 泰 伏 未	关 化	未 当	
x.ui		pu.is.ñ.en	i.ir ₃	ci.eñ	
xui		p ^h uisij-en	iir	tʃi-en	
kingdom		lady-GEN	name	make-VN.AR.F	
‘His wife was Madame Tikein. She was the fifth daughter of the Chancellor ñarqoñ T ^h iltu of the Younger tʰukʈʰi Iskis Maternal Uncles and Lady Xelij. She acquired (lit. she made) the position of Lady of the Q ^h an Kingdom.’					

Zongjiao 19-22/30, 20-1/14

The passage in example (27), in L 665 was glossed “妻 惕隐 母 ... 乙室己 國舅之 少 父房 涅里滚 姓古只 相 公 解里 夫人 二人之 第五 女 韓國 夫人之 號 ...” *qī Tìyǐn mǔ ... Yǐshìjǐ guójiùzhī shào fùfáng Niělǐgǔn Zhugǔzhī xiàng gōng Jiěli fūrén èrrénzhī dìwǔ nǚ Hánguó fūrénzhī hào ...*

[wife Tiyin mother ... Yishiji imperial.maternal.uncle-of small house.of.the.fathers Nieligun Zhuguzhi chancellor Xieli lady two.person-of fifth daughter Han kingdom lady-of title ...].

In CWJ 1107, it was glossed “妻 惕隐 夫人 姓古只 乙室己 国舅之 小 翁之 涅里滚 敌烈 相 公 解 领 夫人 二之 第五 女 韩 国 夫人之 号 在” *qī Tiýǐn mǔ fūrén xìng Yìshìjǐ guójiùzhī xiǎo wēngzhī Niēlǐgǔn Dīliè xiàng gōng Jiěli fūrén èrzhī dìwǔ nǚ Hán guó fūrénzhī hào zài* [wife Tiyin lady Zhuguzhi Yishiji imperial.maternal.uncle-of small father-of Nieligun Dilie chancellor Xieling lady two-of fifth daughter Han kingdom lady-of title be.at].

L contains an editing error emended in CWJ, i.e. the gloss 姓古只 *Zhuguzhi* was restored in its correct position, besides block 𐰇𐰺𐰽 <ci.iuk.ji> instead of block 𐰇𐰺𐰽 <t.il.du₃>.

L did not translate the verb 𐰇𐰺𐰽 <ci.eñ> *ʃ^hi-en*. CWJ translated it as 在 *zài* ‘to be at/in’.

The verb is in feminine VN -AR form, and agrees in gender with its subject Lady Tikein. Probably, the sequence 𐰇𐰺𐰽 𐰇𐰺𐰽 <i.ri ci.eñ> *iri ʃ^hi-en* ‘she made the title (of ...)’ may mean ‘she acquired the position (of ...)’.

Lady Tikein is the wife of the tomb owner Zongjiao. Generally, if the consort of the tomb owner died before him/her, the fact is mentioned in his/her epitaph. Since in Zongjiao there is no account of the death of Lady Tikein, we might presume that at *nunc* she is alive. Following the hypothesis that VP *iri ʃ^hi-* – literally ‘to make a title’ – means ‘to acquire a position’ (finitransformative momentaneous IPS), we may analyze the sentence as indicating the transgressing of the crucial point, i.e. she acquired the position and still has it.

28) 𐰇𐰺𐰽 𐰇𐰺𐰽	𐰇𐰺𐰽.𐰇𐰺𐰽.𐰇𐰺𐰽	𐰇𐰺𐰽 𐰇𐰺𐰽	𐰇𐰺𐰽 𐰇𐰺𐰽 𐰇𐰺𐰽	𐰇𐰺𐰽 𐰇𐰺𐰽
ci.ur.er	𐰇𐰺𐰽.𐰇𐰺𐰽.ho.ñ	h.ash.u	p.ur ₂ .s.en	m.ha.as
ʃ ^h ur-er	...qoŋ	qaʃu	pur-s-en	maqa-as
two-ORD.M	...qoŋ	qaʃu	descendant-PL-GEN	prince-PL?
𐰇𐰺𐰽 𐰇𐰺𐰽 𐰇𐰺𐰽	𐰇𐰺𐰽	𐰇𐰺𐰽 𐰇𐰺𐰽	𐰇𐰺𐰽 𐰇𐰺𐰽	𐰇𐰺𐰽 𐰇𐰺𐰽 𐰇𐰺𐰽
i.ri.s.er	le	o.or.er	pu.u ci.ün	
iri-s-er	le	o-or-er	p ^h u ʃ ^h yn	
title-PL-INS	only	be-VN.AR.M-INS	p ^h u ʃ ^h yn	

九 亦	杰 尔	关 化	杂 尔
g.ün	ong.on	i.ri	ci.er
kyn	on-on	iri	tʰi-er
prefecture	prince-GEN	title	make-VN.AR.M

才	为 尔	王 尔 雨	关 化 矢	全 为 尔	劣 尔 付 又
ia	101.un	di.y2.in	i.ri.de	s.a.ai	tu.ur2.b.ir2
ia	...-un	tijin	iri-te	sa-ai	tʰuur-pir
elder.brother	younger.brother	tekin	title-DAT	sit-CVB.AI	die-VN.PIR.M

‘The second [son] was ...kup qafu. Upon having only titles (lit. becoming only through titles) of the Young Princes, he covered (lit. he made) the position of Prince of the Pu tʰyn Prefecture. After staying (lit. sitting) at the position (lit. at the title) of Tekin, he died.’

Renxian 6-45/64

The passage in example (28), in L 695 is glossed with “第二 ... 號 ... 富春郡王之號 寫” *dì'èr ... hào ... Fùchūn jùn wángzhī hào xiě* [second ... title ... Fuchun prefecture prince-of title write].

In CWJ 1029, it is glossed with “次 ... 子嗣之 ... 诸号众授富春郡王之号在” *cì ... zǐsìzhī ... zhūhào zhòng shòu Fùchūn jùn wángzhī hào zài* [second ... male.heirs-of PL-title many confer Fuchun prefecture prince-of title be.at].

With respect to L, CWJ emended blocks 欠 伏 <[] .m.[] .[] .qo2.ñ> into 欠 伏 <[] .[] .qo2.ñ>, 土 艾 友 <eu.ashu.u> into 列 艾 友 <h.ashu.u>, 丑 冬 into 又 丑 冬 <m.ha.as>, and 及 全 尔 <o.or.ui> into 及 全 尔 <o.or.er>.

I added the tentative interpretation of 丑 尔 全 尔 又 丑 冬 <p.ur2.s.en m.ha.as> *pʰur-s-en maqa-as* as ‘Young Princes’, subsuming that there might be a connection between *maqa-as* and the Central Asian Wanderwort title of Iranian origin *maya/baya* (see Atwood, 2013). The word *pʰur-s-en* ‘of the children’—as already noted under example (25) for *baqʰ pʰur-s*, these words do not contain gender specification, as instead subsumed by the gloss ‘sons’—might be understood here as an attribute, so that ‘the princes of the children’ actually stands for ‘the young princes’.

Whereas in (27) the VP *iri tʰi-en* possibly indicated a situation began in the past and still obtaining at *nunc*, in (28), the VP *iri tʰi-er* seems to indicate a different kind of situation. It is followed by the sentence 才 为 尔 王 尔 雨 关 化 矢 全 为 尔 劣 尔 付 又 <ia 101.un di.y2.in i.ri.de s.a.ai tu.ur2.b.ir2> *ia ...-un tijin iri-te sa-ai tʰuur-pir* ‘after staying (lit. sitting) at the position (lit. at the

title) of Tekin, he died.’ Therefore, the period 业安令和又立冬关化年恭达及全恭个及
 亦九亦杰尔关化亦恭 <p.ur₂.s.en m.ha.as i.ri.s.er le o.or.er p.u ci.ün g.ün oŋ.on i.ri ci.er>
p^hur-s-en maqa-as iri-s-er le o-or-er p^hu t^hyn kyn oŋ-on iri t^hi-er ‘upon having only titles (lit.
 becoming only through titles) of the Young Princes, he covered (lit. he made) the position of Prince
 of the Pu t^hyn Prefecture’ refers to a situation which was completed in the past, and that obtains no
 more at *nunc*. Thus, we have a case similar to the contrast observed between example (25) and (26),
 where VP *pur-s ci-* ‘to make children’ appears to be focal in the former and non-focal in the latter.
 Also in this case the same VP *iir ci-* ‘to cover a position’ appears to be focal in (27) and non-focal in
 (28).

We may consider this as a further hint that VN -AR in finite function does not encode focality.

29) 天 全 丙 刃	九 安	中 矢	百 去 弱
HEAVEN t.iu.ir	um.ur ₂	ai.de	y.eu.ji
... t ^h iur	umur	ai-te	jeu-t ^h i
Tiande	first	year-DAT	go-CVB.CI
全 央	杰	业 及 全	
s.au	ong	p.o.or	
sau	oŋ	p ^h o-or	
Cao	prince	be-VN.AR.M	

‘During the first year of Tiande period (1149) he was Prince of Cao [state].’

Zhonggong 23-22/29

The passage in example (29) in C 605 was glossed with “天 天德 元 年 ... 曹 王 除” *tiān Tiāndé yuán nián Cáo wáng chù* [heaven Tiande first year ... Cao prince appoint].

L 1000 glossed it with “天德 元 年於 ... 曹王拜” *Tiāndé yuán niányú ... Cáo wáng bài* [Tiande first year-at ... Cao prince salute]. Additionally, L emended the block in C 业 及 公 <p.u.n> into 业 及 公 <p.o.n>.

CWJ 960 glossed the passage with “天德 元 年于 迁 曹 王 除” *Tiāndé yuán niányu qiān Cáo wáng chù* [Tiande first year-at transfer Cao prince appoint].

Additionally, CWJ emended the block in L 业 及 公 <p.o.n> into 业 及 全 <p.o.or>.

The sequence 天 全 丙 刃 九 安 中 矢 百 去 弱 <HEAVEN d.iu.ir um.ur₂ ai.de y.eu.ji> ... *tjuir umur ai-te jeu-t^hi* possibly means ‘going into the first year of Tiande period (1149), i.e. during the

first year of period Tiande’. From Zhonggong 24-21 on, new positions that the tomb owner covered in the second year of Tiande period (1150, which is his death date) are accounted. The VP 全 央 杰 出 及 全 <s.au ong p.o.or> *sau on p^ho-or* ‘he was Prince of Cao [state]’ is a stative IPS, indicating a situation taking place during that year, obtaining no more at *nunc*. Thus, this VP does not seem to encode focality.

30)	宅	泰	年	关 化 矢	全 央 杰 出	无 卡 央 杰 出
	TEN	is	ai	i.ri.de	s.a.ha.al	tau.us.l.ha.ai
	...	is	ai	iri-te	sa-qa-al	t ^h ausu-lqa-ai
	ten	nine	year	title-DAT	sit-CAUS-CVB.AL	advance-CAUS-CVB.AI
	央 关		一	无 化	无 仲 公	出 及 全
	ui.i		NORTH	u.ur	j ₃ ü.n	p.o.or
	ui-i		...	uur	ʃu yn	p ^h o-or
	?		north	division	administrative.office ⁶⁸	be-VN.AR.M
	全 央	杰 不		关 化	令 全 央 杰 出	
	s.ung	ong.on		i.ri	t.em.l.ge.l.ir ₂	
	sun	on-on		iri	t ^h em-elke-lir	
	Song	prince-GEN		title	confer-CAUS-VN.LIR.M	

‘After in the nineteenth year [of Chongxi period, i.e. 1050] he was advanced in position, his occupation was the Administrative Office of the North Division. He was conferred the title of Prince of Song.’

Renxian 20-30/45

The passage in example (30) was glossed in L 703 as “十九年號於...北院知...拜宋王之號封” *shí jiǔ nián hàoyú ... běi yuàn zhī ... bài Sòng wángzhī hào fēng* [ten nine year title-at ... north division know ... salute Song prince-of title confer].

In CWJ 1040, it was glossed as “十九年号于...北院知院除宋王之号封” *shí jiǔ nián hàoyú ... běi yuàn zhī yuàn chú Sòng wángzhī hào fēng* [ten nine year title at ... north division administrative office appoint Song prince-of title confer].

⁶⁸ The block 无 仲 公 <j₃ ü.n> in CWJ 1040 was glossed 知院 *zhīyuán* ‘administrative office’.

The block 全为立方 <s.a.ha.al> *sa-qa-al* [sit-CAUS-CVB.AL] is a CVB -Al of the causative of verb 全为 <s.a.> *sa-* ‘to sit’. VP 关化矢全为立方 <i.ri.de s.a.ha.al> *iri-te sa-qa-al* [title-DAT sit-CAUS-CVB.AL] without specifying which title, might be understood as ‘having been placed in his [unspecified] position’.

Follows 无卡中立中 <tau.su.l.ha.ai> *t^hausu-lqa-ai* ‘having been advanced’.

For the interpretation of the verb 无卡中立 <tau.us.l.ha> *t^hausu-lqa-*, I followed R 141, 143.

There, R translates the verbal base 无卡升 <tau.us.o₂> *t^hauso-* as ‘to advance’ based on comparison with WM *dabsi-* ‘id.’. As we can notice from R, both Khitan and Written Mongol have attested causative forms, although formed by different allomorphs in the two languages, i.e. Kh. *t^hausu-lga-* and WM *dabsi-γul-*.

The verb *dabsi-* ‘to advance’ is not attested in SH nor in GK. SH has *dabši-* ‘to knock, to hit’ (H 30)⁶⁹, probably etymologically not connected. Possibly, WM *dabsi-* is connected to MM *daba-* ‘to climb over, to pass, to transgress’ (GK 72)⁷⁰.

The sentence 宅泰中关化矢全为立方无卡中立中火关一及化友伴公业及全 <TEN is ai i.ri.de s.a.ha.al tau.su.l.ha.ai ui.i NORTH u.ur j₃ ü.n p.o.or> ... *is ai iri-te sa-qa-al t^hausu-lqa-ai ui-i ... uur fju yn p^ho-or* may be translated as ‘after in the nineteenth year [of Chongxi period, i.e. 1050] he was placed at his [unspecified] position, he was made to advance, and consequently was [at] the ... Administrative Office of the North Division’.

The state expressed by <NORTH u.ur j₃ ü.n p.o.or> ... *uur fju yn p^ho-or* ‘he was at the ... Administrative office of the North Division’ does not obtain at *nunc*, since according to the following lines of Renxian, the tomb owner occupied other positions after that. Note that this situation is set in 1050. Thereafter, Renxian occupied several other positions, and he died in 1072. Consequently, the VP does not seem to encode focality.

⁶⁹ In the original “klopfen, schlagen”.

⁷⁰ H 30 has “überschreiten, eine Gebirgsgug”. N 310 has “to cross, to pass; to exceed”.

3.7.5 Analytic Constructions with Verbal Nominal -AR

31)	令用久伏	命并凡亦	券	引化欠不	中全	得引出
	t.il.uh.ñ	dz.iang g.ün	e	ja.ri.qo.on	ai.d	b.h.añ
	t ^h ilukip	tsjaŋ kyn	e	ʃariqo-on	ai-t	paq-aŋ
	T ^h ilukip	general	this	prime.minister-GEN	male-PL	child.OBL-PL
	约和	引化谷	又全分升及内	宅	中	去安
	ji ₃ .en	h.ur.er	GREAT u ₂ .du ₃ .o ₂ .o.oñ	TEN	ai	eu.ur ₂
	ʃen	qur-er	... utwoon	...	ai	euur
	among	three-ORD	Da'an	ten.F	year	age
	三十	无矢	几卡	尺安	及谷	
	THIRTY	tau.de	ku.us	u ₃ .ur ₂	o.Oi ₂	
	...	t ^h au-te	k ^h uus	u-ur	o-oi	
	thirty	five-DAT	strength	give-VN.AR.M	become-CVB.AI	
	尺及全出火	非朱	和考夫关	采关	开为亦谷	
	dau.u dz.ung ₂ .un	po.do	ci.iau.118.i	qid.i	REGION.a.ad.er	
	tau tsuŋ-un	p ^h o-to	ʃ ^h au-...-i	k ^h it-i	...a-at-er	
	Daozong-GEN	time-DAT	Zhao-AGM.F-ADJZ ⁷¹	Khitan-ADJZ	border-PL-INS	
	立	来来	火和	及雨伏谷	引立中中立为方	
	WRITE	ci.ci	ui.en	m.in.ñ.er	ja.ha.ai.l.ha.a.al	
	...	ʃ ^h i-ʃ ^h i	uj-en	min-ip-er	ʃaqa-ailqa-al	
	record	make-CVB.CI	matter	reign-PL-INS	indicate-CAUS-CVB.AL	

‘The General T^hilukip was the third among this Prime Minister’s sons. When he began serving in the tenth year of the Da’an period (1084) at the age of thirty-five, he was indicated by the Emperors (to) the Affair of Record Writer at the borders between the Song and the Khitan during the time of Daozong.’

Gu 9-14/32, 10-1/11

⁷¹ Zhao was the family name of Song emperors. Therefore, Zhao stands for Song dynasty.

The passage in example (31), in CWJ 1016-1017 was glossed with “迪里滚 将 军 这 宰相之 男 子 女 中 的 第 三 大 安 十 年 岁 三 十 五 于 ... 授 予 道 宗 之 时 于 汉 儿 契 丹 边 境 ... 事 之 ... ”
Dílǐgǔn jiāng jūn zhè zǎixiàngzhī nán zǐnǚ zhōngde disān Dà'ān shí nián suì sānshí wǔyú ... shòuyǔ
Dàozōngzhī shíyú Hànr Qidān biānjìng ... shìzhī ...

The relevant sequence here is 几 卡 只 安 及 奈 <ku.us u₃.ur₂ o.oi₂> *k^huus u-ur o-oi* [strength give-VN.AR.M become-CVB.AI] ‘lit. becoming giving strength’. We may analyze *u-ur o-oi* as a nominal predicate with dynamic copula. Verbal nominal *u-ur* [give-VR.AR.M] ‘giving’, agreeing in gender with the subject—General T^hilukip—is the predicative complement, while *o-oi* [become-CVB.AI] ‘becoming’ is the dynamic copula. We may adapt the literal translation ‘becoming giving’ into ‘when he began to give.’ Combining it with *k^huus* ‘strength’, we get ‘when he began to give strength, i.e. when he began serving’. Possibly, the analytic construction ‘-VN.AR + become’ encodes inchoative mode of action. The VP *k^huus u-* ‘to serve’ is an activity (non-transformative dynamic IPS). By means of this construction, it is recategorized into an achievement, i.e. *k^huus u-ur o-* ‘to begin serving, lit. to become serving’. In other words, the construction turns a nontransformative IPS into a transformative IPS.

32) 丹 列 出	圣	又 及	杰 安 及	几 卡	只 安
b.h.añ	jur ^o	m.o	ong ng.u	ku.us	u ₃ .ur ₂
paq-aŋ	ʃur	mo	oŋ ŋu	k ^h uus	u-ur
child.OBL-PL	two.M	great.M	oŋ ŋu	strength	give-VN.AR.M
及 及 子	佃 当	曲 谷 和	雨 念 戈 关	业 及 雨 中 戈	
o.o.ol	sui.eñ	go.er.en	ca.ang sh.i	p.o.ondo.l.ir ₂	
o-ol	suj-eŋ	koer-en	ʃ ^h aŋ.ʃi	p ^h onto-lir	
become-CVB.AL	be.born-VN.AR.F	house-GEN	grand.historian	become-FIN.LIR.M	
‘The sons were two. The eldest was Oŋ ŋu. When he began offering service, he became Grand Historian of the Household where he was born.’					

Dilie 12-34/46

The passage in example (32), in CWJ 1173 is glossed with “孩 子 二 大 者 王 五 ... 授 生 房 之 敝 史 除 ” *háizi èr dàzhe Wáng Wǔ ... shòu shēng fang-zhī chǎngshǐ chú* [child two elder Wang Wu ... confer be.born house-of grand.historian appoint].

In example (32), the same structure as in example (31) occurs, i.e. *k^huus u-ur o-* ‘begin to serve’.

Here the dynamic copula takes a different converbial morpheme. In (31), it takes CVB *-Ai*, whereas in (32) it takes *-Al*, i.e. 及及子 <o.o.ol> [become-CVB.AL] ‘becoming’.

33) 弟	令 伏	兄 子 次 女	又 冬 余	力
101	s.i.ñ	shi ju.ung.un	m.as.ho	b.aq
...	siŋ	ʃitʃuŋ-un	mas-oq	baq ^h
younger.brother	Siŋ	chamberlain-GEN	eldest-AGM.M	child
府	中 用 兄 次 女	又 为 夫	为 出	
dil ^o	l.ing g.ung.un	sh.a.ir ₂₄	a.añ	
Til	liŋkuŋ-un	ʃair	a-aŋ	
Til	lord	court.attendant	be-VN.AR.F	
力 冬 令 北	何 秀 未	子 列 出	包	
na.as.s.el	sui.e ₂ .ci	b.h.añ	hur ₃	
naas-sel	suj-eŋ ^{hi}	paq-aŋ	qur	
move-CVB.SEL	be.born-CVB.CI	child.OBL.PL	Three.F	

‘After the eldest son of his younger brother Chamberlain Siŋ, Lord Dil, became Court Attendant, he generated, and his children were three.’

Jue 10-6/18

The passage in example (33), in W2 266 is glossed “弟 喜隱 侍 中 の 長 男 敵 烈 令 公 の 郎 君 … 生 ま れ た 子 供 三” *otōto Kiin shi chūno chō nan Tekiretsu rei kōno rōkun ... umareta kodomo san* [younger.brother Kiin chamberlain-GEN eldest.son Tekiretsu lord-GEN court.attendant ... be.born-PST children three].

In CWJ 1537, it is glossed “第 喜隱 侍 中 之 長 子 敵 烈 令 公 之 郎 君 在 … 生 子 女 三” *dì Xǐyǐn shì zhōngzhī zhǎng zǐ Dǐliè lìng gōngzhī lángjūn zài ... shēng zǐnǚ sān* ‘younger.brother Xiyin chamberlain-of eldest son Dilie lord-of court.attendant be.at ... children three’.

Verbal nominal 为 出 <a.añ> [be-VN.AR.F] *a-aŋ* ‘being’ is modified by 府 中 用 兄 次 女 <dil^o l.ing g.ung.un> *Til liŋkuŋ-un* [Til lord-GEN] ‘of Lord Til’. The noun 又 为 夫 <sh.a.ir₄> *ʃari* ‘court attendant’ is the predicative complement of stative copula *a-aŋ* ‘being’. Literally, this sequence means ‘Lord Til’s being court attendant’. The verbal nominal *a-aŋ* is the object of 力 冬 令 北

<na.as.s.el> *naas-sel* [move-CVB.SEL] ‘moving, transferring’. The sequence 屏 中 用 凡 次 女 又 为 夫 为 出 力 冬 今 比 <dil° l.ing .g.ung.un sh.a.ri2 a.añ na.as.s.el> *Til lijkuŋ-un fair a-aŋ naas-sel* might be translated as ‘after Lord Til ceased to be court attendant, lit. after Lord Til (re)moved his being court attendant’. Possibly, ‘-VN.AR *naas-*’ is an analytic construction encoding terminative mode of action, with the meaning ‘(re)move one’s VB-ing, i.e. cease to VB’.

For the moment only this example was available to me. Hopefully, more similar examples may become available for future research.

34) 中 升 升 弱	谷 又 兴	为 出	万 央 及 雨 公	又 雨
l.she.o2.ji	ge.ir2.i	a.añ	y.au.o.oñ.er	m.in
lef-ofi	keir-i	a-aŋ	jau-oŋ-er	min
mourn-VN.UCI	grief-ADJZ	be-VN.AR.F	go-VN.AR.F-INS	reign
五 凡 当			网 中 巫 中	
RECORD.g.eñ			COMPOSE.l.ha.ai	
...k-ep			...-lqa-ai	
record-VN.AR.F			compose-CAUS-CVB.AI	
‘... after the mourners had been in grief for a long time, the reign let [someone] compose the epitaph [and] ...’				

Dilu 35-24, 36-1/6

Example (34) repeats example (12) discussed in §3.7.2. Under example (12), I focused on the verbal nominal in instrumental case 万 央 及 雨 公 <y.au.oñ.er> *jau-oŋ-er* ‘after going, lit. with the going’. Here I will focus on the sequence 为 出 万 央 及 雨 公 <a.añ y.au.o.oñ.er> *a-aŋ jau-oŋ-er*.

First of all, let us analyze the context. The block 中 升 升 弱 <l.she.o2.ji> *lef-ofi* is an expression connected to grief and mourning. Its last two graphs 升 弱 <o2.ji> *-ofi* usually stand for verbal nominal morpheme *-uci*, that according to previous research sometimes appear to form actor nouns (see §3.3). Perhaps *lef-ofi* means ‘mourner’. If this tentative translation were correct, ‘mourners’ could be the subject of the secondary clause headed by 为 出 万 央 及 雨 公 <a.añ y.au.o.oñ.er> *a-aŋ jawo-oŋ-er* [be-VN.AR.F go-VN.AR.F-INS].

Block 凡 有 又 <g.en.ir> *kenir* often occurs in pair with *lef-ofi* and is also an expression connected

to grief and mourning. 𠂇 𠂇 𠂇 <ge.ir.i> *keir-i* is probably a variant. Noteworthy, the latter—unlike the former—ends in *-i*. Therefore, it may be an adjective, since *-i* besides accusative case and verbal nominal *-i*, can also stand for an adjectivizer, e.g. *k^hit* ‘Khitan’, *k^hit-i* ~ *k^hitir-i* ‘belonging/related to the Khitan’; *paq^h* ‘children’, *paq^h-i* ‘young, little, related to childhood’ (see §2.4.2.6). Consequently, *keir-i* might be an adjective meaning ‘sorrowful, in grief’ deriving from noun *keir* ‘sorrow, grief’.

The sequence 𠂇 出 𠂇 𠂇 <a.añ y.au.> *a-añ jau-* [be-VN.AR.F go-] may be literally translated as ‘to go being’. Here we have quasi-converbial *-AR-INS* form of 𠂇 𠂇 *jau-* ‘to go’, i.e. 𠂇 𠂇 及 𠂇 𠂇 *jau-on-er* [go-VN.AR.F-INS] ‘after going, lit. with the going’ (see §3.7.2). Consequently we may literally translate the sequence *a-añ jau-on-er* as ‘after going being’. Possibly, ‘-VN.AR + go’ is an analytic construction encoding durative mode of action, i.e. ‘continue to VB, go on VB-ing’. Its function is to extend the duration of an IPS. As a result, the sentence may be translated with ‘after they had been in grief for a long time, lit. after they had gone on being in grief’.

3.8 Verbal Nominal *-piR*

Verbal Nominal *-piR* has two allomorphs, i.e. the masculine 𠵿 𠵿 ~ 𠵿 <b.ir₂ ~ bir> *-pir*, and 𠵿 伏 <b.ñ> *-piñ*.

Chinggeltei *et al.* (1985: 142) recognised 𠵿 [pən] as a past tense suffix.

Kane (2009: 147) described 𠵿 𠵿 <b.ún>, 𠵿 <bun>, and 𠵿 伏 <b.ñ> as past tense finite markers, and noted that 𠵿 伏 <b.ñ> covered verbal nominal function as well. Ōtake (2015a: 368, 371) described 𠵿 *-ber* and 𠵿 伏 *-beñ* as masculine and feminine allomorphs of the same morpheme covering both finite and verbal nominal function. Furthermore, he recognised the plural allomorph 𠵿 *-bej̃*.

3.8.1 Verbal Nominal *-piR* in Argument Function

35)	住 𠵿 九 𠵿	九 安	非 朱	小	十	𠵿
	ñe.l.g.en	um.ur ₂	po.do	SOUTH	WEST	tau
	jelek-en	umur	p ^h o-to	...	...	t ^h au
	Tianzong-GEN	first	time-DAT	south	west	five
	𠵿 𠵿 𠵿 𠵿	𠵿	𠵿 𠵿 𠵿	𠵿 𠵿 𠵿 𠵿 𠵿	𠵿 𠵿	
	SEAL.l.u.ji ₃	tai	s.eng.un	p.o.ondo.li	x.ci	
	...-l-ud ₃ i	t ^h ai	sejun	p ^h onto-li	xeŋi	
	ritual-DENV-VN.UCI	grand	field.marshal	become-?	border	
	𠵿 𠵿 𠵿 𠵿	𠵿 安	𠵿 𠵿 𠵿 𠵿	𠵿 𠵿 𠵿 𠵿		
	t.ud.l.ge.eñ	cau.ur ₂	am.ul.ha.añ	abad.l.b.ñ		
	t ^h ut-le-ke-ej̃	ŋ ^h auur	amu-lqa-añ	apat-l-piñ		
	harmony-DENV-CAUS-VN.AR.F	war	be.calm-CAUS-VN.AR.F	self-DENV-VN.PIR.F		
	𠵿 𠵿	𠵿	𠵿	𠵿	𠵿 𠵿	𠵿 𠵿 𠵿
	ir.er	mo	ku	— t	jur.en	ci.ur.er
	ir-er	mo	k ^h u	e-t ^h	ŋfur-en	ŋ ^h ur-er
	come-VN.AR.M	female	person	DEM.PROX-PL	two.F-ORD	two-ORD.M

𠂔 𠂔	𠂔 𠂔 伏	𠂔 𠂔	𠂔 𠂔 𠂔 𠂔
b.aq	hor.b.ñ	x.eu	s.ai p.ong
paq ^h	qorbij	xeu	sai p ^h ong
child	Qorbij	Xeu	investigation.commissioner

‘At the beginning of the time of Tianzong (r. 927-947), he became (he was made to be) Grand Field Marshal of the Five Seals of the south-west. He came to the achievement of harmonizing the borders and putting an end to the war. The second son of him and his wife was the Investigation Commissioner Qorbij Xeu.’

Dilie 8-19/44

The passage in example (35), in K 195 is glossed with “𠂔 𠂔 𠂔 𠂔 <mu.le.g:en> ‘venerable ancestor = Taizong 太宗’; 𠂔 𠂔 <yù.úr> ‘first [year]’; 𠂔 𠂔 <po:do> ‘at the time’; 𠂔 ‘south’; 𠂔 ‘west’; 𠂔 𠂔 𠂔 𠂔 <FIVE doro:le.u.ji> ‘five seals’ (=possessor of the five seals (?); 𠂔 𠂔 𠂔 <tai s.êj.un> ‘great *xiangwen*’; 𠂔 𠂔 <x.ci> ‘settlement, town’⁷²; 𠂔 𠂔 <cau.úr> ‘battle’; 𠂔 𠂔 伏 <hó.le.bo.ñ> ‘imperial clan’; 𠂔 𠂔 <rèn.er> ‘served’; 𠂔 𠂔 <mo ku> ‘wife’; 𠂔 <te> (possibly: plural suffix for females); 𠂔 𠂔 <TWO:en> ‘two’; 𠂔 𠂔 𠂔 <c.úr.er> ‘second’; 𠂔 𠂔 <bo.qo> ‘son’; 𠂔 𠂔 伏 <hor.bo.ñ> *Horbun (Kitan name); 𠂔 𠂔 *Heu ‘Kitan name’, written 𠂔 *heu in the *Liaoshi*; 𠂔 𠂔 𠂔 𠂔 <s.ai p.ong> ‘*caifang*’”.

K 212 gives the linear translation “In the first year(s) of the reign of Taizong, he was the grand *xiangwen* of the five seals of the southwest. At a battle at settlement... he served the clan of the emperor. He had two wives. The second son was *Horbun *Heu. His official title was investigation commissioner.”

L 785 glossed “太宗之初时南西五押大詳稳拜... 軍... 妻等二人之第二子曷魯本 𠂔 採訪”*Tàizōngzhī chū shí nán xī wǔ yā dà xiángwěn bài ... jūn ... qī děng èrrénzhī zǐ Hólǔběn Hǒu cǎifǎng* [Taizong-of beginning time south west five seal great *xiangwen* salute ... army ... wife and two person-of second son Heluben Hou *caifang*].

CWJ 1171 glossed “太宗初时于南西五押大詳稳成为... 軍... 妻他们二之次子曷魯本 𠂔 采访”*Tàizōngzhī chū shíyú nán xī wǔ yā dà xiángwěn chéngwéi ... jūn ... qī tāmen èrzhī zǐ Hólǔběn Hǒu cǎifǎng* [Taizong-of beginning time-at south west five seal great *xiangwen* become ... army ... wife they two-of second son Heluben Hou *caifang*].

⁷² In the glossary at K 86 we have ‘border region’. Apparently, the different translations ‘settlement, town’ and ‘border region’ are suggested by the presumably connected Manchou form *hečen(i)* meaning both ‘city’ and ‘city wall’.

We know the word 令火 <t.ud> *t^hut* from the expression 天 令火 <HEAVEN t.ud> ... *t^hut*, which corresponds to the Chinese reign title 咸雍 *Xiányōng* ‘everywhere harmony’. Possibly, the Khitan rendered the same concept by saying “the Heaven is harmonious”, and *t^hut* may mean ‘harmony, harmonious’.

Consequently, the verbal base 令火 𐰽 <t.ud.l.> *t^hut-le-* [harmony-DENV-] may be a denominal verb meaning ‘to be in harmony’, and 令火 𐰽 𐰿 <t.ud.l.ge> *t^hut-le-ke-* [harmony-DENV-CAUS-] may be its causative form meaning ‘to harmonize’. In (35), verbal nominal 令火 𐰽 𐰿 𐰾 <t.ud.l.ge.eñ> *t^hut-le-ke-eñ* [harmony-DENV-CAUS-VN.AR.F] ‘harmonizing, harmony’ functions as argument, specifically as object of 𐰾 𐰽 𐰿 𐰾 <abad.l.b.ñ> *apat-la-pij* [self-DENV-VN.PIR.F]. The meaning of *apat-la-pij* is discussed below. At the same time, *t^hut-le-ke-eñ* may be analyzed as the head of a content clause, where its object is *xeci* ‘border’, i.e. ‘harmonizing the borders’.

Verbal nominal *t^hut-le-ke-eñ* in argument function may be analyzed as pertaining to the semantic category of result noun. It indicates the transgressing of the crucial point of harmonizing the borders, i.e. the borders are in harmony.

The verbal base 乃 平 𐰽 <am.ul.ha.> *amu-lqa-* [be.calm-CAUS-] is probably cognate with MM *amu-* ‘to finish, to be calm’ (H 7).⁷³ It is analyzable as a base *amu-* ‘to finish’ augmented by the causative morpheme *-lKA-*. The MM counterpart as well has a causative derivational attested, i.e. *amu’ul-* ‘to tranquilize’ (H 7).⁷⁴ Note that the causative allomorphs used in the two languages are different, i.e. **-lKA-* versus **-hUl-*. I translated *amu-lqa-* as ‘to put an end to’.

Verbal nominal 乃 平 𐰽 𐰾 <am.ul.ha.añ> *amu-lqa-añ* [be.calm-CAUS-VN.AR.F] functions as argument specifically as object of *apat-la-pij*. At the same time, *amu-lqa-añ* may be analyzed as the head of a content clause, where its object is *cauur* ‘war’, i.e. ‘putting an end to the war’.

Verbal nominal *amu-lqa-añ* in argument function may be analyzed as pertaining to the semantic category of result noun. It indicates the transgressing of the crucial point of putting an end to the war, i.e. the war is over.

The verbal base 𐰾 𐰽 <abad.l.> *apat-la-* is a denominal verb derived from 𐰾 <abad> *apat* ‘self, body’. It may be compared with WM *beyele-* ‘to assume a shape or form, be[come] realized, fulfilled, or carried out; to materialize; to come to fruition’ (FL 95), derived from *beye(n)* ‘body, physique, organism; health; person, individual; (one)self’ (FL 94-95). I translated *apat-la-* with ‘to

⁷³ The original has “aufhören [...] ruhig sein”.

⁷⁴ The original has “beruhigen”.

𠂔 𠂔	令 𠂔 𠂔 𠂔	安 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔
iun.aq	t.ai.i du ₂	ng.i	x.ie.201	— ci.er
paq ^h	t ^h ai ʃu	ŋi	xje...	ʃ ^h i-er
child	grand.preceptor	ŋi	Xie...	make-VN.AR.M

In the tenth day, yellow rooster, from the beginning of the fourth month, white rat, of the fifth year, blue goat, of the Tianqing period, the Young Grand Preceptor of the Uncles, 𠂔 Xie..., made.

Gu 25-1/22

C 591 glossed the passage in example (36) as “天 天庆 五 乙 未 年 四 月 庚 子 朔 十 己 酉 日 …… 太 师 仪 … 写” *Tiān tiānqìng wǔ yǐ wèi nián sì yuè gēng zǐ shuò shí jǐ yǒu rì ... tài shī yí ... xiě* [heaven Tianqing five yin.wood sheep year four month yang.metal rat first.day.of.the.month ten yin.earth rooster day ... grand preceptor Yi ... write]. Being dates the most early deciphered sections, this passage was unproblematic already when C was compiled. Thus, we need to compare with succeeding studies only the last six blocks, that are the mention of the writer.

L 988 has “伯 父 子 太 師 儀 愜 寫” *bófù zǐ tài shī yí qiè xiě* [uncle child grand preceptor Yi Qie write].

CWJ 1022 have “兄 子 太 师 仪 … 书” *xiōng zǐ tài shī yí ... shū* [elder.brother child grand preceptor Yi ... write].

𠂔 𠂔 <yun.aq> was translated as 子 *zǐ* ‘child’, showing that authors recognized that 𠂔 <yun> was to be emended into 𠂔 , the two graphs differing only by one dot.

This passage is the conclusive mention of the scribe that made the epitaph, common to most epitaphs. As the origin of the writer is already specified by 𠂔 𠂔 𠂔 <ia.ia₂.ai> ‘of the uncles’, I suggest that *𠂔 𠂔 <*b.aq> occurs here not as a kinship term, but with the meaning ‘young’, acting as attribute to 令 𠂔 𠂔 𠂔 <tai t.ai.i du₂>. As we can notice from the gloss 太 师 *tài shī* ‘grand preceptor’, the authors interpreted 𠂔 <du₂> as 𠂔 <shī>, so we have 令 𠂔 𠂔 *𠂔 <t.ai.i *shī> *t^hai shu* ‘grand preceptor.’

Let us now turn to 𠂔 𠂔 𠂔 𠂔 <or₂.l.b.ñ> *orle-pij*. This block is often used to render the Chinese 朔 *shuò* ‘first day of the month’. *Orle-pij* and 朔 *shuò* are actually used in the meaning ‘day of the month’, introducing the number of the day. For instance, here we have 𠂔 𠂔 𠂔 𠂔 𠂔 𠂔 𠂔 𠂔 <or₂.l.b.ñ TEN ñugu t.aq.a ñair> *orle-pij ... juku taq^ha ñair* ‘tenth day of the month, yellow

rooster’. Since it displays the element 𠂔 伏 <b.ñ̃> -*pij*, 𠂔 𠂔 <or₂.l.> *orle-* is likely to be a verbal base. Based on the Chinese counterpart, *orle-pij* may mean ‘beginning’. Consequently, *orle-* may mean ‘to begin’.

In (36), verbal nominal *orle-pij* might have argument function. Semantically, it may pertain to the category of result noun, indicating that the crucial point of beginning has been transgressed, i.e. the month has begun.

Orle-pij has a second frequent meaning. Let us see example (37).

37)	𠂔	𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔 𠂔
	GREAT	xu.177	kid.i	g.ur ₂ .en	qa.ha.an	x.du ₂ .ir ₂
	...	xu...	k ^h it-i	kur-en	q ^h aq-a-an	xetu-ir
	great.F	Liao	Khitan-ADJZ	empire-GEN	Khagan-GEN	horizontal-ADJZ?
	𠂔 𠂔	𠂔	𠂔 𠂔	𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔 𠂔
	go.er	ia	101.un	dau.du ₃	ai.en	g.ui.in.ñ̃
	goer	ia	...-un	tautu	aj-en	kuiinij
	house	elder.brother	younger.brother-GEN	middle	father-GEN	Kuiinij
	𠂔 𠂔 𠂔		𠂔 𠂔		𠂔 𠂔 𠂔	
	s.eng.un		m.in		WRITE.g.eñ	
	sejgun		min		...k-ej	
	field.marshal		reign		write-VN.AR.F	
	𠂔 𠂔		𠂔 𠂔 𠂔 𠂔		𠂔 𠂔 𠂔	
	m.ing		or ₂ .l.b.ñ̃		ci.ge.el	
	miŋ		orle-bij		ʃ ^h i-ke-el	
	poem		begin-VN.PIR.F		make-CAUS-CVB.AL	
‘Having a preface (lit. a beginning) made to the poem written for our Field Marshal Guiinij of the Middle Fathers of the Horizontal Tent of the Khagan of the Great Liao Khitan Empire, ...’						

Nu 1-1/18

L 827 glossed the passage in example (37) as “大 遼 契丹 國之 可汗之 ... 族系 橫帳之 仲 父房

國引寧詳穩墓之誌銘序并” *Dà Liáo qìdān guózhī kěhànzhī ... zúxì héngzhàngzhī zhòng fūfáng guó yǐnníng xiángwěn mùzhī zhì míng xù bìng* [great Liao Khitan empire-of khagan-of ... clan horizontal.tent-of middle fathers’.household kingdom Yinning field.marshal tomb-of record inscription preface attach]. CWJ 1190 glossed “大 … 契丹国之可汗横帐兄弟之仲父之国隐宁? 详稳之墓志铭序并” *Dà ... qìdān guózhī kěhàn héng zhàng xiōng dìzhī zhòng fūzhī guóyǐnníng? xiángwěnzhi mù zhì míng xù bìng* [great ... Khitan khagan horizontal tent elder.brother younger.brother-of middle father-of Guoyinning? field.marshal-of tomb record inscription preface attach].

In example (37) – like in several KSS inscriptions – 北中付伏 <or₂.l.b.ñ> *orle-pijn* [begin-VN.PIR] is used in the meaning ‘preface, introduction’, corresponding to 序 *xù* ‘preface’ in Chinese Liao epitaphs. It functions as an argument, specifically as object of verb 𠬞𠬞𠬞 <ci.ge.el> *tʰi-ke-el* [make-CAUS-CVB.AL] ‘letting so. make, having sthg. made’.

Under example (36), it seemed feasible to classify *orle-pijn* as a result noun. Concurrently, in (37), it rather may be analyzed as pertaining to the semantic category of action noun, i.e. ‘the beginning’. Apparently, it may pertain to both categories, depending on the meaning it acquires in the sentence.

3.8.2 Verbal Nominal *-piR* in Attributive Function

38) 𠬞𠬞𠬞 𠬞𠬞𠬞 𠬞𠬞𠬞 𠬞𠬞𠬞	𠬞𠬞𠬞	𠬞𠬞𠬞	𠬞𠬞𠬞	𠬞𠬞𠬞
l.un ng.iu ₂ .de	t.gu	hur ₃	ai.s	ji.en
lun nju-te	tegu	qur	ai-s	tʃen
Analects-DAT	thus	three.F	year-PL	through
𠬞𠬞𠬞	𠬞𠬞𠬞 𠬞𠬞𠬞	𠬞𠬞𠬞	𠬞𠬞𠬞	𠬞𠬞𠬞 𠬞𠬞𠬞 𠬞𠬞𠬞
ai.en	y.au a.aj	mo.er	336	au.ul.u.ul.g
aj-en	jawa-aj	moer	...	auulu-ulek
father-GEN	go-VN.AR.F	way	NEG	change-VN.LAK

𠂇 𠂇 𠂇 𠂇 𠂇 𠂇	𠂇 𠂇	𠂇 𠂇 𠂇 𠂇	𠂇 𠂇
ci.i.is.d.b.ñ	mo.er	k.el.u ₃ .ji	x.i
ʃ ^h is-te-pij	moer	kel-uʃi	x-i
blood-VBLZ-VN2.F	way	say-VN5	say-VN.I

‘In the Analects it is said thus: not to diverge from the way walked (lit. gone) by the father for three years, is called the filial way.’

Yongqing 25-42/47, 26-1/10

Example (38) repeats example (22) discussed in §3.7.3.

Verbal nominal 𠂇 𠂇 𠂇 𠂇 𠂇 <ci.i.is.d.b.ñ> ʃ^his-te-pij [blood-DENV-VN.PIR.F] translates the Chinese 孝 *xiào* ‘filiality’. Etymologically, it is a denominal verb derived from 𠂇 𠂇 𠂇 <ci.i.is> ʃ^his ‘blood, kinship’. The literal meaning of ʃ^his-te- may be ‘to be blood-related’. The NP 𠂇 𠂇 𠂇 𠂇 𠂇 𠂇 <ci.i.is.d.b.ñ mo.er> ʃ^his-te-pij moer [blood-DENV-VN.PIR.F way] ‘the filial (lit. blood-related) way’ is made of verbal nominal in attributive function ʃ^his-te-pij modifying nominal head *moer*.

Verb ʃ^his-te- ‘to be filial, lit. to be blood-related’ may be analyzed as a state (non-transformativ non-dynamic IPS). NP ʃ^his-te-pij moer refers to the way which is filial, referring to a general rule. Thus, ʃ^his-te-pij in attributive function may be analyzed as indicating general truth, and may be considered as pertaining to the intraterminal realm.

3.8.3 Verbal Nominal -piR in Finite Function

39) 𠂇 𠂇	𠂇	𠂇 𠂇	𠂇 𠂇	𠂇 𠂇 𠂇	𠂇 𠂇 𠂇 𠂇
eu.ur ₂	iun	dil.de	cau.ur ₂	ji.en.i	024.ó.ui.ii
eur	jun	til-te	ʃfauur	ʃfen-i	...ouii
age	sixty	seven-DAT	war	among-ADJZ	?

又 化	尔 今 此	因	劣 矣 中
m.ir ₃	on.s.el	abad	tu.ur ₂ .bir
mir	on-sel	apat	t ^h uur-pir
horse	fall-CVB.SEL	self	die-VN.PIR.M

‘... at the age of sixty-seven during a battle (...) he fell from the horse, and soon after he died.’

Xiangwen 12-13/22

The passage in example (39) was translated by WJ 224 as “at the age of sixty-seven, while riding on horseback, he was killed in action.”

In CWJ 1475, it was glossed with “岁 六十 七 于 军 中 ... 马 坠 身 薨” *sui liùshí qī-yú jūn zhōng ... mǎ zhuì shēn hōng* [age sixty seven-at army middle ... horse fall self die].

This passage refers the death in battle of the father of the tomb owner. Verbal nominal 劣 矣 中 <tu.ur₂.bir> t^huur-pir [die-VN.PIR] ‘he died’ here has finite function. The literal meaning of t^huur- is “to be filled”. This verb stem is connected to MM *dü’ür-* ‘to be full’⁷⁶ and WM *dügür ~ degür* ‘to be[come] filled of full; (fig.) to expire, finish, end (of time or events); to be completed or finished’⁷⁷, and by semantical shift it assumes the meaning of ‘to die’ in the sense of ‘to fill, or to finish, one’s life time’ (cf. WR 80). Verb t^huur- ‘to die, lit. to be filled’ might be analyzed as an achievement (finitransformative momentaneous IPS). Verbal nominal in finite function t^huur-pir might be considered as indicating the transgression of the crucial limit. Moreover, it refers to an event far from *nunc*. It might be considered as a postterminal not marked for focality.

40) 又 关 雨	毛	得 力	业 关	业 及 子 得 伏
m.i.in	ONE	b.aq	p.i	p.o.ol.b.ñ
miin	...	paq ^h	p ^h i	p ^h ol-piñ
my	one.F	child	imperial.concubine	become-VN.PIR.F

‘One of my daughters has become Imperial Concubine.’

Chala 10-36/40

The passage in example (40), in CWJ 1582 is glossed with “吾 一 女 妃 成为” *wú yī nǚ fēi chéngwéi* [my one daughter imperial.concubine become].

⁷⁶ H 40. In the original “voll sein”.

⁷⁷ FL 278. I express my gratitude to prof. Khabtagaeva for pointing out to me this datum. She additionally pointed out to me that in modern Mongolic languages this verb can be used to mean “to die”.

Wu (2018: 386) translated it as ‘one of my daughters became imperial concubine.’

Example (40) will be commented on together with (41), occurring in the next line in the same epitaph.

41) 圣 和	才 泰	芳 矢	夙 央 化 升 伏
im.en	ia.LUCK	cu.de	x.ui.ri.b.ñ
imen	ia...	ʃ ^h u-te	xuiri-pij
my	luck	top-DAT	reach-VN.PIR.F
‘My bliss has reached the top.’			

Chala 11-16/19

The passage in example (41), in CWJ 1582 is glossed with “吾 福 极于 至” *wú fú jí-yú zhì* [my bliss top-at reach].

Wu (2018: 386) translated it as ‘I have been blessed to the utmost.’

Here is the tomb owner speaking, soon before his death. He refers to the fortunate events happened to him and his family, among which one of his daughters becoming imperial concubine. At the end, he declares: “my bliss has reached the top”.

The finite verbs of the two sentences are 业 及 子 升 伏 <p.o.ol.b.ñ> *p^hol-pij* and 夙 央 化 升 伏 <x.ui.ri.b.ñ> *xuiri-pij*, both taking morpheme *-PIR*.

Both VPs 业 兴 业 及 子 <p.i p.o.ol.> *p^hi p^hol-* ‘to become imperial concubine’ and 芳 矢 夙 央 化 <cu.de x.ui.ri.> *ʃ^hu-te xuiri-* ‘to reach the top’ may be analyzed as achievements (finitransformative momentaneous IPSs). Noteworthy, both sentences are pronounced at *nunc* and refer to events happened in the past whose resultant state still obtains at *nunc*. Unlike example (39), here verbal nominals marked by *-piR* seem to encode focality, possibly being low-focal postterminal (perfect). notion.

3.8.4 Verbal Nominal *-piR* in Analytic Constructions

42)	口	丰	中 关 雨	凡 央 伏	凡 及 必	及 米 及 必
	323	ai	l.i.in	g.ui.ñ	g.u.un	o.udu.u.un
	...	ai	lin	kui-jɿ	kuun	outu-un
	DEM.DIST	year	Lin	Gui-ADJVZ	jade	palace-GEN
	雨 安	来 [] 当	来 冬 为 火	为 立 方		
	cau.ur ₂	ci.[]eñ	ci.as.a.iu ₂	a.ha.al		
	ʃ ^h auur	ʃ ^h ...epɿ	ʃ ^h asa-ju	a-qa-al		
	war	second?	clan.chief-LOC	be-CAUS-CVB-AL		
	及 米 及 化 和	雨 弱	至 卒	穴 全	为 安	
	o.udu.u.ur.en	cau.ji	hur ₂ .u ₂	nai.d	101.ur ₂	
	outu-ur-en	ʃ ^h autʃi	quru	nai-t	...ur	
	palace-INS-PX3	army	commander	chief-PL	together	
	居 谷	为 出	因 中 丹 伏	来 谷		
	KNOW.er	a.añ	abad.l.b.ñ	ci.er		
	...-er	a-aɿ	apat-la-pɿɿ	ʃ ^h i-er		
	know-VN.AR.M	be-VN.AR.F	self-DENV-VN.PIR.F	make-VN.AR.M		
	叔 比 谷 万	穴 丰	全 将 凡 亦	关 化	令 金 中 谷 万	
	k.el.ge ₂ .y	da ₂ .ai	s.iang g.ün	i.ri	t.em.l.ge.y	
	k ^h el-ke-ei	tai	siaɿ kyn	iri	t ^h em-elke-ei	
	say-CAUS-CVB.AI	grand	general	title	confer-CAUS-CVB.AI	

‘That year (Chongxi 13, 1044 CE) , becoming (lit. being made to be at) Second Clan Chief in the war of the Jade Palace of Lin Gui, he is said to have fulfilled being Joint Administrator of the Campaign Commanders’ Chiefs at that palace, and then he was appointed the title of Grand General, ...’

Gaoshi 15-7/29, 16-1/2

Apparently, the structure *apat-la-pij* *ʃʰi-* ‘lit. make a fulfilment’ was used in the sense of ‘bring something to completion’. Possibly, the structure ‘-VN.AR fulfilment make’ is a completive mode of action meaning ‘finish VB-ing’. Perhaps, the structure analyzed under example (35) in §3.8.1 may be an instance of a structure encoding a similar actional recategorization. Note that in that instance the finite verb employed after *apat-la-pij* is *ir-er* ‘he came’ vs. *ʃʰi-er* ‘he made’ in (42).

4. Finite forms

At the current research stage, Khitan seems to have less inflectional morphemes exclusively specialized for finite function than Middle Mongol. Whereas Middle Mongol has five such morphemes (*-yU*, *-mUi*, *-bA*, *-lU'A*, *-ǰU'U*), Khitan has only one (*-liR*).

The aspecto-temporal categories relevant to this investigation of finite forms were already introduced under sections §3.1.3 and §3.1.4.

4.1 Finite Form *-liR*

Verbal Nominal *-liR* is represented by the markers 𐰺𐰺 <l.ir₂>, 𐰺𐰽 <al.ir₂>, 𐰺𐰾 <il.ir₂>, 𐰺𐰿 <ul.ir₂>, and 𐰺𐰻 <l.ñ>. Chinggeltei (1999; Ch. tr. Chen, 2012: 15) classified 𐰺𐰺 [lən] as a finite form marker. Kane (2009) described 𐰺𐰺 <l.ún>, 𐰺𐰽 <al.ún>, 𐰺𐰾 <il.ún>⁸¹ as allomorphs of a past tense finite form marker. Ōtake (2015b: 368–370) respectively described 𐰺𐰺 *-ler* and 𐰺𐰻 *-(e)leñ* as masculine and feminine allomorphs of a past tense finite form marker, and added the plural allomorphs 𐰺𐰽 *-lej* and 𐰺𐰾 *-alej*. Chinggeltei & Wu & Jiruhe (2017: 581–582) described 𐰺𐰺 /ələn/, /olon/⁸², 𐰺𐰽 /alan/, 𐰺𐰾, and 𐰺𐰻⁸³ as past tense finite form markers. Following Róna-Tas (2017: 167)⁸⁴, I add to previous accounts the allomorph 𐰺𐰿. I do not include the plural allomorphs in my description. The examples offered by Ōtake are not sufficiently clear to prove whether the subjects are actually plural. I agree in classifying markers ending in 𐰺 and 𐰻 as masculine and feminine respectively, and read 𐰺𐰺 /lir/, 𐰺𐰽 /alir/, 𐰺𐰾 /ilir/, 𐰺𐰿 /ulir/, and 𐰺𐰻 /lip/.

I did not find any examples in which *-liR* has nominal or adjectival function. This might be the only Khitan verbal inflectional morpheme occurring exclusively in finite function. I suggest that given the similar composition of the morphemes *-AR*, *-piR*, and *-liR*, i.e. an X part followed by the gender segments *-r/-p*, *-liR* might share with *-AR* and *-piR* nominal origin. After that, whereas the latter have maintained nominal and adjectival function besides the newly developed finite function, *-liR* might have abandoned nominal and adjectival function, maintaining only the newly developed finite function. Hopefully an answer to this question may be found in future research.

⁸¹ I read 𐰺𐰺 <l.ir₂>, 𐰺𐰽 <al.ir₂>, 𐰺𐰾 <il.ir₂>, like CWJ.

⁸² Apparently, their opinion is that 𐰺𐰺 is pronounced /ələn/ after front stems, and /olon/ after labial stems.

⁸³ The pronunciation of the latter two markers was not specified by the authors.

⁸⁴ Róna-Tas (2017: 167) identifies 𐰺𐰿 𐰺𐰿, read <ū.ul.ún> and pronounced *üwülün*, as a “past tense in *lun*” of the verb 𐰺 ‘to give’, and translates ‘was given’.

Let us start our analysis with example (43).

43)	公 升 火	夫 爻	扎 矢	爻 及 州	爻 为 夫 相	丙
	n.o ₂ .un	ir ₄ .ir ₂	or ₂ .de	m.o.oñi	sh.a.ir ₄ .en	mo
	nu-un	ir-ir	or-te	moonji	ʃair-en	mo
	spouse-PX3	receive-VN.IR.M	place-DAT	Moopni	court.attendant-GEN	female
	几	出 夹 爻 伏 爻	兮 黍 伏 矢	力 冬 中 爻		
	ku	to ₂ .an.sh.ñ.u	pu.is.ñ.de	na.as.l.ir ₂		
	ku	t ^h oanʃɪpu	p ^h uisɪp-te	naas-lir		
	person	T ^h oanʃɪpu	lady-DAT	move-FIN.LIR.M		
	‘Instead of taking his own wife, he married the wife of Court Attendant Moopni, Lady T ^h oanʃɪpu.’					

Tuguci 4-7/16

The passage in example (43) refers to an ancestor of the tomb owner, the Grand Prince Oqʃin, and describes an instance of levirate. As mentioned in Tuguci 3-11/15, his elder brother the Court Attendant Moopni died young. Consequently, Oqʃin married the widow of his brother, Lady T^hoanʃɪpu. In KSS epitaphs, when levirate is referred to, the verb 力 冬 <na.as.> *naas-* ‘to move, to transfer’ is used. Literally it is ‘the brother transferred [himself] to the widow’. 力 冬 中 爻 <na.as.l.ir₂> *naas-lir* ‘he transferred’ has finite function. The VP *T^hoanʃɪpu p^huisɪp-te naas-lir* is an achievement (finitransformative momentaneous IPS). The event is located in the past and appears as detached from *nunc*. Here *naas-lir* seems to be a postterminal not encoding focality.

4.1.1 Comparative Analysis of Apecto-temporal Categories of Verbal Nominals *-liR* and *-AR*

This paragraph analyzes a long section from Jue, where we have both forms in *-liR* and forms in *-AR*.

44) 𠂔 𠂔	公 𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔 𠂔
SIX.er	n.on.en	ab ai	do ₂ .o.oñ	d.il.ug	ci.eng.un
...-er	non-en	ap ai	toop	tiluk	ʃ ^h ejun
six.F-ORD.M	generation-GEN	grandfather	Toop	Tiluk	<i>Changwen</i>
𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔 𠂔 𠂔 𠂔		
m.o	ai.en	ci.eng.un	p.o.ondo.l.ir ₂		
mo	aj-en	ʃ ^h ejun	p ^h onto-lir		
great.M	father-GEN	<i>changwen</i>	become-FIN.LIR.M		
‘[His] ancestor of six generation was the Changwen Duowo Dilu. He was made to be Changwen of the First Patriarchal Houshold.’					

Yelü Jue 3-39/49

The passage in example (44), in W2 269 was glossed with “第六代の先祖 合魯隱 敵刺 敵穩 孟父帳の 敵穩 成った” *dairoku daino senzo Gōroon Tekiratsu shōon mō fu chōno shōon natta*” [sixth generation-GEN ancestor Heluyin Dila changwen elder father tent-GEN changwen become-PST].

In CWJ 1533, it was glossed with “第六代之 祖父 铎盥 敌刺 敵穩 孟父之 敵穩 成为” *dìliù dài-zhī zǔfù Duówǎn Dìlā chǎngwěn mèng fù-zhī chǎngwěn chéngwéi*” [sixth generation-of grandfather Duowan Dila changwen elder father-of changwen become].

With respect to W2, CWJ corrected the reading of the block 𠂔 𠂔 𠂔 <do₂.o.oñ> – representing the second name of the Changwen – from 合魯隱 *Hélǔyǐn* to 铎盥 *Duówǎn*. The former transcription probably assumed that graph n. 091 𠂔 was read as <xel>, or <xol>, or something similar. As summarised in CWJ 191-192, the most acceptable reading is <do₂>.

The first name of the Changwen, 𠂔 𠂔 𠂔 <d.il.uh> was transcribed by both sources with 敌刺 *Dilà*.

I retained a transcription based on the readings of the graphs, i.e. *Toon Tiluk*, since no person named 铎盪 敌刺 *Duówǎn Dìlà* is attested in either LS or QDGZ.

The block 出及用中又 <p.o.ondo.l.ir₂> *p^honto-lir* was translated as ‘to become’ by both W2 and CWJ. The VP consists of the predicative complement 又及中相各女 <mo ai.en ci.eng.un> *mo aj-en t^hejun* ‘Changwen of Elder Fathers’ in the indefinite case, and the verbal predicate 出及用中又 <p.o.ondo.l.ir₂> *p^honto-lir* [become-FIN.LIR.M] ‘he became’. The verb has FIN *-liR* form, agreeing in gender with its subject 巧及用空用欠各女 <do₂.o.oñ d.il.ug ci.eng.un> *Toon Tiluk t^hejun* ‘the Changwen Toon Tiluk’ introduced in the previous sentence, which is a nominal predicate with zero copula.

The passage in example (44) is followed by the passage in example (45).

45) 令尔及北	公尔相	生 中	列 圣 列	覓 为 夫
t.ad.o.or	n.on.en	ab ai	h.im.h	sh.a.ir ₄
t ^h a-toor	non-en	ap ai	qimiq	fair
five-ORD.M	generation-GEN	grandfather	Qimiq	court.attendant
饥 卡	巧	欠 各		
ku ₂ .us	146	u ₃ .er		
k ^h uus	...	u-er		
strength	NEG	give-VN.AR.M		
‘[His] ancestor of fifth generation was the Court Attendant Xemeg. He did not serve.’				

Yelü Jue 3-50/56, 4-1/2

The passage in example (45), in W 269 was glossed with “第五 代の 先祖 匣馬葛 郎君 官職 未だ 賜” *daigo dai-no senzo Kōbakatsu rōkun kanshoku imada tamamono* [fifth generation-GEN ancestor Xiamage court.attendant position not.yet appointment].

CWJ 1533 glossed with “第五 代之 先祖 匣馬葛 郎君 ... 未 賜” *dìwǔ dài-zhī xiānzǔ Xiámǎgě lángjūn. ...wèi cì* [fifth generation-of ancestor Xiamage court.attendant ... NEG.PST bestow].

Like in (44), also here the passage divides into a zero copula nominal clause from 令亦及北 <t.ad.o.or₂> *t^ha-toor* ‘fifth’ to 又力夫 <sh.a.ir₄> *fari* ‘court attendant’, and a finite predicate clause from 仇卡 <ku₂.su> *kusu* ‘effort’ to 只𠂔 <u₃.er> *u-er* ‘he gave’.

I transcribed the block 𠂔𠂔𠂔 <h.im.h> as *qimiq* based on the phonetic shape suggested by the graphs. Albeit the phonetic shape of this proper noun is reminiscent of 匣馬葛 *Xiámǎgě* mentioned in LS 66, 73 (this name was not mentioned in QDGZ), we cannot transcribe it with certainty as Xiamage since *qimiq*, whose phonetic form has some notable differences in vocalism, could represent a different name. As a matter of fact, from LS we understand that Xiamage was another name of 嚴木 *Yánmù*, the elder brother of Dezu, and founder of the Elder Fathers’ Household. His son was 偶思 *Ǒusī* and his grandson was 曷魯控溫 *Hélǔ Kòngwēn* or 曷魯洪隱 *Hélǔ Hóngyǐn*. From the following examples, where his descendants are enlisted, we can recognize that we are dealing with another person.

Perhaps the use of 仇卡 <ku₂.us> instead of 几𠂔𠂔 <ku.u₃.us> has cast some doubts on the translation of the second clause, misleading the authors. Both W2 269 and CWJ 1533 glossed it as if the subject were the receiver, i.e. 只𠂔 <u₃.er> *u-er* [give-VN.AR.M] ‘he gave’ is glossed 賜 *cì* ‘to bestow upon an inferior’. The expression *k^huus u-* ‘to serve, lit to give strength’ was well known at least already from WJ. The subject is clearly the giver, and what he gives is 几𠂔𠂔 <ku.u₃.us> *k^huus* ‘strength, service’, of which 仇卡 <ku₃.us> *k^huus* ‘id.’ is probably an allograph. Hence, I translated ‘he did not serve’.

The glosses used for the negation 𠂔 <146>, J 未だ *imada* ‘not yet’ Ch. 未 *wei* ‘id.’, let us reflect on a noteworthy point.

In example (44), 止及困𠂔𠂔 <p.o.ondo.l.ir₂> *p^honto-lir* [become-FIN.LIR.M] ‘he became’ is an achievement (finitransformative momentaneous IPS), i.e. in a precise moment a person is made to become Changwen.

In example (45), 仇卡 𠂔𠂔𠂔 <ku₂.us 146 ũ.er> *kuus ... u-er* [strength NEG give-VN.AR.M] ‘he did not serve’ means that, despite his honorific—probably posthumous—title of Court Attendant, Qimiq never worked as an official during his lifetime. The scope of the negation is not a punctual moment like in (44), but it is rather a long span of time, because the event ‘to offer service’ is an activity (non-transformative dynamic IPS).

46) 令 化 𠂔	𠂔 𠂔	𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔 𠂔 𠂔
t.ur.er	ab ai	hus.a	xe.il	sh.ha.or ₂	318.na.ar ₂ .l.de
t ^h ur-er	ap ai	qusa	xeil	faqor	...naralte
four-ORD.M	grandfather	Qusa	Xeil	chosen.envoy	?
𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔 𠂔
eu.ul	cau.ur	sh.ha.or ₂	a.ai	d.ia ₂ .iu ₂	on.l.ir ₂
eul	ḡ ^h aur	faqor	a-ai	tja-ju	on-lir
cloud	army	...	be-CVB1	enemy-LOC	fall-VN3.M
'The ancestor of fourth generation was the Chosen Envoy Kusa Xeil. While he was Chosen Envoy of the ... Cloud Army, he fell under the enemy.'					

Jue 4-3/16

The passage in example (46), in W 269 was glossed “第四 代の 先祖 ... 解里 ... 冬軍 ... 居る ... 落ちた” *daiyon dai-no senzo ... Kairi ... fuyugun ... iru ... ochita* [fourth generation-GEN ancestor ... Xieli ... winter army ... be ... fell].

In CWJ 1533 it was glossed “第四 代之 祖父 鶻洒 解里 劲节 ... 云军 劲节 居 ...” *dìsì dài-zhī zǔfù Gǔsǎ Xièlǐ jìngjié ... yúnjūn jìngjié jū ...* [fourth generation-of ancestor Gusa Xieli chosen.envoy ... cloud army chosen.envoy reside ...].

This passage divides into two sentences. The first one is from 令 化 𠂔 <t.ur.er> *t^hur-er* ‘fourth’ to 𠂔 𠂔 𠂔 <sh.ha.or> *faqor* ‘an official title’. It is a zero copula nominal clause. The second one is from 𠂔 𠂔 𠂔 𠂔 <318.na.ra.l.de> *...naralte* ‘?’ to 𠂔 𠂔 𠂔 <on.l.ir> *on-lir* [fall-FIN.LIR.M] ‘he fell’. It divides into two clauses. The first one is a converbial clause headed by the copula in CVB - *Ai* 𠂔 𠂔 <a.ai> *a-ai* [be-CVB.AI] ‘being’. The second one is the main clause headed by the finite verb *on-lir* ‘he fell’.

In LS 76 a 解里 *Xièlǐ* is mentioned, but his style differs from that given in Jue, i.e. 發單 *Fāchán/dān* (LS) vs. 鶻洒 *Gǔ/Húsǎ* (Jue). Moreover, there is no name 鶻洒 *Gǔ/Húsǎ* attested in either LS or QDZG. Therefore, I preferred to directly use the transcription of the Khitan form, Qusa Xeil.

I follow CWJ 1533 in translating the block 𠂔 𠂔 𠂔 <sh.ha.or> *faqor* as 劲节 *jìngjié*, which I rendered with ‘Chosen Envoy’, and the block 𠂔 𠂔 <eu.ul> *eul* as 云 *yún* ‘cloud’ instead of 冬 *Jue* *fuyu* ‘winter’ in W2 269. I follow W2 269 in glossing the block 𠂔 𠂔 <a.ai> *a-ai* J 居る *iru*

‘being’. However, a more precise translation would be more useful for aspecto-temporal analysis. The Japanese verbal nominal 居る *iru* alone is too generic, possibly ranging from ‘being’ to ‘was’ to ‘was going to be’.

Based on the following main clause 公 公 火 不 中 又 <d.ia₂.iu₂ on.l.ir₂> *tja-ju on-lir* [enemy-LOC fall-FIN.LIR.M] ‘he fell under the enemy’, I think it is feasible to translate the converb *a-ai* with ‘while he was’, thus giving to the converb the function of expressing temporal simultaneity. As a result, we have ‘while he was Chosen Envoy of the ... Cloud Army, he fell under the enemy’. In this way, the achievement (finitransformative momentaneous IPS) ‘to fall under the enemy’, is embedded inside the state (non-transformative non-dynamic IPS) ‘to be Chosen Envoy’.

47)	列 帀 公	公 不 有	生 丰	笏 伏	全 为 乃	又 关 弓
	h.od.er	n.on.en	ab ai	cu.ñ	s.a.am	sh.i ju
	xo-ter	non-en	ap ai	ʃ ^h uŋ	s.a.am	ʃi ʃu
	three-ORD.M	generation-GEN	grandfather	ʃuŋ	sam	Chamberlain
	又 当	与 又 火	又 关 弓	止 及 閑 中 又		
	ir ₂ .ep	ep ₂ .u.ui	sh.i ju	p.o.ondo.l.ir ₂		
	irep	epuui	ʃi ʃu	po-nto-lir		
	he-AGM.F	household	chamberlain	become-VN.LIR.M		
‘The ancestor of third generation was the Chamberlain ʃuŋ Sam. He was made to be Chamberlain of his household.’						

Tue 4-17/29

The passage in example (38), in W2 269 was glossed “第三 代の 先祖 ... 三 世燭 ... 世燭 成っ
た” *daisan dai-no senzo ... san seishoku ... seishoku natta* [third generation-GEN ancestor ... San
chamberlain ... chamberlain became].

In CWJ 1534, it was glossed “第三 代 祖父 丑女 三 世燭 ... 帳 世燭 成为” *dīsān dài zǔfū Chǒunǚ Sān shìzhú ... zhàng shìzhú chéngwéi* [third generation Chounü San chamberlain ... household
chamberlain become].

No person called 丑女 三 *Chǒunǚ Sān* is mentioned in either LS or QDGZ. Thus, transcribing 笏
伏 全 为 乃 <cu.ñ s.a.am> as 丑女 三 *Chǒunǚ Sān* is not reliable. I chose to transcribe the name
based on the reading of the graphs, i.e. ʃ^huŋ Sam.

This passage divides into two sentences. The first one is a zero-copula nominal clause. The second

one is a verbal predicate clause governed by the masculine FIN *-liR* 止及用中又 <p.o.ndo.l.ir2> *p^honto-lir* [become-FIN.LIR.M] ‘he became’. Once again, the momentaneous event ‘to become X’ takes morpheme *-liR*.

48) 生 中	列 艾 友 杏	火 丹 杏	今 又 火	令 杏 万
ab ai	h.ash.u.uñ	da ₂ .al ₂ .er	pu sh.iu ₂	t.ge.y
ap ai	qa ^h juuŋ	tal-er	p ^h u ju	t ^h eke-ei
grandfather	Qa ^h juuŋ	Taler	deputy.administrator	die-CVB.AI
令 金 中 杏 当	关 化	凡 今 将	凡 用 今 当	又 安 今 当
t.em.l.ge.eñ	i.ri	shī s.iang	g.ing s.ung ₂	sh.ng s.ung ₂
tem-elke-eŋ	iri	ŋi sjaŋ	kiŋsuŋ	ŋiŋsuŋ
confer-CAUS-VN.AR.F	name	governor	Jingzong	Shengzong
圣	巫 立 亦 杏	仇 卡	只 杏	
jur	qa.ha.ad.er	ku ₂ .us	u ₃ .er	
djur	q ^h aq-at-er	k ^h uus	u-er	
two.F	khagan.OBL-PL-INS	strength	give-VN.AR.M	
丞	又	关 化 矢	及 子 伏	
035	GREAT	i.ri.de	o.ol.ñ	
...	...	iri-te	o-olŋ	
?	great.F	name-DAT	become-FIN.LIR.F	

‘[His] grandfather was the Deputy Administrator Hu.TENT.u.uni Diler. The title conferred [to him] after he had died, was Military Governor. He served the two emperors Jingzong and Shengzong. He reached the title (lit. he became to the title) of ... Great.’

June 4-30/52

The passage in example (48), in W2 269 is glossed “祖父（人名）副署 再び 封ぜられ 号 史相 景宗聖宗 二 可汗 官職 賜 ... 大号に貰う” *sofu (jinmei) fukusho futatabi fūzerare gō shishō keisō*

Seisō-ni kakan kanshoku tamamono ... dai gō-ni morau [grandfather proper.name deputy.administrator second.time confer-PASS-CVB title governor Jingong Shengzong two kaghan position appointment ... great title-DAT receive].

In CWJ 1534, it is glossed “祖父 曷主隱 铎鲁斡 副枢 再 封 号 使相 景宗 聖宗 二 可汗 ... 賜 ... 大 号于 授” *zǔfù Hézhǔyǐn Duólǔwò fùshū zài fēng hào shǐxiàng Jǐngzōng Shèngzōng èr kěhàn ... cì ... dà hào-yú shòu* [grandfather Hezhuyin Duoluwo deputy.administrator second.time confer title governor Jingzong Shengzong two kaghan ... bestow ... great title-to give].

No person called 曷主隱 *Hézhǔyǐn* is attested either in LS or QDGZ, and 铎鲁斡 *Duólǔwò* mentioned in LS 26, 105 cannot be the person mentioned here. 𠤎𠤎𠤎 <da₂.al₂.er> *Taler* is the tomb owner’s grandfather. Instead, the Duoluwo mentioned in LS 26 lived after the tomb owner’s lifetime. LS 26 shows he was active during Shouchang (1095-1101). The tomb owner had died in 1071. Moreover, *Duoluwo* and *Taler* present significant divergences in vocalism. Therefore, the two transcriptions are not reliable. I based the transcription on the reading of the graphs, i.e. *Qafuun Taler*.

This passage divides into four sentences. The first one, from 𠤎𠤎𠤎 <ab ai> *ap ai* ‘grandfather’ to 𠤎𠤎𠤎 <p^hu sh.iu₂> *p^hu fu* ‘deputy administrator’ is a zero copula nominal clause. The second one, from 𠤎𠤎𠤎 <t.ge.y> *t^heke-ei* [die-CVB.AI] ‘after he had died’ to 𠤎𠤎𠤎 <shi s.iang> *fi sjan* ‘military governor’, is another zero copula nominal clause, albeit more complex in structure. The first block, 𠤎𠤎𠤎 <t.ge.y> *t^heke-ei* was glossed in both the aforementioned sources as an adverbial meaning ‘again, once again’, i.e. J 再𠤎 *futatabi* ‘again, once more, a second time’ Ch. 再 *zài* ‘again, once again’. Instead, *t^heke-ei* is the CVB -*Ai* form of the verb 𠤎𠤎𠤎 <t.ge.> *t^heke-* ‘to die’. Thus, I translated it as ‘after he had died’.

The block 𠤎𠤎𠤎𠤎𠤎𠤎 <t.em.l.ge.eñ> *t^hem-elke-ep* [confer-CAUS-VN.AR.F] ‘conferred’ is the feminine VN -*AR* form of the verb 𠤎𠤎𠤎𠤎𠤎𠤎 <t.em.l.ge.> *t^hem-elke-* ‘to be conferred’ in adjectival function, agreeing in gender with, and modifying the following noun, 𠤎𠤎𠤎 <i.ir₃> *iir* ‘name, title’. Linking this NP with the preceding converb *t^heke-ei* ‘after he had died’, we obtain ‘the title conferred after he had died.’ The NP is on its turn the subject of a zero copula nominal predicate with predicative complement *fi sjan* ‘military governor’, thus we have ‘the title conferred [to him] after he had died was Military Governor’.

The third one goes from 𠤎𠤎𠤎𠤎𠤎𠤎 <g.ing s.ung> *Kinsun* ‘Jingzong’ to 𠤎𠤎𠤎 <u₃.er> *u-er* [give-VN.AR.M] ‘he gave’. It is headed by the masculine VN -*AR* of *u-* ‘to give’ in finite function.

The fourth one is a nominal clause headed by the feminine FIN -*liR* form of the dynamic copula 𠤎

<o.> *o-* ‘to become’, 及子伏 <o.ol.p> *o-olip* [become-FIN.LIR.F] ‘she became’. This block, in W2 269 was glossed 貰う *morau* ‘to receive, to take, to accept’, avoiding to specify tense. In CWJ 1534, it was glossed 授 *shòu* ‘to give to, to transmit, to confer’. It was also translated as “to become” (WJ 99) and as “to come, to become, to come there, to finish, to close” (R 161).

If it were a finite form, we would expect the FIN *-liR* form of *o-* ‘to become’ to be masculine, agreeing with the same subject as in the former three sentences. The use of feminine is either an exception to agreement rules, or it is actually a verbal nominal heading a relative clause, and modifying a following nominal head. We are not able to answer this question yet, because the two following blocks are obscure. I provisionally translate it as a finite verb.

The verb *o-lip* takes a locative complement in dative case, 关化矢 <i.ri.de> *iri-te* ‘to the title’, giving us literally ‘become to the title’, which I adapted into ‘he reached the title’.

Summarizing, we have two finite VPs, the former describing an activity (non-transformative dynamic IPS), i.e. *kusu u-er* ‘he served’, and the latter describing an achievement (finitransformative momentaneous IPS), i.e. *iri-te o-olir* ‘he reached the title, lit. became to the title’.

49) 全 井 凡 太 女	舟 列 出	圣	又 及	中 丙 伏	今 全 为	公 及
s.iang g.ung.un	b.h.añ	jur ^o	m.o	l.iu.ñ	pu s.a	n.u
sjaŋkuŋ-un	baq-aŋ	ʃur	mo	ljuip	p ^h usa	nu
chancellor-GEN	son-PL	two.M	great	Ljuin	Pusa	Nu
们 凡 才 圣	北 为 夹 杂 各 女	司 黍 矢		火 央 化 全 北	无 卡 升 央	
du g.ia.im	or ₂ .a.an	ci.eng.un	bai.is.de	x.ui.ri.s.el	tau.us.o ₂ .ui	
tu kjaim	oraan	ʃ ^h enun	paiis-te	xuiri-sel	t ^h auso-wi	
chief.supervisor	after	<i>changwen</i>	position-DAT	arrive-CVB.SEL	advance-CVB.AI	

令 企 中 峇 当	关 化	圣 化 由	令 欠 叉 关
t.em.l.ge.eñ	i.ir ₃	xe.ri.320	t.ho sh.i
t ^h em-elke-eɲ	iir	xeri...	t ^h oq fĩ
confer-CAUS-VN.AR.F	name	?	regional.governor

‘The sons of the Chancellor were two. The elder one was the Chief Supervisor Liuin Pusa Nu. Later, the title conferred [to him] after he reached the position of Changwen, was [...] regional governor.’

Yelü Jue 5-20/40

W 268 glossed the passage in example (49) with “相 公 の 子 供 二 人 大 留 隐 菩 萨 奴 都 监 … 敞 穩 … 至 り … 封 ぜ ら れ 号 … 度 使” *shōkō-no kodomo futari ooi Ryuin Fu Sa Nu token ...*

chōun ... itar-i ... fūz-e-rare gō ... doshi [chancellor-GEN children two.people eldest Ryuin Fusanu chief.supervisor ... changwen ... reach-CVB ... confer-POT-PASS title ... regional.governor].

CWJ 1534 glossed this passage with “相 公 之 孩 子 二 大 留 隐 菩 萨 奴 都 监 后 敞 穩 … 至 … 封 号 … 都 使” *xiàng gong-zhī háizi èr dà Liúyǐn Pú Sà Nù dūjiān hòu chǎngwěn ... zhì ... fēng hào ... dū shǐ* [chancellor-of child two great Liuyin Pu Sa Nu chief.supervisor after changwen ... reach ... title ... regional.governor].

Here we have three zero-copula sentences. The first zero-copula sentence goes from block 令 企 中 峇 当 关 化 <s.iang g.ung.un> *sjankun-un* [chancellor-GEN] ‘of the Chancellor’ to 圣 化 由 <jur°> *fur* ‘two (M)’. The second sentence goes from block 叉 及 <m.o> *mo* ‘the eldest son’ to block 令 企 中 峇 当 关 化 <du g.ia.im> *tu kjaim* ‘chief supervisor’. The third sentence goes from 北 为 夹 <or₂.a.an> *oraan* to 令 欠 叉 关 <t.ho sh.i> *t^hoq fĩ*. This passage does not contain any sentences with finite verbs.

We have the sequence 叉 夹 化 令 企 中 峇 当 关 化 <x.ui.ri.s.el tau.us.o₂.ui t.em.l.ge.eñ i.ir₃> *xuiri-sel tauuso-wi t^hem-elke-eɲ iir* [reach-SEL.CVB advance-CVB.AI confer-CAUS-VN.AR.F title]. The converb *xuiri-sel* ‘after reaching’ takes the locative complement 可 中 系 矢 <b.ai.is.de> *paiis-te* ‘to the position’ resulting into “after reaching the position”. It is followed by the converb *tauuso-wi* “after advancing”. This is followed by the NP 令 企 中 峇 当 关 化 <t.em.l.ge.eñ i.ri> *tem-elke-eɲ iri* “the title conferred [to him]”. The result is “the title conferred on him after reaching the position and advancing”.

50)	丕安全出	主王雨	非朱	丕力杰全	付列出
	sh.ng s.ung ₂	xong.di.in	po.do	sh.a.ir ₄ .d	b.h.añ
	ʃɿŋsuŋ	xoŋti-in	p ^h o-to	ʃari-t	paq-aŋ
	Shengzong	emperor-GEN	time-DAT	court.attendant-PL	child.OBL-PL
	弱有	力牛	亦	全用有	付用丕力
	ji.en	a.ai	ün	s.ing.en	b.ing m.a
	ʃɿen	a-ai	yn	siŋ-en	piŋma
	both	be-CVB.AI	Yn	Sɿŋ-GEN	soldier
					become-VN.LIR.M

‘At the times of Emperor Shengzong [the two sons of Chancellor Qaʃuun Taler] were both Young Court Attendants, he became soldier of Yn Siŋ.’

Yelü Jue 5-40/52

W2 268 glossed the passage in example (50) with “聖宗皇帝の時代郎君子供中の居る云精? 兵馬成った” *Seisō kōtei-no jidai rōkun kodomo nakano ir-u un sei? heiba nat-ta* [Shengzong emperor-GEN age court.attendant children among be-NPST Yunjing? soldier become-PST].

CWJ 1534-1535 glossed it with “圣宗皇帝之时于诸郎君孩子中之在云精? 兵马成为” *Shèngzōng huángdì-zhī shí-yú zhū-lángjūn háizi zhōngzhī zài Yúnjīng? bīngmǎ chéngwéi* [Shengzong emperor-of time-at PL-court.attendant child among be.at Yunjing? soldier become]. Here, we have an other instance of ‘to become X’ invariably taking morpheme *-liR*.

From this excerpt we can notice that although achievements (to become, to fall) and activities (to serve) are on the same temporal level, i.e. a past detached from *nunc*, and they all may be simply perceived as postterminals not encoding focality, in fact they employ different morphemes. The achievements take *-liR*, while the activities take *-AR*. This possibly suggests that *-liR* might include a punctuality notion, whereas *-AR* might include a durativity notion.

5. Converbs

This chapter introduces the categories employed in this thesis to analyze converbs (§5.1).

Subsequently, a paragraph is devoted to previous research and analysis of examples on each converbial morpheme. Like it was done for verbal nominals, due to limitation of space I analyzed in depth only two out of seven morphemes. Firstly, I deal with morphemes that I analyzed more briefly, i.e. *-Ci* (§5.2) and *-Al* (§5.3). Secondly, a single paragraph briefly introduces the most underexplored morphemes on which not much can be understood yet, i.e. *-ash*, *-A*, and *-pci* (§5.4). Thirdly, morphemes that I analyzed more deeply are dealt with, i.e. *-Ai* (§5.5) and *-sel* (§5.6)

5.1 Categories of Converbs

The framework employed to analyze converbs in this thesis is based on Nedjalkov (1995) and König (1995).

Converbs are forms of the inflectional paradigm of verbs that cover the syntactical function of adverbials (cf. Nedjalkov, 1995: 97).

Converbs are classified into three types according to semantic criteria (cf. Nedjalkov, 1995: 106; König, 1995: 58):

- a) narrative converbs: these converbs form sequences of situations without expressing the relations between them; any relation attributable to them is due to context and world knowledge and is not encoded in the converb;
- b) contextual converbs: contextual converbs encode more than one circumstantial relation; the specific relation they express in a sentence is selected by the context;
- c) specialized converbs: Specialized converbs are specific for one circumstantial relation

According to syntactic criteria of classification of converbs (Nedjalkov, 1995: 98-99, narrative converbs are coordinative, i.e. they establish clausal relations comparable to the use of the preposition ‘and’, whereas contextual and specialized of converbs are conjunctive, i.e. they establish clausal relations comparable to subordinative conjunctions. Another type of converb according to syntactic classification is the one termed in Nedjalkov (1995: 98) “converb proper”. Converbs pertaining to this type do not function as clause heads, but rather as simple adverbs.

The categories of circumstantial relations divide into temporal and non-temporal.

Temporal relations include:

- a) anteriority: it indicates that the situation in the converbial clause happens before the situation in the main clause, i.e. ‘after VB-ing’;
- b) simultaneity: it indicates that the situation in the main clause happens during the situation in the converbial clause, i.e. ‘while VB-ing’;
- c) posteriority: it indicates that the situation in the converbial clause happens after the situation in the main clause, i.e. ‘before VB-ing’

Non-temporal relations include:

- a) manner: it indicates the way in which the situation in the main clause happens, i.e. ‘by VB-ing’ ;
- b) cause: it indicates the motivation that causes the situation in the main clause to happen, i.e. ‘because of VB-ing’ ;
- c) purpose: it indicates the aim of the situation of the main clause, i.e. ‘in order to VB’ ;
- d) condition: it indicates what must happen to materialize the situation in the main clause, i.e. ‘if it VB-s’ ;
- e) concessivity: it indicates that the situation in the main clause happens despite the situation in the converbial clause, i.e. ‘although it VB-s’ ;
- f) substitution: it indicates that the situation of the main clause happens instead of the situation of the converbial clause, i.e. ‘instead of VB-ing’
- g) attendant circumstance: it indicates the “fortuitous cooccurrence of two situations” (König, 1995: 69), i.e. ‘at the same time VB-ing’

There are even more types of non-temporal relations. In the present list I included only the ones which proved to be relevant for this study. More exhaustive lists of circumstantial relation categories are given in König (1995: 64) and Nedjalkov (1995:107).

5.2 Converb -Ci

Converbial morpheme -Ci has allomorphs 𠬞 <ci> -tʰi, 𠬞 <ji> -tʰi, and 𠬞 𠬞 <e.ci> -etʰi.

Chinggeltei *et al.* (1985: 144) describe 𠬞 [tʰ] as a converbial suffix and compare it to Mongolian imperfective converb -J.

Kane (2009: 153-154) exemplifies 𠬞 <ci> and 𠬞 <ji> as allomorphs of one converbial morpheme meaning “after”.

Graph n. 152 𠬞 is listed as inflectional suffix in Chinggeltei *et al.* (1985: 141) [no reading], Chinggeltei (1992: 321-327) [su ~ sun], Chinggeltei (1999: 15) [su], and CWJ 583-585 [utʰ ~ udʒ]. As pointed out in §3.3, in previous studies morphemes here distinguished as VN -uci and CVB -Ci are sometimes put together. In this thesis, all instances of graph 𠬞 <ji> (and allographs) preceded by graphs 𠬞 <u₃>, 𠬞 <u₂>, 𠬞 <u> are classified as representing VN -uci.

51)	𠬞 𠬞 𠬞	𠬞 𠬞 𠬞 𠬞 𠬞	𠬞 𠬞 𠬞	𠬞 𠬞 𠬞 𠬞 𠬞 𠬞 𠬞	𠬞 𠬞 𠬞
	ta.ang.en	ki.en ₂ l.ing.de	x.ui.ci	g.iu.ung t.ie.en ₂	y.iu ₂ .d ₃
	t ^h aŋ-en	k ^h jen liŋ-te	xui-t ^h i	kjuŋ t ^h jen	jut
	Tang-GEN	Qianling-DAT	reach-CVB.CI	palace	?
	𠬞 𠬞 𠬞 𠬞	𠬞 𠬞	𠬞	𠬞 𠬞 𠬞 𠬞	
	p.o ₂ .ui.i	dau.ñ	336	or.l.hu.er	
	powii	taw-ijŋ	...	or-la-q-er	
	?	see-VN.IR.F	NEG	can-VN.LAK-INS	

He arrived at the Qianling Tombs of the Tang dynasty, and since the buildings and halls (had collapsed?) and one could not see anything, ...’

Langjun 2-5/14, 3-1

K 153-154 translated the passage in example (51) as “[a]fter he arrived at the Qianling tombs of the Tang, the halls were dilapidated ...’. Langjun is one of the most discussed KSS inscriptions.

Examples for morpheme -Ci from Langjun 2-5/8 were already reported by C 144 and Chinggeltei, 1999 (Chinese translation in Chen, 2012: 15) translated as “至唐乾陵” ‘arrive at Qianling’.

Under example (2) a larger portion of the text was analyzed. Whereas under (2) the focus was on VN -iR, under example (51) here the focus is on CVB -Ci.

As we had seen, the previous period presented the Court Attendant going to hunt in the border

regions of the Empire, since it was a peaceful time. During his travel he passed through Chang'an (nowadays Xi'an, Shaanxi) and visited the Mausoleum of the Tang Dynasty. When he reached the place, he found out that the tombs had collapsed, and it was not possible to admire them. Converb 穴 失 來 <x.ui.ci> *xui-ŋ^hi* [reach-CVB.CI] 'reaching, arriving' is the head of a secondary clause. The subject is implied by the preceding period, and it is 'the Court Attendant'. Before the verb we have a NP which indicates the goal of motion, i.e. 仍 宛 有 並 考 中 用 矢 <ta.ang.en ki.en₂ l.ing.de> *t^han-en k^hjen liŋ-te* [Tang-GEN Qianling-DAT] 'at Qianling Tombs of the Tang'. After converb *xui-ŋ^hi*, there is another secondary clause, which was analyzed and translated under (2) as 'since the buildings and halls (had collapsed?) and one could not see anything'.

The sequence of the events is 'he arrived and then he noticed that the tombs had collapsed'. It is not possible from this example alone to establish whether the converb is simply a narrative converb, or if it encodes any specific temporal relation. Therefore, I provisionally translated the functional meaning of the converb by means of the conjunction 'and'.

52) 天 德 二 年	聖	年	穴	艾 矢	中 用	杰 不
HEAVEN d.iu.ir ₂	jur	ai	nai	sair.de	l.u ₂	ong.on
... tjuir	ŋfur	ai	nai	sair.te	lu	on-on
Tiande	two.F	year	head	month-LOC	Lu	prince-GEN
及 必	百 上 弱	艾 秀	凡 失	杰	公 金 中 泰 公	
u.un	y.eu.ji	sair.e ₂	g.ui	ong	d.em.l.ge ₂ .er	
uun	jeu-ŋi	ye	kui	on	tem-elke-er	
office	go-CVB	Yue	state	prince	confer-CAUS-VN.AR.M	
'In the first month of the second year of Tiande period (1150 CE) he went to the position of Prince of Lu, and he was given the title of Prince of the Yue state.'						

Zhonggong 24-22/35

K 154 translated the passage in example (52) as '[i]n the first month of the second year of the Tiande 天德 reign period, when he was prince of Lu 魯王, he was given the honorary title of prince of Yue'.

Converb 百 上 弱 <y.eu.ji> *jeu-ŋi* [go-CVB.CI] 'going' heads a secondary clause beginning from blocks 24-2/3 天 德 二 年 <HEAVEN d.iu.ir₂> ... *tjuir* [heaven virtue] 'Tiande period'. The subject of the period is the tomb owner Zhonggong. Converb *jeu-ŋi* is preceded by a VP indicating goal of

motion, i.e. 中 令 杰 尔 及 火 <l.u₂ ong.on u.un> *lu oŋ-on u-un* [Lu prince-GEN office] ‘at the position of Prince of Lu’. Notice that whereas goals of motion are usually marked by dative case, this one is unmarked. The goal of motion is preceded by the temporal complement ‘in the first month of the second year of Tiande period’. The secondary clause is followed by the main clause headed by VN -AR in finite function 余 金 中 泰 尔 <d.em.l.ge₂-er> ‘he was conferred’.

As we saw under example (51) for *xui-ŋ^hi*, also *yeu-ŋi* indicates an event that happens before the event in the following clause.

Whereas CVB -*ci* was described as meaning ‘after’ (K 153), suggesting a temporal relation of anteriority, still it remains unclear whether this relation is encoded in the suffix, or these are simply narrative converbs with the temporal relation implied by the context.

Further research is needed on this matter.

5.3 Converb -*Al*

Converbial morpheme *-Al* has allomorphs 方 <al> *-al*, 比 <el> *-el*, 子 *-ol*. Allomorph was exemplified in K 153. The examples translated there are discussed here below.

53)	宅	包	年矢	年关兴用	年及	
	TEN	hur3	ai.de	s.i x.ing	pu.u	
	...	qur	ai-te	si xin	p ^h u	
	ten.F	three.F	year-DAT	Ji Qing	deputy	
	九丙水	凡	止及全	口	年	
	g.iu.ung	shǐ	p.o.or	323	ai	
	kjuŋ	ʃu	p ^h o-or	...	ai	
	palace	commissioner	be-VN.AR.M	DEM.DIST	year	
	年关雨 凡火伏	凡及火	及米及火	用安	和 [] 当	和冬为火
	l.i.in g.ui.ñ	g.u.un	o.udu.u.un	cau.ur ₂	ci.[].eñ	ci.as.a.iu ₂
	lin kuinj	ku-un	outu-un	t ^h auur	t ^h ...en	t ^h asaju
	Lin Kuinj	jade	palace-GEN	war	?	clan.chief
	为立方	及米及化有	用弱	重年	穴全	
	a.ha.al	o.udu.u.ur.en	cau.ji	hur ₂ .u ₂	nai.d	
	a-qa-al	outu-ur-en	t ^h auŋi	quru	nai-t	
	be-CAUS-CVB.AL	palace-INS-PX3	army	commander	chief-PL	
	为安	屋谷	为出	因中付伏	和谷	
	101.ur ₂	KNOW.er	a.añ	abad.l.b.ñ	ci.er	
	...ur	...-er	a-aŋ	apat-la-piŋ	t ^h -er	
	together	know-VN.AR.M	be-VN.AR.F	self-DENV-VN.PIR.F	make-VN.AR.M	
	叔比谷万	穴年	年并凡亦	关化		

k.el.ge ₂ .y	da ₂ .ai	s.iang g.ün	i.ir ₃	
k ^h el-ke-ei	tai	sjaŋkyn	iir	
say-CAUS-CVB.AI	grand	general	title	
令 金 中 谷 万	宅	屏	丰 矢	兴 关 同 又 安
t.em.l.ge.y	TEN	dil	ai.de	x.i.ing sh.ng
t ^h em-elke-ei	...	til	ai-te	xin jŋ
confer-CAUS.CVB.AI	ten.F	seven.F	year-DAT	Xing Sheng
们 丞	凡 丙 水	凡 谷	出 及 全	
du.u	g.iu.ung	shǐ.ĩ ₂	p.o.or	
tu	kjuŋ	ʃu	p ^h o-or	
capital	palace	envoy	be-VN.AR.M	

‘On the thirteenth year [of Chongxi period, 1044 CE] he was Deputy Palace Commissioner of Jiqing. That year, having been made (lit. being made to be) Second Clan Chief in the war of the Jade *Ordo* of Lin Kuip, he is said to have fulfilled being Joint Administrator of the Campaign Commanders’ Chiefs at that palace, then he was appointed the title of Grand General, and on the seventeenth year [1048 CE] he was Capital Palace Envoy of Xingsheng.’

Gaoshi 14-31/33, 15-1/29, 16-1/11

Example (53) was employed by K 153 to provide an instance of CVB -*AI*. K translated lines 14-31/33, 15-1/22. A larger portion of text is analyzed here. K’s translation is “[i]n the thirteenth year, he became the deputy palace commander 副宫使 of the Jiqing 積慶 palace. In that year, having been appointed to the *jasa* 闡撒 of the armies of the jade *ordo* [...], he was also official in control, associate administrator 同知 and campaign commander 都統 of the armies of the *ordo*”.

CWJ 1243-1244 glossed the passage reported here with “十三年于积庆副宫使成为该年...孤稳斡鲁朵之军...政...宫之年统诸官同知在亲目书谓大将军号封十七年于兴圣都宫使成为” *shí sān nián-yú Jī qìng fù gōng shǐ chéngwéi gāi nián ... gūwěn wòlǔduǒ-zhī nián ... zhèng ... gong-zhī nián tǒng zhū-guān tóng zhī zài qīnmù shū wèi dà jiāng jūn hào fēng shí qī nián-yú Xīng shèng dū gōng shǐ chéngwéi* [ten three year-at Jiqing deputy palace commissioner become that year ... jade *ordo*-of army ... government ... palace-of year command PL-official together know be.at relative write say great general ten seven year-at Xingsheng capital

palace envoy become].

This passage pertains to the career account of the tomb owner Gaoshi, who is the grammatical subject of the two sentences. The first clause ends with verbal nominal 业及全 <p.o.or> *p^ho-or* [be-VN.AR.M] ‘he was’ in finite function. After *p^ho-or* we have a long period made of three secondary clauses and a main clause. The first secondary clause is headed by converb 为立方 <a.ha.al> *a-qa-al* [because-CVB.AL] ‘having been made, lit. being made to be’. The second secondary clause is headed by converb 叙北忒百 <k.el.ge₂.ei> *k^hel-ke-ei* [say-CAUS-CVB.AI] ‘being said’. The third secondary clause I headed by 令金忒百 <t.em.l.ge.ei> *t^hem-elke-ei* [confer-CAUS-CVB.AI] ‘being conferred’. The main clause is headed by verbal nominal *p^ho-or* ‘he was’ in finite function.

Converbs marked by CVB *-Ai*, *k^hel-ke-ei* and *t^hem-elke-ei*, may be analyzed as indicating an anteriority relation to the following clause, i.e. ‘after being said (confirmed?) to have fulfilled his duty of Joint Administrator (lit. his being Joint Administrator)’ and ‘after being conferred the title of Grand General’. Converb *a-qa-al* may be analyzed as indicating a similar relation, i.e. ‘after having been made (lit. after being made to be) Second Chief in the war (lit. of the war) of the Jade *ordo* of Lin Guip’.

My tentative analysis is that this converb is marked differently—with CVB *-Ai* instead of CVB *-Ai*—because of the duration of the event. This converb might be analyzed as encoding an actional notion of temporary action i.e. after having been X for a short time. Such function is encoded in Mongolic languages such as Khalkha by the derivational suffixes -схий- [-sxii-] and зна⁴ [-ʈna-].

I propose this interpretation since from the text we understand that this was a position occupied during a war, i.e. Second Chief, and in the same year replaced by a higher position, i.e. Joint Administrator of Chiefs of the Campaign Commanders. This might suggest that this duty was of brief duration.

This hypothesis should, however, be further tested.

54) 为	忒北忒	几忒忒	忒几	忒
101	l.bu ₂ .ug	ku.ung.ur ₂	tai shī	du
...	lupuk	k ^h uŋur	t ^h ai shuu	tu
younger.brother	Lupuk	K ^h uŋur	grand.preceptor	capital

凡 火 水	凡	为 立 为 方	为 为 夫 全	全 各 火
g.iu ₂ .ung	shī	a.ha.a.al	sh.a.ir ₄ .d ₄	s.eng.un
kjun	ʃu	a-qa-al	ʃair-t	sejun
palace	commissioner	be-CAUS-CVB.AL	court.attendant	field.marshal
为 中	令 文 圣	凡 文 圣 全	为 亥	公 火
a.ai	t.ie.im	g.ie.im.d	101.ur ₂	n.ui
a-ai	t ^h jeim	kjeim-t	...ur	nui
be-CVB.AI	manager	supervisor-PL	joint	inner
仇 爻	伏 力	为 夹 为	丑 全	屋 火
ku ₂ .u	ñ.aq	sh.au.a	hur ₂ .u ₂	KNOW.er
k ^h uu	ɲaq ^h	ʃawa	quru	...-er
storehouse	dog	falcon	commander	know-VN.AR.F

[His] younger brother was Lupuk K^huŋur. After having been made (lit. being made to be) Grand Preceptor and Commissioner of Capital Palace, and being Court Attendant and Field Marshal, he managed [the position of] Joint Administrator of the Managers and Supervisor, Palace Storehouses, and Hunting (lit. Dogs and Falcons).

Han Dilie 20-24/44

Example (54) was employed by K 153 to provide an instance of CVB -AI. K translated this passage as “[t]he younger brother, Lubuh 魯不古 Kungur 控骨里, having been made senior preceptor 太師 and palace commissioner 宮使, was a member of the bureau of court attendants, and *xiangwen*. He was in overall control of managers 點 and supervisors 檢, and also the general administrator of the palace storehouses 內庫 of dogs and eagles 犬鷹”.

CWJ 1260 glossed the passage with “弟 卢不姑 控骨里 太师 都 宫 使 … 郎君 詳稳 … 点 检 同 内 库 犬 鹰 统 知” *dì Lúbùgū Kònggǔlǐ tài shī dū gong shǐ ... lángjūn xiángwěn ... diǎn jiǎn tóng nèi kù quǎn yīng tǒng zhī* [younger.brother Lubugu Kongguli grand.preceptor capital palace commissioner ... court.attendant field.marshal ... manager supervisor together inner storehouse dog eagle command know].

This passage starts with a zero-copula nominal predicate introducing the subject of the following period, i.e. the Grand Preceptor Lupuk K^huŋur. This period is composed of two secondary clauses and one main clause. The first secondary clause is headed by converb 为 立 为 方 <a.ha.a.al> a-qa-

al [be-CAUS-CVB.AL] ‘having been made (lit. being made to be)’. The second secondary clause is headed by converb 為 中 <a.ai> *a-ai* [be-CVB.AI] ‘being’. The main clause is headed by verbal nominal 厓 𠵿 <KNOW.er> ...-*er* [know-VN.AR.M] ‘he managed’ in finite function.

In this period, unlike the one in example (53), there are no hints on why different converbs are used. If we use the hypothesis proposed under (53), i.e. CVB -*Al* encoding temporary action, we may infer that converb *a-qa-al* may have been employed to indicate that Lupuk K^huŋur was Capital Palace Commissioner for a shorter time than he was Court Attendant and Field Marshal. Nevertheless, there is no indication of this in the text, and my inference is based on just one previous example.

In conclusion, CVB -*Al* remains in need of deeper investigation.

5.4 Converb -*Ai*

The converbial morpheme -*Ai* has the following four allomorphs selected by vowel harmony: 𠬞 <ai> -*ai*, 𠬞 <y> -*ei*, 𠬞 <oi> -*oi*, and 𠬞 <ui> -*ui*. Generally, back vowel stems take -*ai*, front vowel stems select *ei*, stems whose last vowel is *o* select -*oi*, and stems whose last vowel is *u* select -*ui*. Chinggeltei *et al.* (1985: 142–144) identified 𠬞 [i ~ kəi], 𠬞 [uei], 𠬞 [n], and 𠬞 (no reading) as converbial suffixes. Although no specific functions were described, they were compared to Mongolian converbial suffixes. 𠬞 [i ~ kəi] and 𠬞 [uei] were compared to Mongolian perfective participle -*AAd*, and 𠬞 [n] to Mongolian modal converb -*n*. Chinggeltei (1999; Chinese translation, Chen, 2012: 15) recognizes 𠬞 [ai], 𠬞 [(e)i], 𠬞 [uei], 𠬞 [i]. Kane (2009: 149) recognises six allomorphs traceable to “[t]he converb in vowel + i” that “indicates the order in which the action happened: ‘then, after that’” (*ibid.*). These are 𠬞 <ai>, 𠬞 <ei>, 𠬞 <ii>, 𠬞 <i>, 𠬞 <oi>, and 𠬞 <ui>.

Chinggeltei & Wu & Jiruhe (2017: 578 – 579) identify six allomorphs traceable to the same converbial morpheme, namely 𠬞 [ai], 𠬞 [əi(?)], 𠬞 [i(?)], 𠬞 [oi(?)], 𠬞 [ui(?)], and 𠬞 [ui(?)]. The latter five readings are followed by a question mark meaning that there are still doubts about their actual pronunciation.

55) 几	𠬞 𠬞	𠬞 𠬞 𠬞	𠬞	𠬞 𠬞	—
ku	WRITE.e	b.125.er	ir ₃	dai.or ₂	
k ^h u	...-e	b...-er	ir	tajor	
person	text-LOC	be-VN.AR.M?/complete-INS?	name	under	
𠬞 𠬞	𠬞 𠬞 𠬞	𠬞 𠬞 𠬞 𠬞	𠬞 𠬞 𠬞	𠬞 𠬞 𠬞 𠬞	
neu.e ₂	etu.g.n	sui.l.ha.ai	g.ur ₂ .en	na.ha.añ.ir ₂	
newe	et ^h uken	sui-lqa-ai	kur-en	naqa-añ-ir	
earth	earth	be.born-CAUS-CVB.AI	empire-GEN	maternal.relative-PL-ADJZ	
𠬞 𠬞 𠬞 𠬞 𠬞	𠬞 𠬞	𠬞 𠬞 𠬞	𠬞 𠬞	𠬞 𠬞	
p.o.ol.b.ci	hur.er	n.on.en	b.aq		
p ^h ol-pŋi	qur-er	non-en	paq ^h		

become-CVB.PCI	three-ORD.M	generation-GEN	child
𠂔 欠 𠂔	𠂔 𠂔 𠂔	—	𠂔 𠂔 𠂔 𠂔 𠂔
sh.ho.a	sh.a.ir ₄		ci.ing t.ie.en ₂
foqa	fair		t ^h in t ^h jen
foqa	court.attendant		Chengtian
𠂔 𠂔 𠂔	𠂔	𠂔 𠂔	
tai xeu.un	101	ab ai	
t ^h ai xeu-un	101	ap ai	
empress dowager	younger.brother	grand.father	
‘In the biography according to the name in complete form, being generated by the Mother Earth, and becoming one of the Maternal Uncles of the Empire, instead [his] son of third generation was Court Attendant foqa, the younger granduncle of Empress Dowager Chengtian.’			

Hudujin 2-28/36, 3-1/9

The passage in example (55), in W2 58-59 (215-214) was glossed “人 下土生まれ 国の舅 成った 第三代の子（人名） 郎君 承天 太后の 叔祖父” *hito ... shita tsuchi umar-e koku-no shūto nat-ta daisan dai-no ko (jinmei) rōkun Shōten taikou-no shuku sofū* [person ... under earth bear-CVB empire-GEN maternal.uncle become-VN.PST third generation-GEN son (proper name) court.attendant Chengtian empress.dowager-GEN granduncle].

In CWJ 1497-1498 it was glossed “人 下地 母之生 国之舅 成为 第三代之子 术瓜？ 郎君 承天 太后之 叔祖父” *rén ... xià dì mǔ-zhī shēng guó-zhī jiù chéngwéi dìsān zǐ Shùguā? lángjūn Chéng tiān tài hòu-zhī shūzǔfū* [person ... under earth mother-of bear empire-of maternal.uncle become third son Shugua? court.attendant Chengtian empress.dowager-of granduncle].

Out of the three words without gloss, the first one 𠂔 𠂔 <WRITE.e> probably means ‘in the text’. Where final <.e> might represent a locative suffix. I tentatively suppose that together with the preceding word 𠂔 <ku> *k^hu* ‘person’ it forms a compound 𠂔 𠂔 𠂔 <ku WRITE.e> meaning ‘in the biography, lit. in the text about a person’.

The second word without gloss 𠂔 𠂔 𠂔 <b.125.er> was already interpreted as a masculine VN -AR

of a verb *pau-* ‘to be’ (WJ 157, W2 270). This interpretation is apparently based on the resemblance between 𠂔𠂔 <b.aũ.>⁸⁵ *pau-* and the several variants of the copula 𠂔𠂔 ~ 𠂔𠂔 ~ 𠂔𠂔 ~ 𠂔𠂔 <b.u. ~ b.o. ~ p.u. ~ p.o.> *pu-* ~ *po-* ~ *p^hu-* ~ *p^ho-*, together with it fitting in some context.⁸⁶

Interpretation of block 𐎶𐎵𐎥𐎺 <b.125.er> depends on the reading of 𐎵 <125>. Although in recent studies was generally read <aû> (K, WJ) or <aũ> (R), CWJ 210 proposed that their transcription [iau]⁸⁷ – from 𐎶𐎵𐎥𐎺 <t.125.t> = $t^h au - t^h$ [five-DAT] ‘at five’ – might instead be replaced by [ru] – from 𐎶𐎵𐎥𐎺 <t.125.t> = $t^h ur - t^h$ [four-DAT] ‘four’⁸⁸. According to note n.160 here below, I modified CWJ’s transcription [ru] into <ur₃> [ur]. Under this hypothesis, 𐎶𐎵𐎥𐎺 <b.125.er> becomes <b.ur₃.er> *pur-er*, which might be compared with MM *būri* ‘complete, every, each’⁸⁹. Thus, I tentatively interpret it as a stem *pur-* ‘complete’⁹⁰ followed by instrumental suffix *-er*, yielding a form meaning ‘completely, lit. by completeness’.

The third word without gloss 𐎠 $\langle ir_3 \rangle$ *ir* might be a variant of 𐎠𐎠 $\langle i.ir_3 \rangle$ *iir* ‘name, title’.

Consequently, I interpret the sequence 凡 五 旁 付 考 公 凡 <ku WRITE.e b.ur₃.er ir₃> *k^hu ... pur-er ir* [person text complete-INS name] as ‘in the biography, the full name...’

The period includes two converbs, 佃中並中 <sui.l.ha.ai> *sui-lqa-ai* [be.born-CAUS-CVB.AI] ‘being born’ and 出及子丹來 <p.o.ol.b.ci> *p^hol-pt^hi* [become-CVB.PCI] ‘becoming’. In conclusion to the period, we have a zero-copula sentence where 仝公不有丹力 <hur.er n.on.en b.aq> *qur-er non-en paq^h* [three-ORD.M generation-GEN child] ‘child of third generation’ is the subject, and 覓欠力 覓力夫 <sh.ho.a sh.a.ir4> *foqa fair* ‘Court Attendant foqa’ is the predicative complement. After that, we have an apposition to Court Attendant foqa, i.e. 來用令文考丕介火与生中 <c.ing t.ie.en₂ tai xeu.un 101 ab ai> *t^hij t^hjen t^hai xeu-un ap ai* ‘the granduncle of Empress Chengtian’.

In this context, the converb *sui-lqa-ai*, marked by converbial morpheme *-Ai*, might express a

⁸⁵ Romanized like this in K and WJ.

⁸⁶ W2 270 glossed 屯公不仝利巫丹考莽 <dur° n.on.s.en qa b.125.er> as “四代の可汗であつた” *yon dai-no kakkan de atta* ‘there were four khagans’. WJ 157 note “The copular stem <b.au> may or may not be related to *b.u* ‘to be’.”

⁸⁷ The authors keep the romanization <aũ> following previous studies. Subsequently, they reconstruct the actual pronunciation into [iau], supposing that, due to resemblance of 𐵓 <aũ> with 𐵓 <iau> the two might be allographs with the same pronunciation [iau].

⁸⁸ Even so, since ‘four’ is *tur*, the reading <ur₃> [ur] seems more plausible.

⁸⁹ Cf. H 22-23 “buri, burin [...] vollständig [‘whole, complete’] subst. Alle, die ganze Menge, Schaar [...] attr. d. ganzen ... [...] adv. insgesamt ~ bolju alle zusammen -buri (encl.) jeder [‘every’] [...] buri yer, burin iyer, insgesamt, alle zusammen”; GK 61 “**būri** *postnom* every/each [...] **būrid-** to be(come) full/complete [...] < **burin** complete”.

⁹⁰ Mongolic final *-i* in nouns, possibly a noun class suffix (Janhunen, 2015: 582), is usually absent in Khitan, cf. MM *mori* ‘horse’ vs. Kh. *mir* ‘id.’; MM *noqai* ‘dog’ vs. Kh. *naq^h* ‘id.’.

relation of simultaneity, i.e. “in the time he was generated by Mother Earth, he came into the world as one of the Imperial Maternal Uncles”. The form *p^hol-pɣ^hi* might be an instance of a converbial morpheme *-pɣ^hi* comparable to Common Mongolic concessive converbial morpheme **-bci*. Perhaps, Kh. *-pɣ^hi* does not express concessive relation, but shares with it an adversative notion, employed in expressing a change of subject. As a matter of fact, we may notice that after *p^hol-pɣ^hi* the grammatical subject changes from the ancestor K^{huus} Qumor to his descendant of third generation Joqa.

56)	火 关 用 全 出	又 和	住 及 弱	又 及	和 关 忝 全 中
	x.i.ing s.ung ₂	m.en	ñe.u.ji	m.o	ci.i.is.d.bir
	xinj sunj	men	ɲeutɕi	mo	ɣ ^h is-te-pir
	Xingzong	men	sacred	great.M	blood-DENV-VN.PIR.M
	得 力	天 全 分 中 立 力 本	主 王	又 夫 和	公 亦 全 亦 关
	ta.139.1	HEAVEN u ₂ .du ₃ .l.ha.a.ar	xong di	m.ir ₄ .en	n.ad.ab.ad.i
	t ^h a...	... utu-lqa-ar	xoŋ ti	mir-en	natapat-i
	?	Chongxi	emperor	clan	travelling.camp-ADJZ
	小	十	全 住 当	米 及 凡	全 为 中
	SOUTH	WEST	s.ñe.eñ	udu.u.du ₂	s.a.ai
	...	...	sep-eŋ	utuu-tu	sa-ai
	south	west	travel-VN.AR.F	palace-DAT	sit-CVB.AI
	中 丙 刃 谷	万 土 弱	尚 尔 劣	令 文 考 矢	土 : 土 中
	l.iu.ir.er	y.eu.ji	co.on tu	t.ie.en ₂ .de	etu:etu.ai
	ljuir-er	jeu-ɕi	ɕon t ^h u	t ^h jen-te	et ^h wet ^h w-ai
	die-VN.AR.M	go-CVB.CI	cuantu	hall-DAT	?-CVB.AI

天 冬 本	尤 安	丰	宅	乇
HEAVEN as.ar	um.ur ₂	ai	TEN	ñe ₂
... as-ar	umur	ai	...	jne
Qingning	first	year	ten.F	one.F
艾	天	𠂇	全 考 余	失 列
sair	HEAVEN	ñair	s.iau.ho ₂	216.h
sair	...	jair	sjaw-oq	...q
month	ten.F	day	blue-AGM.M	rat
𠂇 平 兮 卡 只 谷	𠂇 𠂇	九 丙 水 凡	久 立 丰	
eu.ul pu.us.u ₃ .er	qar ₃ .en	g.iu.ung.du ₂	da.ha.ai	
euul p ^h uus-u-er	q ^h ar-en	kjuŋ-tu	taqa-ai	
Yunqing	mountain-GEN	palace-DAT	follow-CVB.AI	
𠂇 子 立 为 艾	关 秀	乇 只 当	止 雨	谷 卖 火 当
o.ol.ha.a.ash	i.is	ñe ₂ .u ₃ .eñ	p.in	d.ur ₂ .ud.eñ
o-olqa-aŋ	iis	jne u-eŋ	p ^h in	turuteŋ
become-CAUS-CVB.ASH	?	?	?	?
全 泰	又 相	𠂇 𠂇 伏 谷 全	𠂇	矢
s.oi ₂	m.en	x.eu.ñ.ge.s	ju	204
soi	men	xeuŋikes	ŋu	...
?	?	?	?	?
又 火	𠂇 坐 关	网 为 艾	𠂇 全 谷 𠂇	又
xua.ud	e.d ₃ .i	COMPOSE.a.ash	x.s.ge.l	xua
xwaut	eti	...a-aŋ	xesekel	xwa
?	?	compose-CVB.ASH	?	?

土 平	爻 矢	百 穴 关	今 币 关 力 火	出 谷 和
eu.ul	lu.de	y.nai.i	s.od.i.na.ud	p.ge.en
euul	lu-te	einaii	sotinaut	p ^h eken
cloud	dragon-DAT	?	?	?

爻	客 来	今 爻 谷 当
lu	096.ci	s.ir ₂ .ge.eñ
lu	...t ^h i	sir-ke-ep
dragon		?-CAUS-VN.AR.F

‘When the Emperor Xingzong, the Divine Sacred Great Filial and Clear Emperor Chongxi, stayed in the Northwest Moving Palace of the Travelling Camp of [his] clan, after he died (lit. going dead), was placed(?) in the Cuantu hall, and in the tenth day, blue rat, of the eleventh month of the first year of the Qingning period (1055 CE) he was brought (lit. being made to become following) to the Cloud Celebration Tomb (lit. palace of the mountain), and ...’

Xingzong 2-1/30, 3-1/30, 4-1/3

The passage in example (56) was glossed in CWJ 868-869 as “兴宗神圣大孝章重熙皇帝... 捺钵之南西行宫于驻蹕崩徙攢涂殿于... 清宁元年十一月十日甲子云庆山之宫于掩闭... 邑... 生神... 云龙于... 龙...” *Xìngzōng shén shèng dà xiào zhāng chóngxī huángdì ... nàbō-zhī nán xī xíng gong-yú zhùbì bēng xǐ cuántú diàn-yú ... qīngníng yuǎn nián shí yì yuè shí rì jiǎ zǐ yún qìng shān-zhī gong-yú yǎnbì ... yì ... shēng shén ... yún lóng yú ... lóng ...* [Xingzong divine sacred great filial clear Chongxi emperor ... travelling.camp-of south west go palace-at temporally.reside die transfer Cuantu hall-at ... Qingning first year ten one month ten day blue.yang rat cloud celebrate mountain-of palace-at close ... city ... life divine ... cloud dragon-at ...].

Here it seems we are facing a very long period of which we cannot safely tell the end. I arbitrarily ended the passage at the block 今爻谷当 <s.ir₂.ge.eñ> *sirke-ep*, an unknown word the might be a VN -AR. If this were the finite verb of the period it would imply a change of subject, since from the beginning of the period, at least for the four clauses I was able to interpret, the subject is masculine, i.e. the Emperor Xingzong. Since *sirke-ep* is a feminine form, we may suppose that: 1) this form has finite function and a change of subject must have taken place; 2) this form is in adjectival function determining a successive word taking feminine agreement. For the moment being, this is difficult to

determine, since from block 及子並為艾 <o.ol.ha.a.ash> *o-olqa-af* ‘being made to become’— where my translation stops— the text becomes quite obscure for several lines.

The translated section consists of five converbial clauses. The former two have *-Ai* converbs, the third one has *-Ci* converb, and the latter two have *-ash* converbs. The subject of the period is Emperor Xingzong mentioned at the beginning at 2-1/2 兴关用今出 <x.i.ing s.ung₂> *xin suŋ* ‘Xingzong’ and followed until 2-10/11 主至 <xong di> *xoŋ ti* ‘Emperor’ by his posthumous title and his last reign title. There follows the locative phrase at 2-12/17 又夫有公亦生亦关小十 今住当米及凡 <m.ir₂.en n.ad.ab.ad.i del WEST s.ñe.eñ udu.u.du₂> *mir-en natapat-i tel ... sep-en utuu-tu* [clan-GEN travelling.camp-ADJZ south west travel-VN.AR.F palace] ‘at the Southwestern Moving Palace of the Travelling Camp of [his] clan’. Thereafter, we have 今为丰 <s.a.ai> *sa-ai* [sit-CVB.AI] ‘sitting’. Converb *sa-ai* might indicate a simultaneity relation with the following clause, such as ‘while he was residing at X place [...]’.

The following block 中丙刃谷 <l.iu.ir.er> *ljuir-er* [die-VN.AR.M] ‘he died’ might be interpreted as a finite verb concluding the period, thus yielding ‘while he was residing at [...], he died.’

57) 令币及凡	今生及肉	伏丰余	小	及化
t.od.o.or	s.ab.o.oñ	ñ.ar.ho ₂	del	u.ur
t ^h o-toor	sapo-oŋ	jar-oq	tel	uur
five.OBL-ORD.M	Sapoon	jaroq	south	division
中圣为	令欠又关	又忽今将凡亦有	关化今谷	达
l.im.a	t.ho sh.i	sh.ang s.iang g.ün.en	i.ir ₃ .s.er	le
lima	t ^h oq fi	faŋ sjaŋ kyn-en	iir-s-er	le
academician	governor.general	superior.general-GEN	title-PL-INS	only
及全谷	又出	未出必	关化矢	今为丰
o.or.er	sh.287	ci.eu.un	i.ir ₃ .de	s.a.ai
o-or-er	ſ...	ſeu-un	iir-te	sa-ai
become- VN.AR.M-INS	?	prefecture-GEN	title-DAT	sit-CVB.AI

𠂇 𠂇	𠂇 𠂇 𠂇 𠂇	𠂇 𠂇 𠂇	𠂇 𠂇 𠂇	𠂇 𠂇 𠂇 𠂇
eu.ui	y.ie.en ₂ .ñ	qa.h.a	ja.ir ₃ .ho	y.ie.en ₂ x.e ₂
eu-ui	jeenijn	q ^h aq	ʃairoq	jen xe
not.be-CVB.AI	Jeenijn	Q ^h aq	prime.minister	Jen Xe

𠂇 𠂇 𠂇 𠂇	𠂇 𠂇	𠂇 𠂇	𠂇 𠂇 𠂇	𠂇 𠂇	𠂇 𠂇 𠂇 𠂇
p.ie.sh ₂ .iu ₂	jur.en	go.er	k.em.er	INHERIT.ir ₂	287.ad.l.ir ₂
p ^h jefu	ʃur-en	koer	k ^h em-er	...-ir	...at-lir
<i>biexu</i>	two.F-GEN	house	edict-INS	inherit-	?-FIN.M
				VN.IR.M	

‘The fifth son was Sapoojn naroq. Only after becoming (lit. becoming through the titles of) Academician of the Southern Division, Governor General, and Superior General, he had a position in (lit. he was sitting at a title of) ʃ... Prefecture, when he died (lit. when he was no more), and after that he ... inherited by edict the household of Prime Minister Jeenijn Q^haq and *biexu* Yan Ge.’

Renxian 7-23/52

The passage in example (57) was glossed in CWJ 1029-1030 as “第五 撒不椁 涅鲁古 南院 林牙 度使上将军之诸号（以）众授…州之号于在卒延宁辖嘎？宰相延哥别胥二之房刺 承桃…” *dìwǔ Sābùwǎn Nièlǔgǔ nán yuàn lín yá dù shǐ shàng jiāng jūn-zhī zhū-hào-yǐ zhòng shòu ... zhōu-zhī hào-yú zài zú yán níng xiágā? Zǎixiàng Yán Gē bièxū èr-zhī fáng cì chéngtiāo* [fifth Sabuwan Nielugu south division academician governor.general superior general-of PL-title-by many appoint ... prefecture-of title-at be die Yanning Xiaga? prime.minister Yan Ge *biexu* two-of house edict inherit].

The first CVB -*Ai*, 𠂇 𠂇 𠂇 <s.a.ai> [sit-CVB.AI] *sa-ai* ‘sitting’ may indicate a relation of simultaneity with the following clause, i.e. ‘while he was in the position X, he died’. The second converb 𠂇 𠂇 <eu.ui> *eu-ui* [not.be-VN.AI] ‘not being’ may indicate a relation of anteriority to the following clause, i.e. ‘after he died, he inherited X’.

Verb *sa-* ‘to sit’ may be analyzed as an initiotransformative IPS. Converb *sa-ai* may be considered as viewing the situation in its resultant state phase, i.e. to be sitting, obtained after transgressing the crucial point of sitting down.

Verb *eu-* ‘not be’ might be analyzed as a state (non-transformative non-dynamic IPS). If that is the

case, converb *eu-ui* may be considered as viewing the stative situation of ‘not being’ as ongoing.

58) 天 令 火	丕	年	土 亥	又	
HEAVEN t.ud	ñeim	ai	eu.ur ₂	yun	
... t ^h ut	jeim	ai	eur	jun	
Xianyong	eight.F	year	age	sixty	
令 考 令	及 化	九 用 有	中 丙 又 土	全 为 年	劣 安 中
t.125.t	u.ur	g.ing.en	l.iu sh.eu	s.a.ai	tu.ur ₂ .bir
t ^h ...-t ^h	uur	kiŋ-en	lju feu	sa-ai	t ^h uur-pir
four?/five?-DAT	front	capital-GEN	lieutenant	sit-CVB.AI	fill-VN.PIR.M
In the eighth year of the Xianyong period (1072 CE), at the age of sixty-four?/five?, he resided [at the position of] Lieutenant of the Southern Capital, when he died. Hongyong 4-23/32, 5-1/3					

The passage in example (58) was glossed in CWJ 1141 as “咸雍 八年 岁 六十 四于 上 京之 留守 在 薨” *Xiányōng bā nián suì liùshí sì-yú Shàng jīng-zhī liúshǒu zài hōng* [Xianyong eight year age sixty four-at upper capital-of lieutenant be.at die].

Similarly to example (57), converb 全 为 年 <s.a.ai> *sa-ai* ‘sitting’ may be expressing a relation of simultaneity with the following verb. The difference to (57) lies in that after *sa-ai* there is finite verb instead of a converb. Whereas in (57) we had *sa-ai eu-ui* ‘when he died while residing [at X]’, in (58) we have *sa-ai t^huur-pir* “while residing [at X], he died.” The verbs used for ‘to die’ are different. Whereas (57) uses *eu-* ‘not be’, (58) has *t^huur-pir* the literal meaning of which is “to be filled”—connected to MM *dü ’ür-* ‘to be full’⁹¹—that by semantical shift assumes the meaning of ‘to die’ in the sense of ‘to fill one’s life time’ (cf. WR 80). Like in (57), *sa-ai* indicates a resultant state, i.e. ‘he was residing, lit. he was sitting’. During this stative situation the event *t^huur-pir* ‘he died’ happened.

We may preliminarily observe that in the last two examples *sa-ai* indicates a relation of simultaneity with the following clauses.

⁹¹ H 40. In the original ‘voll sein’.

59) 丕 杰 丕	丹 列 出	丕	丕 及
tai ong:on	b.h.añ	jur ^o	m.o
t ^h ai oŋ-on	paq-ap	ʃur	mo
grand.prince-GEN	child.OBL-PL	two.M	great.M
丕 及 州	丕 力 夫	州 余 朱	丕 火
m.o.oñi	sh.a.ir ₄	oñi.ho ₂ .do	eu.ui
moonji	ʃair	opi-oq-to	eu-ui
Moopi	count.attendant	young.M-ADJVZ.M-DAT	not.be-CVB1
丕 化 丕	丕 弱 伏	丕 杰	
ci.ur.er	oh.ji.ñ	tai ong	
ʃur-er	oqʃiŋ	t ^h ai oŋ	
two-VN1.M	Oqʃiŋ	grand.prince	

‘The sons of the Grand Prince were two. Since the elder son, the Court Attendant Moopi, died young, then the second son was the Grand Prince Oqʃiŋ.’

Tuguci 3-8/20

The passage in example (59), in CWJ is glossed with “大 王 之 孩 子 二 长 … 郎 君 小 子 卒 次 阿 古 轸 大 王” *dà wáng-zhī hái zǐ èr zhǎng ... lángjūn xiǎozǐ zú cì Āgǔzhěn dà wáng* [grand prince-GEN child two elder ... court.attendant young die second Aguzhen grand prince].

In example (59), the sons of Grand Prince T^hooniŋ⁹² are listed.

Children lists in KSS inscriptions are structured in the following way.

The mention of each child is a zero copula nominal predicate built on the pattern ‘ordinal.numeral + child + childhood.name + style + title’. Sometimes, sentences specifying further information on their life and career may follow. Generally, before another child is introduced, the last sentence ends in a finite verb.

In the case of example (59), the mentions of two sons are linked by a converb instead of a finite verb. A tentative explanation to this phenomenon might be the following.

Moopi, in quality of first son, should have inherited the title of Grand Prince from the father T^hooniŋ. Since he died young when he was still Court Attendant, a lower position, the title of Grand Prince went to his younger brother Oqʃiŋ. Upon this explanation, the secondary clause headed by

⁹² Grand Prince T^hooniŋ 丕 丕 伏 <to.on.ñ> was the grandfather of the tomb owner Tuguci.

eu-ui has a causal relation to the following clause, i.e. ‘since the elder son, Court Attendant Mooni, died young, then the second son was the Grand Prince Oqŋŋ [whereas the former should have become Grand prince instead]’.

Notice that while in the preceding examples the circumstantial relation between the two clauses linked by CVB *-Ai* appears to be temporal, here the relation appears to be non-temporal, namely causal. This might be regarded as a hint that we are not dealing with a specialized converbial morpheme, but rather with a contextual or a narrative one.

60) 令大	𠂔为出	尺安爻	几卡
t.ud ₂	SEAL.a.añ	dau.ur ₂ .ir ₂	ku.us
t ^h ut	...-a-aŋ	tauur-ir	k ^h uus
serenity	ritual-DENV-VN.AR.F	middle-ADJZ	strength
爻火	𠂔几𠂔	爻化	𠂔兴
u.ui	c.g.en	u.ur	p.i
u-ui	ŋ ^h iken	uur	p ^h i
give-CVB.AI	left	division	p ^h i
𠂔爻兴	𠂔各𠂔	𠂔及𠂔𠂔𠂔	
is.ir ₂ .i	s.eng.un	p.o.ondo.l.ir ₂	
isiri	sejun	p ^h onto-lir	
<i>isiri</i>	field.marshal	become-FIN.LIR.M	
‘When he started serving in the middle of the Baoning period (969-979), he became <i>P^hi Isiri</i> Field Marshal of the Left Division.’			

Diligu 6-11/21

In CWJ 1368, the passage in example (60) is glossed with “保宁中 … 左院皮室详稳成为” *Bǎoníng zhōng ... zuǒ yuàn pí shì xiángwěn chéngwéi* [Baoning middle ... left division *pi shi* field.marshal become].

In example (60) the VP 几卡 爻火 <ku.us u.ui> *k^huus u-ui* [strength give-CVB.AI] ‘serving’ heads a secondary clause. The subject is 𠂔𠂔𠂔 𠂔𠂔 𠂔各𠂔 <p.y.eñ p.un.u s.eng.un> *P^hjen P^hunu sejun* ‘Field Marshal Phjen Phunu’ formerly mentioned in the text (Diligu 6-8/10). The relation between the secondary clause and the main clause headed by the VP 𠂔各𠂔 𠂔及𠂔𠂔𠂔

<s.eng.un p.o.ndo.l.ir₂> *seŋun p^honto-lir* [field.marhal become-FIN.LIR.M] ‘he became Field Marshal’ appears to be temporal, i.e. in general terms ‘when he gave service, he became Field Marshal’. In more specific terms, from the context it is difficult to determine whether the relation to the following clause may be anteriority, i.e. after beginning to serve he became Field Marshal, or simultaneity, i.e. while he was serving he became Field Marshal.

61) 几卡	及安	沙	及奈
ku.us	u.ur ₂	336	o.oi ₂
k ^h uus	u-ur	...	o-oi
strength	give-VN.AR.M	NEG	be-CVB.AI
土安	𠂇	𠂇矢	令𠂇𠂇𠂇
eu.ur ₂	THIRTY	is.de	t.ge.l.ir ₂
eur	...	is-te	t ^h eke-lir
age	thirty	nine.F-DAT	die-FIN.LIR.M
‘He died at the age of thirty-nine without having served (lit. not becoming serving).’			

Diligu 6-31/38

The passage in example (61) is glossed in CWJ with “... 不授岁三十九于故” ... *bù shòu suì sānshí jiǔ-yú gù* [... not confer are thirty nine-at die].

In example (61), the secondary clause 几卡 及安 沙 及奈 <ku.us u.ur₂ 336 o.oi₂> *k^huus u-ur ... o-oi* [strength give-VN.AR.M NEG become-CVB.AI] may be literally translated as ‘not becoming serving’. The main clause includes the temporal complement 土安 𠂇 𠂇矢 令𠂇𠂇𠂇 <eu.ur₂ THIRTY is.de> *eur ... is-te* [age thirty nine.F-DAT] ‘at the age of thirty nine’ and the verbal predicate 令𠂇𠂇𠂇 <t.ge.l.ir₂> *t^heke-lir* [die-VN.LIR.M] ‘he died’.

The subject was introduced formerly in the text at 6-29/30: 𠂇安 𠂇为夫 <sh.ng sh.a.ir₄> *ŋiŋ fair* ‘Court Attendant ŋiŋ’, who is the son of Field Marshal P^hjen P^hunu mentioned under example (60). This clause reports that Court Attendant ŋiŋ did not cover any official position, and died at a relatively young age.

In this case the relation of the secondary clause to the main clause may be analyzed as manner, or attendant circumstance.

62) 天 令 火	年 令 公	小	及 化	令 及 丹 及 又 火
HEAVEN t.ud	ai.s.er	del	u.ur	pu.u b.u sh.iu ₂
... t ^h ut	ai-s-er	tel	uur	p ^h u pu fu
Xianyong	year-PL-INS	south	division	deputy administrator
天	为	天	凡 安 有	
HEAVEN	REGION.a	HEAVEN	g.ur ₂ .en	
...	...a	...	kur-en	
heaven	region	heaven	state	
用 中	圣 北	圣 令 及	令 金 中 公 万	
il.bir	tai sǐ	tai pu.u	t.em.l.ge.y	
ilpir	t ^h ai suu	t ^h ai pu	t ^h em-elke-ei	
tribal.judge	crown.prince	<i>tai fu</i>	confer-CAUS-CVB.AI	
令 为	凡 用 有	为 火 友	出 及 全	
t.ilt	g.ing.en	tu.ung j ₃	p.o.or	
t ^h ilt ^h	kiŋ-en	t ^h uŋ ʃu	p ^h o-or	
south	capital-GEN	joint.administrator	be-VN.AR.M	

‘During the Xianyong period (1065-1075), after he was conferred [the titles of] Deputy Administrator of the South Division, Tribal Judge of the Celestial State, Crown Prince, and *Tai Fu*, he was Joint Administrator of the Southern Capital.’

Diligu 8-2/21

CWJ 1369 glossed the passage in example (62) as “咸雍 年间 南 院 副 部 署 天 疆? 天 国 之 夷 离 毕 太 子 太 傅 封 南 京 之 同 知 成 为” *Xiányōng nián-jiān nán yuàn fù bù shǔ tiān jiāng? Tiān guó-zhī yílìbì tài zǐ tài fù fēng nán jīng-zhī tóng zhī chéngwéi* [Xianyong year-during south division deputy administrator heaven region heaven state-of tribal.judge crown.prince *taifu* confer south capital-of joint know become].

In example (62), the head of the secondary clause is converb 令 金 中 公 万 <t.em.l.ge.y> *t^hem-elke-ei* [confer-CAUS-CVB.AI] ‘having been conferred’. This is preceded by a sequence of official positions conferred to Chancellor Sapoon Tauuloor 令 生 及 南 尺 平 升 及 北 <s.ab.o.oñ dau.ul.o₂.o.or₂>, the son of the Court Attendant ʃiŋ mentioned in the preceding example. The last

position, Joint Administrator of the Southern Capital, is introduced after the converb as the predicative complement of copula 出及全 <p.o.or> *p^ho-or* [be-VN.AR.M] ‘he was’.

This period may be analyzed as a sequence of events, i.e. conferments of positions. The secondary clause headed by converb *t^hem-elke-ei* ‘being conferred’, may be regarded as having a relation of anteriority to the main clause headed by *p^ho-or* ‘he was’.

63)	出平	今卡只谷	辰和	为	雨北
	eu.ul	pu.us.u ₃ .er	har ₃ .en	EAST	dai.or ₂
	eul	p ^h uusw-er	qar-en	...	tajor
	cloud	celebrate-VN.AR.M	mountain	east	under
	全文考 万丙爻	令文考 矢	火火化 峇 峇 万	可 谷 出 半	
	s.ie.en ₂ y.iu.u	t.ie.en ₂ .de	x.ui.ir ₃ .ge ₂ .y ⁹³	bai.d.ha.ai	
	sjen ju	t ^h jen-te	xuiir-ke-ei	pait-qa-ai	
	Xian You	hall-DAT	reach-CAUS-CVB.AI	bury-CAUS-CVB.AI	
	口	半	六	艾	丁
	323	ai	SIX	sair	juri
	...	ai	...	sair	ʃfuri
	that	year	six.F	month	twenty
	包	曲爻	失 列	康 才 祭	
	hur ₂	qar.u	216.h	ETERNAL ia.LUCK	
	qur	q ^h aru	...q	... ia...	
	three.F	black.M	rat	Yongfu	

⁹³ C 143 had 火火化 峇 万 <x.ui.ir₃.ge.y>, which was emended in CWJ 902 as 火火化 峇 万 <x.ui.ir₃.ge₂.ei>.

列及閑	久並本	及子並為出	𠂔	叔北只𠂔
h.o.ndo	da.ha.ar	o.ol.ha.a.añ	SEAL	k.el.u ₃ .ji ₂
qon-to	taqaar	o-olqa-ap	...	k ^h el-ufĩ
mound-DAT	burying	become-CAUS-VN.AR.F	ritual	say-VN.UCI

‘After he was brought to the Xianyou hall under the east [side] of Yunqing mountain, they performed the ritual of completing the burying in the Yongfu mound on the 23rd day, black rat, of the sixth month of that year [Qiantong 1, i.e. 1101 CE].’

Daozong 6-7/31

C 143 employed (63) example to provide an instance of allomorph *-ei* of CVB *-Ai*. In fact, this passage provides us with two CVB *-Ai* one immediately after the other.

C’s example reported line 6-12/16, which was translated as “徙殡于仙游殿” *xǐ bìn yú xiān yóu diàn* ‘transferred and buried in the Xianyou hall’.

In (63), I included a larger portion of text, i.e. line 6-7/31, in order to observe the relation of the secondary clause to the main clause.

The sequence of two CVB *-Ai* is 𠂔𠂔化𠂔𠂔𠂔𠂔𠂔 <x.ui.ir₃.ge₂.y bai.d.ha.ai> *xuiir-ke-ei pait-qa-ai* [reach-CAUS-CVB.AI bury-CAUS-CVB.AI] ‘being brought and buried’.

The first converb, *xuiir-ke-ei* ‘being brought’, has clearly a relation of anteriority with the second converb *pait-qa-ai* ‘being buried’.

The second converb is clearly in relation of anteriority to the main clause, the verbal predicate of which is *khel-ufĩ* ‘they said’. This verb takes as object the NP *daqaar o-olqa-ap* ... ‘the ritual of completing the burying’.

Summarizing, the structure of the period is ‘he was brought to the tomb, buried, and then they performed (lit. they said) the ritual of completing the burying’.

64) 𠂔𠂔𠂔	𠂔𠂔	𠂔𠂔𠂔𠂔	𠂔𠂔𠂔𠂔	𠂔𠂔
b.aq.i	i.ir ₃	g.au sh.ib	ci.ur.eñ	ong ñ
paq ^h -i	iir	kau fĩp	f ^h ur-ep-en	onjĩn
child-ADJZ	name	Gaoshi	two-ORD.F-PX3	Onjĩn

天 伞 分 半 立 为 本	歪	山	无 矢 为	半 矢
HEAVEN u ₂ .du ₃ .l.ha.a.ar	ñeim	Ñugu	tau.li.a	ai.de
... utu-lqa-ar	jneim	juku	t ^h aulia	ai-te
Chongxi	eight.F	Yellow	rabbit	year-DAT
土 安	丁	宅 矢	几 卡 只 安	及 本
eu.ur ₂	juri	dur.de	ku.us.u ₃ .ur ₂	o.o _{i2}
euur	ʃfuri	tur-te	k ^h uus u-ur	o-oi
age	twenty	four-DAT	strength give-VN.AR.M	become-CVB.AI
兮	止 半 止 木	叉 为 夫	仍 关	宅
SEAL	p.ai.sĩ.en	sh.a.ir ₄	ta ₂ .i	TEN
...	p ^h aisuu-en	ʃair	ta-i	...
seal	paiza-GEN	court.attendant	put-VN.I	ten.F
半 矢	兮	止 半 止 木	叉 为 夫	
ai.de	SEAL	p.ai.sĩ.en	sh.a.ir ₄	
ai-te	...	p ^h aisuu-en	ʃair	
year-DAT	seal	paiza-GEN	court.attendant	
为 半	宅	宅	半 矢	
a.ai	TEN	ONE	ai.de	
a-ai	...	...	ai-te	
be-CVB.AI	ten.F	one.F	year-DAT	
伞 杏	丹 关	穴	及 本	
s.uñ	ñair.i	nai	o.o _{i2}	
sup	ɲair-i	nai	o-oi	
night	day-ADJZ	head	become-CVB.AI	

月 百 北	全 考 全 考 凡 亦	关 化 全	令 金 中 谷 关
ir.y.el	s.iau s.iang g.ün	i.ir ₃ .s	t.em.l.ge.er
irj-el	sjau sjaŋ kyn	iir-s	t ^h em-elke-er
come-CVB.AL	junior.general	title-PL	confer-CAUS-VN.AR.M

‘[His] childhood name was Gaoshi. His second [name] was Onjip. In the eighth year of Chongxi period (1039 CE), yellow rabbit, at the age of twenty-four he began serving, and he was (lit. he put) the Court Attendant of Seals and *Paizas*. In the tenth year, after being Court Attendant of Seals and *Paizas* in the tenth year, in the eleventh year he came to become Head of Night and Day, and thean he was appointed the titles of Junior General.’

Gaoshi 13-19/30, 14-1/30

K 150 employed example (64) to provide an instance of allomorph *-oi* of CVB *-Ai*. K’s example reported line 14-2/30. In (64), I included a larger portion of text, i.e. lines 13-19/30, 14-1/30. K’s translation is ‘[a]t the age of twenty four, he became a palace attendant 近侍 and a court attendant in the bureau of ceremonies and seals. In the tenth year, he was in the bureau of ceremonies and seals 印牌司. In the eleventh year, he was given the titles of night and day guard 宿直官 and junior general 小將軍’.

In CWJ 1243, this passage was glossed with “乳名高十字王宁重熙八己卯年于岁二十四于 … 授印牌司之郎君补十年于印牌司之郎君在十一年于夜日之官授改小将军号封” *ruming Gao shí zǐ Wáng níng Chongxi bā jǐ mǎo nián-yú suì èrshí sì-yú … shòu yìn pàisi-zhī lángjūn bǔ shí nián-yú yìn pàisi-zhī lángjūn zài shí yī nián-yú yè rì-zhī guān shòu gāo xiǎ jiāngjūn hào fēng* [childhood.name Gaoshi style Wangning Chongxi eight yellow rabbit year-at age twenty four-at … confer seal *paizi*-of court.attendant fill ten year-at seal *paiza*-of court.attendant be.at ten one year-at night day-of office confer change junior general title confer].

Whereas K has 𠄎 关 <au₃.i> ‘?’, CWJ 1243 have 𠄎 关 <ta₂.i> ‘补’ *bǔ* ‘fill a vacant official position’ (PK 29).

The subject of the four sentences included in the passage is Gaoshi Onjip, whose two names are introduced in the first two zero copula sentences. The third sentence is a period made of a secondary clause headed by analytic construction *u-ur o-oi* [give-VN.AR.M become-CVB.AI] ‘begin giving, lit. become giving’, and a main clause headed by verb *ta-i* [put-VN.I] ‘he was, lit. he put’.

The event *khuus u-ur o-oi* ‘begin serving’ is the necessary condition for the event *shair ta-i* ‘he was court attendant’ to happen. Thus, the secondary clause has a relation of anteriority to the main clause.

The fourth sentence is a period made of two secondary clauses and a main clause. The first secondary clause is headed by converb *a-ai* ‘being’, the second secondary clause is headed by analytic construction *o-oi irj-el* ‘having become’, and the main clause is headed *them-elke-er* ‘he was appointed’.

In the first secondary clause, *fair a-ai* repeats the event concluding the preceding period. We can see a contrast in how the situation is viewed in the two sentences. In the former, the state ‘to be court attendant’ begins in the eighth year. In the latter, after two years (in the tenth year), the state ends, being replaced by a new situation. Thus, this sequence may be understood as ‘after being court attendant until the tenth year, in the eleventh year he became Night and Day Guard’, clearly expressing an anteriority relation of the first clause to the second one.

5.5 Converb -sel

Converbial morpheme *-sel* has allomorphs 全 北 <s.el> *-sel*, 冬 北 <as.el> *-asel*, and 卡 <us.el> *-usel*.

The first allomorph is recognized in Kane (2009:150-151), who reads 全 北 <s.ii> and in the translations of examples proposes causal and/or anteriority relations. CWJ 580 recognize the suffix, that according to the reading table at CWJ 343 should be read [sli], positing for future research whether it may or not be a converb encoding causality.

65) 出 矣	义	屏 矢	而 矣	弱 和 关	而 升 矣 北
eu.ur ₂	iun	dil.de	cau.ur ₂	ji.en.i	024.o ₂ .ui.el
euur	jun	til-te	ɬfaur	ɬfen-i	...owi-el
age	sixty	seven.F-DAT	war	among-ADJZ	?-CVB.AL
矣 化	尔 全 北		因	劣 矣 中	
m.ir ₃	on.s.el		abad	tu.ur ₂ .bir	
mir	on-sel		apat	t ^h uur-pir	
horse	fall-CVB.SEL		self	die-VN.PIR.M	

‘At the age of sixty-seven during a battle (...) he fell from the horse, and soon after he died.’

Xiangwen 12-13/22

The passage in example (65) was translated by WJ 224 as “at the age of sixty-seven, while riding on horseback, he was killed in action.”

In CWJ 1475 it was glossed with “岁 六十七于 军 中 ... 马 坠 身 薨” *sui liùshíqī-yú jūn zhōng ... mǎ zhuì shēn hōng* [age sixty-seven-at army middle ... horse fall self die].

The two works give different interpretation of the VP 矣 化 尔 全 北 <m.ir₃ on.s.el> *mir on-sel* depending on the meaning of verb stem 尔 <on.> *on-*. WJ translated the VP as ‘riding on horseback’ based on MM *unu-* ‘to ride on horseback, to mount’⁹⁴, while CWJ translated it as ‘falling from the horse’ based on MM *una-* ‘to fall, to come down’⁹⁵. The second interpretation is supported by two facts: 1) CWJ’s wordlist include the VP 矣 化 矢 关 尔 关 <m.ir₃.de.i on.i> *mir-tei on-i* [horse-ABL

⁹⁴ SH, Muq, LV (N 364).

⁹⁵ SH, Muq, LV (N 532).

fall-VN.I] ‘to fall from the horse’ (CWJ 396)⁹⁶; 2) based on some Gansu-Qinghai languages such as Shira Yugur, Mongghul, and the verb stem for ‘to ride on horseback’ should be reconstructed as CM **hunu* (N 364)⁹⁷. If we have initial **h-* in Proto-Mongolic we should expect Khitan **phun-* or **phon-*.

Thus, I chose the interpretation of *on-* descending from PM **una-* to fall.

The choice of different interpretations is decisive for analyzing the circumstantial relation. In fact, if we had ‘to ride’ we should translate ‘while riding on a horseback he died’ with a temporal relation of simultaneity. On the other hand, if we have ‘to fall’ we may translate as ‘after falling from the horse he died’ with a temporal relation of anteriority, or ‘he died from falling from the horse’ with a non-temporal relation of causality.

66) 𐰇𐰏𐰤	𐰇𐰏	𐰇𐰏	𐰇𐰏𐰤	𐰇𐰏𐰤𐰏𐰤
ir ₂ .e	g.ui	ong.on	bai.is.de	h.ui.ir ₃ .ul.el
ire	kui	on-on	pa _{is} -te	xuiir-sel ⁹⁸
now	kingdom	prince-GEN	position-DAT	reach-CVB.SEL
𐰇𐰏𐰤𐰏𐰤𐰏𐰤𐰏𐰤	𐰇𐰏	𐰇𐰏		
k.ai fu ng.i tu.ung s.a.am sī	g.ui	b.in		
k ^h ai fu ŋi t ^h uŋ sam suu	kui	pin		
commander.unequalled.in.honour	kingdom	Bin		

⁹⁶ In the original “从马洛”.

⁹⁷ Shira Yugur *hənə-*, *hunə-*; Mongghul *funə-*, *funi-*, *foni-*, *χoni-*; Bonan (Dahejia dialect) *χonə-*; Bonan (Ñantoq subdialect of Tongren Bonan) *hənə-*; Bonan (Xiazhuang dialect of Tongren Bonan) *xonə-* (N 364).

⁹⁸ The fourth graph of block 𐰇𐰏𐰤𐰏𐰤𐰏𐰤𐰏𐰤 <x.ui.ir₃.ul.el> from the picture of the rubbing of Zhonggong in CWJ 637 looks damaged and not easily readable. Since block 𐰇𐰏𐰤𐰏𐰤𐰏𐰤𐰏𐰤 <x.ui.ir₃.s.el> is attested 8 times in CWJ corpus while 𐰇𐰏𐰤𐰏𐰤𐰏𐰤𐰏𐰤𐰏𐰤 <x.ui.ir₃.ul.el> is attested only once, it is probable that the interpretation 𐰇𐰏𐰤𐰏𐰤𐰏𐰤𐰏𐰤𐰏𐰤 <x.ui.ir₃.ul.el> is an error due to the difficulty of reading the fourth graph and the similarity between 𐰇𐰏 <s> and 𐰇𐰏 . Therefore, 𐰇𐰏𐰤𐰏𐰤𐰏𐰤𐰏𐰤𐰏𐰤 <x.ui.ir₃.ul.el> is here read *xuiir-sel* [reach-CVB.SEL].

凡 太	令 峇 当	因 矢	仝 金 中 峇 峇
g.ung	t.ge.eñ	abad.de	d.em.l.ge ₂ .er
kun	t ^h eke-ep	apat-te	tem-elke-er
duke	die-VN.AR.F	self-DAT	confer-CAUS-VN.AR.M
‘In that time, he reached the position of Kingdom Prince, and then was posthumously appointed (lit. he was appointed on his dead self) to Commander Unequalled in Honour and Duke of the Kingdom of Bin’			

Zhonggong 5-41/57

The passage in example (66), was glossed in CWJ 949 with “今 国 王之 … 至 开 府 仪 同 三 司 幽 国 公 薨 身 于 封” *jīn guó wáng-zhī ... zhì kài fū yì tóng sān sì Bīn guó gōng hōng shēn-yú fēng* [now state prince-of ... arrive commander.unequalled.in.honour Bin state duke die self-at confer]. This period includes a secondary clause and the main clause. The secondary clause is headed by converb 夬 央 化 平 比 <x.ui.ir₃.ul.el> *xuiir-sel* [reach-CVB.SEL] ‘reaching’. The main clause is headed by verbal nominal in finite function 仝 金 中 峇 峇 <d.em.l.ge₂.er> *tem-elke-er* [confer-CAUS-VN.AR.M] ‘he was conferred’. The first event seems to be in a relation of anteriority to the second event. It is not clear whether a relation of causality is feasible.

67) 仝 峇 凡 太 女	舟 列 出	峇	又 及	中 丙 伏	仝 仝 为	公 及
s.iang g.ung.un	b.h.añ	jur ^o	m.o	l.iu.ñ	pu s.a	n.u
sjaŋ kun-un	boq-aŋ	ʃur	mo	ljuin	p ^h usa	nu
chancellor-GEN	son.OBL-PL	two.M	great	Ljuin	Pusa	Nu
仝 凡 才 峇	扎 为 央	央 各 女	可 忝 矢	夬 央 化 仝 比		
du g.ia.im	or ₂ .a.an	ci.eng.un	bai.is.de	x.ui.ir ₃ .s.el		
tu kjaim	oraan	ʃejun	paiis-te	xuiir-sel		
chief.supervisor	after	<i>changwen</i>	military.governor-DAT	reach-CVB.SEL		

无 卡 升 火	令 金 中 咨 当	关 化	圣 化 由	令 欠 又 关
tau.us.o2.ui	t.em.l.ge.eñ	i.ri	xe.ir3.320	t.ho sh.i
t ^h auuso-ui	t ^h em-elke-ep	iri	xeir...	t ^h oq fi
advance-CVB.AI	confer-CAUS-VN.AR.F	name	? ⁹⁹	governor.general

‘The sons of the Chancellor were two. The elder one was the Chief Supervisor Ljuip P^hu Sa Nu. Later, after he reached the position of *changwen*, the title conferred [to him] after he advanced was [...] Governor-General.’

June 5-19/40

The passage in example (67) is glossed in CWJ 1534 with “相 公之 孩子 二 大 留隐 菩 萨 奴 都 监 后 敞稳 ... 至 ... 封 号 ... 都 使” *xiang gong-zhi haizi er dà Liuyin Pu Sa Nu dū jian hou changwěn ... zhi ... fēng hào ... dū shǐ* [chancellor-of child two elder Luyin Pu Sa Nu chief.supervisor after changwen ... arrive ... confer title ... governor-general].

At the beginning of this passage we have two zero-copula sentences. The first one tells us that the grandfather of the tomb owner, Chancellor and Deputy Administrator Qafuup Tiler, had two sons. The second one introduces the first son, Chief Supervisor Ljuip P^hu Sa Nu. the Chancellor in question must be the Deputy Administrator <Hu.TENT.u.uni> Diler, grandfather of the tomb owner. Thereafter, we have a period where 又 火 化 令 北 <x.ui.ir3.s.el> *xuiir-sel* [reach-CVB.SEL] ‘reaching’ heads a secondary clause.

The main clause is a zero-copula nominal sentence where 无 卡 升 火 令 金 中 咨 当 关 化 <tau.us.o2.ui t.em.l.ge.eñ i.ir3> *t^hauuso-wi t^hem-elke-ep iir* [advance-CVB.AI confer-CAUS-CVB.AR.F title] ‘the title conferred [to him] after he advanced’ is the subject NP. This NP is headed by the noun *iir* ‘title’. The nominal head *iir* is modified by verbal nominal in attributive function *t^hem-elke-ep* ‘conferred’. Verbal nominal *t^hem-elke-ep* is modified by converb *t^hauuso-wi* ‘after he advanced, advancing’. Converb *t^hauuso-wi* here pertains to the syntactical type of converb proper (see §5.1), i.e. it does not head a secondary clause, but it functions as a simple adverbial modifying *t^hem-elke-ep* ‘conferred’, specifying the time of the conferment, i.e. after he advanced.

NP 圣 化 由 令 欠 又 关 <xe.ir3.320 t.ho sh.i> *xeir... toq fi* ‘... Governor-General’ is the predicative complement of the zero-copula nominal predicate.

⁹⁹ There are not sufficient clues to translate 圣 化 由 <xe.ir3.320> *xeir...*. We may formulate two hypothesis: it may be a qualification indicating a specific type of regional governor, or it may be the name of the region administered by the regional governor.

The main clause tells us the title acquired after advancing, thus clarifying that this conferment must have happened after the event in the secondary clause headed by converb *xuiir-sel*, i.e. ‘he reached the position of Changwen’.

In conclusion, we may regard the clause headed by *xuiir-sel* as being in anteriority relation to the main clause. However, it is not clear whether this is due to a specific function of converb *-sel*, or rather to the context provided by the main clause.

68) 弟	全 关 伏	凡 子 太 女	又 冬 余	丹 力
101	s.i.ñ	shǐ ju.ung.un	m.as.ho ₂	b.aq
...	sij	ʃuʃʃuŋ-un	mas-oq	paq ^h
younger.brother	Sij	chamberlain-GEN	eldest-AGM.M	child
序	中 用 凡 太 女	又 为 夫	为 出	
dil ^o	l.ing g.ung.un	sh.a.ir ₄	a.añ	
til	liŋkuŋ-un	ʃair	a-aŋ	
Til	lord	court.attendant	be-VN.AR.F	
力 冬 全 比	佃 秀 来	丹 列 出	包	
na.as.s.el	sui.e ₂ .ci	b.h.añ	hur ₃	
naas-sel	suj-eŋ ^{hi} i	paq-aŋ	qur	
move-CVB.SEL	bear-CVB.CI	child.OBL-PL	three.F	

‘After the eldest son of his younger brother Chamberlain Sij, Lord Til ceased to be Court Attendant, he generated, and his daughters were three.’

Jul 10-6/18

The passage in example (68) was glossed in CWJ 1537 with “弟 喜隐 侍 中之 长子 敌烈 令 公之 郎君 在 ... 生 子女 三” *dì Xiyǐn shì zhōng-zhī zhǎng zǐ Dīliè líng gōng-zhī lángjūn zài ... shēng zǐnǚ sān* [younger.brother Xiyin chamberlain-of eldest son Dilie lord-of court.attendant be.at ... be.born children three].

I have already discussed this passage under example (33) in §3.7.5. Under (33) the analysis focus was on terminative analytic construction VN *-AR naas-* ‘to cease to VB, lit. to (re)move one’s VB-ing’, whereas here I will focus on the converb 力 冬 全 比 <na.as.s.el> *naas-sel* [move-CVB.SEL] ‘(re)moving’.

The subject of the secondary clause headed by predicate 又为夫出力冬今比 <sh.a.ir4 a.añ na.as.s.el> *fair a-qn naas-sel* [court.attendant be-VN.AR.F move-CVB.SEL] ‘ceasing to be Court Attendant’ is Lord Til, the eldest son of Chamberlain Sij. He is the subject of converb 佃秀来 <sui.e2.ci> [be.born-CVB.CI] *suj-ey^hi* ‘generating’ as well. The subject changes in the main clause, which is a zero-copula nominal predicate. There, the subject is 仔列出 <b..h.añ> *paq-qn* [child.OBL-PL] ‘children’ and the predicative complement is 包 <hur3> *qur* [three.F] ‘three’.

The clause headed by the construction *a-qn naas-sel* may be regarded as being in relation of anteriority to the following clauses. However, it is not clear whether this is due to a specific functional meaning encoded by converbial morpheme *-sel*. It could also be that CVB *-sel* is not a specialized converbial morpheme, and that the anteriority relation is due the terminative notion encoded by the construction VN *-AR* + *naas-* ‘to cease VB-ing’, which may suggest the end of an event and the occurring of other events thereafter.

6. Conclusions

This chapter draws together the principal findings of this thesis, which has set out to provide a systematic morphological and functional analysis of verbal inflectional forms in Khitan. The study has examined twelve morphemes in total, comprising seven verbal morphemes (*-iR*, *-uci*, *-K*, *-I*, *-lAK*, *-AR*, *-piR*), one finite morpheme (*-liR*), and four converbial morphemes (*-Ci*, *-Al*, *-Ai*, *-sel*). Given the constraints of space, in-depth analysis has been deliberately focused on VN *-AR* and *-piR*, FIN *-liR*, and CVB *-Ai* and *-sel*, with the remaining morphemes introduced more briefly. Three further converbial morphemes (CVB *-ash*, *-A*, *-pci*) have been omitted from the analysis.

The verbal nominal morpheme *-iR* is attested in the construction VB-*iR or-te* ‘instead of VB-ing, lit. in the place of VB-ing’, where the verbal nominal is followed by nominal head *or-te* [place-DAT]. This construction encodes substitutive relation with the following clause. It is also attested in the modal construction encoding dynamic modality, namely ability, VB-*iR or-* ‘be able to VB, can VB’. Unlike the preceding construction where *or* is a noun meaning ‘place’, here *or-* is a verbal stem meaning ‘to be able, can’. Lastly it is attested in argument function, namely predicative complement after verb *seŋ-i* [travel-VN.I] ‘he travelled’, yielding the meaning ‘to go hunting, lit. to travel as one who is hunting’.

According to this instances, it possibly encodes non-focal intraterminality.

The verbal nominal morpheme *-uci* forms actor nouns, i.e. ‘the VB-er, one who VB-s’.

Verbal nominal morphemes *-uci*, *-K* are attested on the quotative verb *k^hel-* ‘to say, to call’, and verbal nominal morpheme *-i* on quotative verb *x-* ‘to say’, all occurring in finite use to report general knowledge. They may encode non-focal intraterminality.

Although in such instances, *-i* seems to pertain to intraterminality and non-past tense, on other verbs, for instance *seŋ-i* ‘he travelled’, it reports past events.

The verbal nominal morpheme *-lAK* in attributive function may pertain to postterminality. It is employed in a quasi-converbial morpheme *-lAK-INS*, e.g. *or-lak-er* [can-VN.LAK-INS] ‘since one was not able to, since it was not possible to’, likely encoding causality relation to the following clause.

Verbal nominal morpheme *-AR* forms verbal nominals that function as arguments, attributes, and finite verbs.

Argument Function: The AR-forms examined in this study have undergone lexicalization through

the following semantic pathways:

- i) to write → the written (thing)/the writing → text
- ii) to confer → the conferred (title) → conferment

These forms denote resultant states derived from transformative verbs.

Other forms are used as predicates of content clauses, e.g. *xeffi t^hut-le-ke-en tfaunur amu-lqa-aj* *apat-la-pij ir-er* [border harmony-DENV-CAUS-VN.AR.F war be.calm-] ‘he came to the achievement of harmonizing the borders and putting an end to the war’.

Attributive Function: AR-forms derive from transformative verbs and denote the completion of their modified noun. In one case an AR-form derives from a non-transformative verb and denote the termination of it modified noun, e.g. *aj-en jawa-aj moer* [father-GEN go-VN.AR.F way] ‘the way walked (lit. gone) by the father’.

Finite Function: AR-forms situate events in the past. The morpheme *-AR* combines with both non-transformative and transformative verbs. With non-transformative verbs, it indicates termination; with transformative verbs, it indicates completion. In certain instances, AR-forms refer to past situations that remain obtaining or relevant in the present. In this respect, *-AR* appears to function as a focal postterminal marker. However, in other instances, AR-forms refer to past events without present relevance.

Thus, it cannot be confirmed that *-AR* encodes focality.

When combined with the instrumental case, *-AR* yields a quasi-converb indicating anteriority to the following clause.

Additionally, *-AR* combines with auxiliary verbs to form analytic constructions that may be analyzed as modes of action – IPS operators:

- *-AR o-* [VN.AR + become]: an inchoative construction meaning 'begin to VB'
- *-AR naas-* [VN.AR + move]: a terminative construction meaning 'cease to VB, stop VB-ing'
- *-AR jau-* [VN.AR + go]: a continuative construction meaning 'continue to VB, go on VB-ing'

Verbal nominal morpheme *-piR* forms verbal nominals that function as argument, attributes, and finite verbs.

Argument Function: The piR-forms analyzed here have undergone lexicalization through the following pathways:

- i) to fulfill → the fulfilled (thing) → fulfillment
- ii) to begin → the beginning → preface, first day of the month

The former derives from a momentaneous transformative verb and yields a noun denoting a resultant state with postterminal connotation. The latter derives from a momentaneous

transformative verb and yields an action noun that is neutral with respect to terminality.

Attributive Function: One piR-form in attributive function was analyzed: *ʃis-te-pij* 'filial'. This form has lexicalized into an adjective via the pathway: to be filial → being filial → filial. A contrast was observed with an AR-form occurring in the same context: *yau-aŋ moer* 'the way walked by the father' (termination) versus *ʃis-te-pij* 'the filial way' (general truth). This suggests the hypothesis that in attributive function, -piR pertains to intraterminality.

Finite Function: Three piR-forms in finite function were analyzed: *t^huur-pir* 'he died', *p^hol-pij* 'she has become', and *xuiri-pij* 'it has reached'. These all derive from momentaneous transformative verbs. The first form denotes a past event without present relevance, i.e. a non-focal postterminal neutral to terminality. The latter two denote events that occurred in the past but remain obtaining in the present, i.e. low-focal postterminal.

Additionally, -piR combines with the auxiliary verb 'to make' to form the analytic construction -piR *ʃ^hi-*, which may be analyzed as a completive mode of action meaning 'finish VB-ing,'. Possibly, synonymous construction with the same actional meaning is -piR *ir-* [VN.piR + come].

The morpheme -liR forms finite forms. Given its structural similarity to the previous two morphemes, we might hypothesize that -liR would exhibit the same functional range. However, based on the material analyzed here, this hypothesis is not supported, at least provisionally. Only instances of -liR in finite function were identified.

A comparison was made between liR-forms and AR-forms occurring within the same passage, revealing that momentaneous transformative verbs consistently take -liR, while durative non-transformative verbs consistently take -AR. Since both types of forms in the passage refer to events without present relevance, the difference in marking may function as a means of emphasizing that events marked by -liR are punctual, whereas events marked by -AR are temporally extended.

Finite forms marked by -liR analyzed in this thesis (*p^honto-lir* 'he became', *o-olir* 'he became', *on-lir* 'he fell', *a-aŋ naas-lir* 'he ceased to be X') are all nonfocal postterminal presenting past events detached from the present.

Converbial morphemes -Ci and -Al were analyzed too briefly to provide a precise definition of the categories they encode. My preliminary observations identified two examples of Ci-forms occurring in clauses in anteriority relation to following clauses, e.g. *xui-ʃ^hi* 'reaching' and *jeu-ʃi* 'going'. As for -Al, one example with *a-qa-al* [be-CAUS-CVB.AL] 'being appointed, lit being made to be' suggests a notion of temporary action similar to the one encoded in Mongolic derivative suffixes such as Khalkha -схий- [-sxi:-] and -зна⁴- [-tsnə-], i.e. 'being appointed to a position for a brief time'.

The converbial morpheme *-Ai* is attested in clauses indicating several circumstantial relations:

- 1) simultaneity, e.g. *sui-lqa-ai* [be.born-CAUS-CVB.AI] ‘in the time he was generated’; *sa-ai* [sit-CVB] ‘while residing’;
- 2) anteriority, e.g. *t^hem-elke-ei* [confer-CAUS-CVB.AI] ‘after being appointed’; *xuiir-ke-ei* [reach-CAUS-CVB.AI] ‘after reaching’; *pait-qa-ai* [bury-CAUS-CVB.AI] ‘after being buried’; *a-ai* [be-CVB.AI] ‘after being’;
- 3) causality, e.g. *eu-ui* [not.be-CVB.AI] ‘since he had died’;
- 4) manner (or attendant circumstance), *kuus u-ur* NEG *o-oi* [strength give-VN.AR NEG become-CVB.AI] ‘without having served’

In other instances, the circumstantial relation is not easy to determine, e.g. *kuus u-ui* [strength give-CVB.AI] ‘while serving’ (simultaneity) or ‘after serving’ (anteriority).

The variety of relations found in clauses headed by *Ai*-forms suggests that this morpheme pertains to the category of narrative converb.

Possibly an analytic construction *-Ai + irj-* [CVB.AI + come] encodes completive mode of action, e.g. *o-oi irj-el* [become-CVB.AI come-CVB.AL] ‘having become, lit. coming to become’.

Besides the syntactic function of secondary clause head, it is attested also as converb proper, i.e. an adverbial to a verbal predicate, e.g. *t^hauuso-wi t^hem-elke-en iir* [advance-CVB.AI confer-CAUS-VN.AR.F title] ‘the title conferred after advancing’.

The converbial morpheme *-sel* occurs in clause indicating anteriority relation to the following clause. Nevertheless, there is a certain degree of ambiguity. For instance in the case of *mir on-sel apat t^huur-pir* [horse fall-CVB.SEL self die-VN.PIR] ‘he died after falling from the horse’ (anteriority) or ‘he died because of falling from the horse’ (causality).

Moreover, in some cases the anteriority relation itself seems to be heavily influenced by context.

In conclusion, *-sel* may pertain to the category of narrative or contextual converb.

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APPENDIX A – CORPUS

Chala

Line 6-37/46

才 生 丰	用 凡 秀	今 又 为	—
ia ab ai	ing g.e ₂	pu m.a	
ia ap ai	inj ke	p ^h u ma	
grand.uncle	Ying Ge	imperial.son.in.law	
又 安 今 出 必	为		
sh.ng s.ung ₂	101		
ʃinj suŋ	...		
Shenzong	younger.brother		

Line 7-1/42

今 关	凡 央	杰 尔	丹 力	安 用 凡
s.i	g.ui	ong.on	b.aq	ng.ing shī
si	kui	oŋ-on	paq ^h	ŋinj ʃu
Qi	state	prince-GEN	child	ŋinj ʃu
凡 央 央 央	圣 相	出 央 今	弱	列 行 州
g.ung.ji ₅ .iu ₂	jur.en	p.ur ₂ .s	146	h.mu.oŋi
kuŋʃu	ʃur-en	pur-s	...	qumoji
princess	two.F-GEN	descendant-PL	NEG	Qumoji
出 平 凡 央	叔 金 央	今 将 凡 亦	曲 央	
eu.ul.g.er	k.em.er	s.iang g.ün	go.er	
eu-ulek-er	k ^h em-er	sjaŋ kyn	koer	
not.be-VN-LAQ	edict-INS	general	house	
西 出 方	令 央 万	令 金 央 央 央	杰 又 公 用	
INHERIT.ha.al	t.ge.y	t.em.l.ge.er	w.u n.ing	
...-qa-al	t ^h eke-ei	t ^h em-elke-er	wu ninj	
inherit-CAUS-CVB.AL	die-CVB.AI	confer-CAUS-VN.AR.M	Wu Ning	

凡 亦	傘 文 門 凡	劣 水 弓 水 又 火 又 相 不	止 用 來 急 凡	
g.ün	z.ie du shǐ	tu.ung ju.ung sh.iu ₂ m.en xa	p.ing ci.ang shǐ	
kyn	tsje tu ʃu	t ^h uŋ ʃuŋ ʃu men ɣa	p ^h iŋ ʃ ^h aŋ ʃu	
prefecture	governor.general	tong zhongshu menxia	ping changshi	
𠂔 𠂔 𠂔 𠂔 𠂔 𠂔		𠂔 𠂔	𠂔 𠂔	
SEAL.l.ha.a.añ.en		s.i	g.ui	ong.on
...-lqa-aŋ-en		si	kui	oŋ-on
ritual-DENV-CAUS-VN.AR.F-PX3		Qi	state	prince-GEN
𠂔 𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔 傘 文	凡 亦 𠂔 𠂔 𠂔	
b.aq.i	b.aq	ng.iau.u z.ie	g.ün.ji ₅ .iu ₂ .un	
paq ^h -i	paq ^h	njauu tsje	kynʃu-un	
child-ADJZ	child	njauu tsje	prefecture.princess-GEN	

Line 8-1/49

𠂔 𠂔 𠂔	𠂔 𠂔 𠂔 𠂔	𠂔 𠂔 𠂔 𠂔	𠂔 𠂔	
ri ₂ .s.el	bai.s.b.ñ	s.iang g.ung	sui.er	
ri-sel	pai-s-piŋ	sjaŋ kuŋ	suj-er	
marry-CVB.SEL	happy-DENV-VN.PIR.F	minister	be.born-VN.AR.M	
𠂔	𠂔	𠂔 𠂔 𠂔 𠂔 𠂔 𠂔	𠂔 𠂔	
ia	ONE ^o	m.o.ji ₄ .ha.a.añ	i.ri	
ia	...	mo-ʃi-qa-aŋ	iri	
elder brother	one.M	elder-DENV-CAUS-VN.AR.F	name	
𠂔 𠂔	𠂔 𠂔	一	十	𠂔 𠂔
198.1.er	ci.ar	NORTH	WEST	jau tau
...er	ʃ ^h ar	...	...	ʃau t ^h au
...er	before	north	west	punitive.commissioner

儿 交 圣	马 水 又 火 中 用	又 及	丹 力	全 木
g.ie.im	ju.ung sh.iu ₂ l.ing	m.o	b.aq	s.en
kjeim	ʃuŋ ʃu liŋ	mo	paq ^h	sen
concurrently	<i>zhongshu ling</i>	elder.M	child	Isen

木 儿 木	及 化	全 焚 虫 火 火 儿	劣 水 马 水 又 火 又 木 不
ci.g.en	u.ur	s.üe.üen x.ui ^o shī	tu.ung ju.ung sh.iu ₂ m.en xa
ʃ ^h iken	uur	syen xui ʃu	t ^h uŋ ʃuŋ ʃu men ʃa
left	division	<i>xuan hui shi</i>	<i>tong zhongshu menxia</i>

虫 用 木 急 儿	个 又 力	门 火	伏 号	全 雨
p.ing ci.ang shī	pu m.a	du ui ^o	ñ.iau	s.in
p ^h iŋ ʃ ^h aŋ ʃu	p ^h u ma	tu ui	ɲau	sin
<i>ping changshi</i>	imperial.son.in.law	<i>duwei</i>	sibling	Qin

全 雨	儿 火	引 急 万 交 考 又 土 及	儿 水 支 火 火	夫 火
z.in	g.ui	ja.ang y.ie.en ₂ sh.eu.u	g.ung.ji ₅ .iu ₂ .un	ri ₂ .i
tsin	kui	ʃaŋ jen ʃeu	kuŋʃu-un	ri-i
Jin	state	ʃaŋ Jen ʃeu	princess-PX3	marry-VN.I

Line 9-1/46

力 虫 丰	金 儿 木	曲 火	西 力 丰	万
na.ha.ai	em.g.en	go.er	INHERIT.a.ar	101
naqaai	emek-en	koer	...a-ar	...
?	grandmother-GEN	house	inherit-VN.AR.M	younger.brother

毛	丰 虫 丰	木 化 当 木	令 金 当	令 火 火
ONE ^o	ar.ha.ar	ci.ur.eñ.en	t.em.eñ	t.ge.er
...	arqaar	ʃ ^h ur-ep-en	t ^h emep	t ^h eke-er
one.M	Arqaar	two-ORD.F-PX3	T ^h emep	die-VN.AR.M

夾	金 木	令 欠 戈 关	又 及	丹 力
050	em.en	t.ho sh.i	m.o	b.aq
...	em-en	t ^h oq ʃi	mo	paq ^h
?	place-GEN	campaign.commander	elder.M	child
丕 火 公 爻	丕 止	戈 考 爻 化	令 金 中 峇 万	—
zh ₂ .iu ₂ n.u	tai sī	sh.iau.u shī	t.em.l.ge.y	
ʒu nu	t ^h ai sī	ʃau ʃu	t ^h em-elke-ei	
ʒu nu	crown.prince	young.preceptor	confer-CAUS-CVB.AI	
主 丕 戈 羽 伞 半 火	丹 力	安 爻	凡 火	出 爻
hong tai sh.iuk dz.u ₂ .un	b.aq	ng.u	g.ui	gui.u
xoŋ t ^h ai ʃuk tsu-un	paq ^h	ŋu	kui	kuju
imperial.uncle-GEN	child	Wu	state	Kuju
凡 火 爻 火	夫 关	力 中	伞 丹 凡 火	用 欠 朱 列 公 伞 丹 秀 火
g.ung.j ₂ .iu ₂ .un	ir ₄ .i	a.ai	s.iang g.ung	il.ho.do.h n.s.b.e ₂
kuŋʃu-un	ir-i	a-ai	sjaŋ kuŋ	ilqodoq nespe
princess-PX3	marry-VN.I	be-CVB.AI	minister	? ?
兮 火	关 化	耑 木	无	
SEAL.ud	i.ir ₃	299.en	tau	
...-ut	iir	...en	t ^h au	
ritual-PL	name	?	?	
土 平 凡 火	土 安	乙	屏 火	
eu.ul.g.er	eu.ur ₂	FIFTY	dil.de	
eu-ułek-er	euur	...	til-te	
not.be-VN.LAK-INS	age	fifty	seven-DAT	

𠂔𠂔𠂔𠂔𠂔𠂔		𠂔𠂔𠂔𠂔𠂔		𠂔𠂔𠂔		𠂔𠂔	
sh.eu.u p.i.in		g.iu.ung.de		o.ji4.el		ñe2°.ho	
jeu p ^h in		kjuŋ-te		oŋi-el		je-qo	
Shou Pin		palace-DAT		go-CVB.AL		one.M-AGM.M	
𠂔𠂔𠂔𠂔𠂔		𠂔𠂔𠂔		𠂔𠂔		𠂔𠂔𠂔𠂔	
au.ul.ha.al		t.am.ar		em.en		t.ho sh.i	
au-ulqa-al		tamar		em-en		t ^h oq ŋi	
take-CAUS-CVB.AL		tamar		place-GEN		campaign.commandant	
𠂔𠂔𠂔		𠂔𠂔		𠂔𠂔𠂔𠂔𠂔𠂔		𠂔𠂔𠂔	
p.o.or		g.ir3		x.ui.ir3.ge.y		y.eu.ji	
p ^h o-or		kir		xuiir-ke-ei		jeu-ŋi	
be-VN.AR.M		?		reach-CAUS-CVB.AI		go-CVB.CI	
𠂔𠂔𠂔𠂔		𠂔𠂔𠂔𠂔		𠂔𠂔		𠂔𠂔𠂔𠂔𠂔	
na.ha.añ.er		s.eng.un		ui		KNOW.u.ji.de	
naqa-ŋer		sejun		ui		...-uŋi-te	
maternal.uncle-PL		field.marshal		affair		know-VN.UCI-DAT	
𠂔𠂔𠂔		𠂔𠂔𠂔𠂔		𠂔𠂔𠂔𠂔𠂔𠂔		𠂔𠂔𠂔	
b.uñ.ir2		t.ul.u3.el		jau.ul.ha.al.h		212.l.h	
pupir		t ^h ulu-el		ŋau-ulqa-alag		...-laq	
?		?-CVB.AL		separate-CAUS-VN.LAQ		go-VN.LAK	
𠂔𠂔		𠂔𠂔𠂔		𠂔𠂔𠂔𠂔𠂔𠂔𠂔		𠂔𠂔	
ün.eñ2		x.ir.bu2		HEAVEN pu.su.u3.ul.ge.ir		ai	
yneŋ		xirpu		... p ^h usuw-ulke-ir		ai	
?		?		Tianqing		year	
						three.F	

介 夾	弓 女	丕 忝	几 只 凡
xeu.ur ₂	ju.un	xa.is	ku.u ₃ .du ₂
xeuur	ʃfun	xais	k ^h uw-tu
spring	summer	between	person.OBL-DAT
无 卡 升 央	坐 为 生 全 爻	爻 关 雨	乇
tau.su.o ₂ .ui	d ₃ .a.ab.d.ir ₂	m.i.in	ONE
t ^h auswo-ui	tapt-ir	miin	...
advance-CVB.AI	repeat-VN.IR.M	my	one.F
付 力	业 关	业 及 子 付 伏	
b.aq	p.i	p.o.ol.b.ñ	
paq ^h	p ^h i	p ^h ol-pij	
child	imperial.concubine	become-VN.PIR.F	

Line 11-1/44

才	为 女	付 列 出	圣
ia	101.un	b.h.añ	jur ^o
ia	...-un	paq-aŋ	ʃʊr
elder.brother	younger.brother-PX3	child.OBL-PL	two.M
凡 水 爻 央 化	夫 秀 来	因 爻	本 升 平 立 丰
g.ung dz ₂ .iu ₂ .ur	ir ₄ .e ₂ .ci	abad.er	ar.o ₂ .ul.ha.ai
kunʃʊ-ur	ri-eʃ ^h i	apat-er	aro-ulqa-ai
princess-INS	marry-CVB.CI	self-INS	bless-AUG-CVB.AI
列 化 爻	业 为 关	雨 令	刃 万 爻
h.ur.er	p.EAST.i	in ₂ .t	ir.y.er
qur-er	p ^h ...i	int ^h	iri-er
three-VN.AR.M	grade	?	title-INS

谷 和 谷	才 祭	笏 矢	火 火 化 丹 伏
ge.en.er	ia.LUCK	cu.de	h.ui.ri.b.ñ
kener	ia<LUCK>	ʧ ^h u-te	xuiri-pijn
?	luck	top-DAT	reach-VN.PIR.F

弱	ㄣ 关	ㄣ	北 及 弱	及 平	及 米 及 凡
146	212.i	336	or ₂ .u.ji	u.ul	o.udu.u.du ₂
...	...-i	...	or-uŋi	uul	ouduu-du
NEG	go-VN.I	NEG	can-VN.UCI	winter	palace-DAT

力 艾	兆 凡	令 金 中 谷 万	—	住 及 灼
a.ash	103.g	t.em.l.ge.y		224.u.ji ₃
a-aŋ	...k	t ^h em-elke-ei		...uŋi
be-CVB.ASH	letter	confer-CAUS-CVB.AI		sacred

凡 只 凡 关	西 力 方	弱 平 止 中	ㄣ 及 弱
ku.u ₃ .du ₂ .i	INHERIT.a.al	jau.ul.ha.ai	212.u.ji
k ^h uw-tui	...a-al	ʧau-ulqa-ai	...-uŋi
palace-ABL	inherit-CVB.AL	separate-CAUS-CVB.AI	go-VN.UCI

叔 坐 谷	万 及	火 止 弱 和	口	中
k.d ₃ .er	y.u	x.eu.ji.en	323	ai
k ^h et-er	ju	xeutŋen	...	ai
exceed?-VN.AR	?	?	DEM.DIST	year

公 乃 安	无	歪	艾
n.am.ur ₂	tau	ñeim	sair
namur	t ^h au	peim	sair
autumn	five.F	eight.F	month

𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔
ñair.de	s.em.el	eu.el	i.ri.de
pair-te	sem-el	ew-el	iri-te
day-DAT	get.ill-VN.AL	not.be-VN.AL	name-DAT

Line 12-1/5

𠂔 𠂔 𠂔	𠂔 𠂔	𠂔	𠂔	𠂔 𠂔 𠂔
tu.ur ₂ .bir	eu.ur ₂	SIXTY	ONE	b.125.er
t ^h uur-pir	euur	...	...	p...-er
die-VN.PIR.M	age	sixty	one.F	be-VN.AR.M

Daozong

Line 1-1/10

𠂔 𠂔 𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔 𠂔 𠂔
hur ₂ .u ₂ .ur.bir	224.u.ji ₂	m.o	ci.i.is.d.bir
xuru-ur-pir	...uŋi	mo	ŋ ^h is-te-pir
responsible-DENV-VN.PIR.M	sacred	great.M	blood-DENV-VN.PIR.M

𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔 𠂔 𠂔
w.un	xong di.en	g.en.ir ₂	c.qu w.un
vun	xon ti-en	kenir	ŋak vun
cultured	emperor-GEN	grief	text

‘Eulogy of the Benevolent Sacred Great Filial Cultured Emperor.’

Dilie

Line 6-34/39

𠂔	𠂔 𠂔	一:𠂔 𠂔	𠂔	𠂔	𠂔
323	xa.she	NORTH:d.ñ	ia	101	227
...	xafe	...tiŋ	ia	...	...
DEM.DIST	time	north	elder.brother	younger.brother	?

引 立 方 立 为	化 凡 有	丹 介 央	谷 安 伏	九
ja.ha.al.ha.a	ri.g.en	b.o ₃ .ui	d.ur.ñ	MRS
ʃaqa-alqa-a	iriken	po-wi	turij	...
indicate-CAUS-CVB.A	tribal.chieftain	be-CVB.AI	Turij	lady

圣 有	丹 列 出	又 及	圣 用 伏	止 欠 弱	化 凡 有
jur.en	b.h.añ	m.o	xe.il.ñ	p.qo.ji	ri.g.en
ʃur-en	paq-aŋ	mo	xeilij	poqoʃi	iriken
two-GEN	child.OBL-PL	great.M	Xeilij	Poqoʃi	tribal.chieftain

久	立 券	有 及	万 存 及 火 关	们 谷
uh	WRITE.e	hor.u	y.ra.u.ud.i	du.er
u	...e	qoru	jaru-ut-i	tuer
?	?	people	Yelü-PL-ADJZ	?

又 米 介 及 有	尺 安 又	因 中 丹 伏	无 卡 中 立 丰
GREAT udu.o ₃ .o.oñ	dau.ur ₂ .ir ₂	abad.l.b.ñ	tau.su.l.ha.ai
... utuwo-oŋ	tauur-ir	apat-la-pij	tausu-lqa-ai
Da'an	middle-ADJZ	self-DENV-VN.PIR.F	pass-CAUS-CVB.AI

尺 公	关 化	考 谷	令 金 中 谷 谷
u ₃ .n	i.ri	SEAL.er	t.em.l.ge.er
u-n	iri	...-er	t ^h em-elke-er
counsel.OBL-GEN	title	ritual-INS	mark-CAUS-VN.AR.M

‘In the middle of the Da’an period he had his position advanced, so that he was conferred the title of counsel with a ritual.’

曲 谷	谷 和 谷	和 么	因 才	和 化 谷	丙 及 杏
go.er	ge.en.er	ci.ia ₂	abad.ia	ci.ur.er	hor.u.uñ
kor	keener	ʃa	apatia	ʃur-er	qoruujn
house	?	?	?	two-ORD.M	Qoruujn

刈 丕 刈	化 凡 和	丙	几	冬 及	安 兴
h.im.h	ri.g.en	mo	ku	as.u	ur ₂ .i
ximix	iriken	mo	ku	asu	uri
Ximix	tribal.chieftain	female	person	Asu	Uri

穴 久 伏	九	令	圣 和	和 化 谷
neu.uh.ñ	MRS	t	jur.en	ci.ur.er
newijn	...	et ^h	ʃur-en	ʃ ^h ur-er
Newijn	lady	these	two.F-GEN	two-ORD.M

Line 8-1/45

丹 力	圣 用 伏	几 久 平
b.aq	xe.il.ñ	ku.uh.ul
paq ^h	xeilij	k ^h ukul
child	Xeilij	K ^h ukul

戈 为 夫	公 司 安	丙	艾 伏
sh.a.ri ₂	n.iuk.ur ₂	mo	sair.ñ
ʃari	niuk ^h ur	mo	sairijn
court.attendant	friend	female	Sairijn

九 矢	公 反	止 为 尔	力 冬 中 又		
MRS.de	n.o	p.a.ad	na.as.l.ir ₂		
...-te	no	p ^h aat	naas-lir		
lady-DAT	spouse	?	move-VN.LIR.M		
‘The second son of these two was the Court Attendant Xeilij K ^h ukul.					
令	圣 相		来 化 尔		丹 力
t	jur.en		ci.ur.er		b.aq
e-t ^h	ʃur-en		ʃ ^h ur-er		paq ^h
DEM.PROX-PL	two.F-GEN		two-ORD.M		child
全 本 立 出	中 列 久	全 各 尔	—	住 中 凡 尔	尤 安
s.ar.ha.añ	l.bu ₂ .uh	s.eng.un		224.l.g.en	um.ur ₂
sarqaap	lupuuq	sejun		...lek-GEN	umur
Sarqaap	Lupuuq	field.marshal		Taizong	first
非 朱	小	十	无	兮 中 及 约	丕
po.do	del	WEST	tau	SEAL.l.u.ji ₂	tai
p ^h o-to	tel	...	t ^h au	...-l-utʃi	t ^h ai
time-DAT	south	west	five.F	ritual-DENV-VN.UCI	grand
全 各 尔	止 及 用 中 关		尔 来	令 火 中 尔 当	
s.eng.un	p.o.ondo.l.i		x.ci	t.ud.l.ge.eñ	
sejun	p ^h onto-li		xetʃi	t ^h ut-le-ke-ep	
field.marshal	become-?		border	harmony-DENV-CAUS-VN.AR.F	
雨 安	乃 平 立 出		因 中 丹 伏		刃 尔
cau.ur ₂	am.ul.ha.añ		abad.l.b.ñ		ir.er
ʃ ^h auur	amu-lqa-ap		apat-la-pij		ir-er
war	be.peaceful-CAUS-VN.AR.F		self-DENV-VN.PIR.F		serve-VN.AR.M

𠂇	几	—	圣 和	令
mo	ku		jur.en	t
mo	k ^h u		ʃur-en	e-t ^h
female	person		two.F-GEN	DEM.PROX-PL

𠂇 化 𠂇	𠂇 𠂇	𠂇 𠂇 伏	𠂇 𠂇
ci.ur.er	b.aq	hor.b.ñ	x.eu
ʃ ^h ur-er	paq ^h	qorbij	xeu
two-ORD.M	child	Qorbij	Xeu

𠂇 𠂇 𠂇 𠂇	𠂇
s.ai p.ong	jur ^o
sai poŋ	ʃur
investigation.commissioner	two.M

‘At the beginning of the time of Tianzong (r. 927-947), he became (he was made to be) Grand Field Marshal of the Five Seals of the south-west. He came to the achievement of harmonizing the borders and pacifying the wars. The second son of him and his wife was the Investigation Commissioner Qorbij Xeu.’

Line 9-1/41

𠂇 𠂇 𠂇 𠂇	𠂇 𠂇 𠂇 𠂇	𠂇	𠂇 𠂇 𠂇	𠂇 𠂇 𠂇
qa.ha.ad.er	ir.l.ge.er	dil ^o	WRITE.ge.d	s.ur ₂ .d
q ^h aq-at-er	ir-elke-er	til	...k-et	surt
kaghan.OBL-PL-INS	serve-AUG-VN.AR.M	seven	book-PL	?

𠂇 𠂇 𠂇 𠂇 𠂇	𠂇 𠂇 𠂇	𠂇 𠂇 𠂇	𠂇 𠂇	𠂇 𠂇
s.058.l.ge.y	ñe.l.g	xong di.in	po.do	ai.en
s...lke-ei	jnelek	xongti-in	p ^h o-to	aj-en
?	Taizong	emperor-GEN	time-DAT	father-PX3

巧	业及用中伏	金和	杂又	业及子立半
146	p.o.ondo.l.ñ	em.en	ci.m	p.o.ol.ha.ai
...	p ^h o-nto-lip	em-en	ʧ ^h im	p ^h ol-qa-ai
NEG	become-FIN.LIR.F	place-GEN	?	become-CAUS-CVB.AI

伙	叔金	引方立半	小:列本	业及全	杂亦列夹
227	k.em	ja.al.ha.ai	del:h.ar	p.o.or	ci.ad.h.an
...	k ^h em	ʧa-alqa-ai	delqar	p ^h o-or	ʧ ^h atqan
?	edict	indicate-CAUS-CVB.AI	?	be-VN.AR	?

凡安	夫伏	刃久	杂住关	丸	全生万
g.ur ₂	ri ₂ .ñ	ir.uh	ci.224.i	191	s.ab.y
kur	rip	iru	ʧ ^h i...i	...	sap-ei
empire	?	?	?	?	succeed-CVB.AI

尺当谷	全半业杰尔	关化
u ₃ .eñ.er	s.ai p.ong.on	i.ri
u-ep-er	sai p ^h oŋ-on	iri
give-VN.AR.F-INS	investigation.commissioner-GEN	title

令金中谷谷	北为夹	—
t.em.l.ge.er	or ₂ .a.an	
t ^h em-elge-er	oraan	
confer-CAUS-VN.AR.M	after	

尖尺谷	主至雨	又雨	全生伏	半为出谷
HEAVEN u ₃ .er	xong di.in	m.in	s.ab.ñ	48.a.añ.er
... u-er	xong ti-in	min	sap-ip	...aaper
Tianshou	emperor	reign	succeed-VN.IR.F	?

Line 11-40/47

百 几	屏 当	尔 火
mo ku	dil.eñ	au ₂ .ui
mo k ^h u	tileŋ	auui
wife	Tileŋ	auui

力 出 出 公	又 及	艾 和	令
na.ha.añ.er	m.o	ash.en	t
naqa-aŋer	mo	aŋ-en	e-t ^h
maternal.relative-PL	great.M	tent-GEN	DIM.PROX-PL

Line 12-1/48

圣 和	符 列 出	圣	州 余	又 文 考 伏	凡 杰 今 公 及
cur.en	b.h.añ	cur ^o	oñi.ho ₂	sh.ie.en ₂ .ñ	g.ong pu n.u
t ^h ur-en	paq-aŋ	t ^h ur	oŋi-qo	ŋenŋ	koŋ p ^h u nu
two.F-GEN	child-PL	two.M	young-AGM.M	ŋenŋ	Koŋ p ^h u nu

圣 又 关	—	又 用 今 出 公	非 朱	雨 安	火 矢
tai sh.i		sh.ing s.ung ₂ .un	po.do	cau.ur ₂	ui.de
t ^h ai ʃi		ʃiŋ suŋ-un	p ^h o-to	t ^h auur	ui-te
grand.preceptor		Shengzong-GEN	time-DAT	war	matter-DAT

引 出 中 用 出 中	令 欠 又 关 和	关 化 今 公	达	及 今 公
ja.ha.ai.il.ha.ai	t.ho sh.i.en	i.ri.s.er	le	o.or.er
t ^h aqaa-i-lqa-ai	t ^h oq ʃi-en	iri-s-er	le	o-or-er
?-CAUS-CVB.AI	governor.general-GEN	title-PL-INS	only	become-VN.AR.M-INS

百 几	和 急	扎	今 忝 伏	又 夫	也 才 条
mo ku	ci.ang	or ₂	pu.is.ñ	m.118	üen.ia.ah
mo k ^h u	tʰaŋ	or	p ^h uisiŋ	m...	yenjaaq
wife	tʰaŋ	or	lady	?	?

中 丙 伏	中 关 要	圣 又 关 和	丹 力
l.iu.ñ	li.318	tai sh.i.en	b.aq
ljuip	li...	t ^h ai ʃi-en	paq ^h
Ljuip	Li...	grand.preceptor-GEN	child

丹 列 出	圣	又 及	杰 安 及	几 卡	只 安
b.h.añ	jur ^o	m.o	ong ng.u	ku.us	u ₃ .ur ₂
paq-aŋ	tʃur	mo	oŋ ŋu	k ^h uus	u-ur
child.OBL-PL	two.M	great.M	Oŋ ŋu	strength	give-VN.AR.M

及 及 子	佃 当	曲 公 和	雨 急 又 关	业 及 雨 中 又
o.o.ol	sui.eñ	go.er.en	ca.ang sh.i	p.o.ondo.l.ir ₂
o-ol	suj-eŋ	koer-en	tʰaŋ ʃi	p ^h onto-lir
become-CVB	bear-VN.AR.F	house-GEN	grand.historian	become-VN.LIR.M

‘The sons were two. The eldest was Oŋ ŋu. When he began offering service, he became Grand Historian of the Household where he was born.’

Dilie 13-1/51

全 将 几 水	丹 及	雨 急 又 关 和	百 几	升 央 关
s.iang g.ung	b.u	ca.ang sh.i.en	mo ku	o ₂ .ui.i
sjaŋ kuŋ	pu	tʰaŋ ʃi-en	mo k ^h u	owii
minister	?	<i>Changshi</i> -GEN	wife	Owii

全 和	尔 火	圣 和	付 列 出	圣	又 及
s.en	au ₂ .ui	cur.en	b.h.añ	cur ^o	m.o
isen	auui	tʰur-en	paq-aɲ	tʰur	mo
Isen	madame	two.F-GEN	child.PL	two.M	great.M

全 本 为	令 旁	旁 火 凡 亦 和	付 凡 才 圣	丑 丰	来 化 公
s.ar.a	t.il.t	tu.ung g.ün.en	du g.ia.im	160.ai	ci.ur.er
sara	tʰiltʰ	tʰuɲ kyn-en	tu kjaim	...ai	tʰur-er
Sara	Tʰiltʰ	commander-GEN	inspector	?	two-ORD.M

令 丙 刃	付 火 九	凡 火 火 业 火 曲 公	令 金 中 谷	果 又 火 北	丑 丰
t.iu.ir	du.ung 191	g.iu ₂ .ung p.ung go.n	t.em.l.ge.y	zhung sh.ng	160.ai
tʰjuir	tuuɲ ...	kjuɲ pʰuɲ kon	tʰem-elke-ei	zuɲ ʃiɲ suu-te	...-ai
tʰjuir	?	<i>gongfengguan</i>	confer-CAUS-CVB.AI	<i>rongchengsi-</i> DAT	?

全 并 凡 火	又 万 文	中 考 火	丑 丑 冬	丰	穴
s.iang g.ung	GREAT y.ie.ra.u	l.iau.118	qa.ha.as	ai	nai
sjaɲ kuɲ	... jerau	ljau-...	qʰaqaas	ai	nai
minister	Taiping	red-AGM.F	tiger	year	First

艾	丁	忝	𠂔 矢	𠂔	𠂔 𠂔
sair	juri	is	ñair.de	abad	sui.eñ
sair	ʃuri	is	ɲair-te	apat	suj-eɲ
month	twenty	nine	day-DAT	self	be.born- VN.AR.F
𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔 𠂔		
sh.ia	ui.il	mo.110.en	l.ge.er		
ʃa	uiil	mo...en	elkeer		
good	deed	?	?		

Line 25-1/41

𠂔 𠂔	𠂔	𠂔 𠂔	𠂔
48.𠂔	227	dai.or	146
...	...	taior	...
?	?	?	NEG
𠂔 𠂔	𠂔 𠂔 𠂔 𠂔	𠂔 𠂔	𠂔
an.i	a.am.ñ.er	p.291	227
ani	aamijer	p ^h ...	...
?	?	?	?
𠂔 𠂔	𠂔 𠂔 𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔
k.em	dai.ondo.l.ir ₂	b.as	y.eu.ji
k ^h em	taj-onto-lir	pas	jeu-ʃi
edict	hear-?-VN.LIR.M	also	go-CVB.CI
𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔 𠂔 𠂔	𠂔 𠂔 𠂔
u.ur	g.ing.en	liu sh.ou	p.o.oi ₃
uur	ging-en	liu fou	po-oi

upper	capital	<i>liushou</i>	be-CVB.AI
‘...again going [after having] heard the edict (lit. again going in the quality of having heard the edict), he was Liushou of the Upper Capital, and...’			
九 化	火 央 化 公 万	令 乃 本	金 和 令 余 又 关 和 火
g.ri	x.ui.ri.ge.y	t.am.ar	em.en t.ho ₂ sh.i.en ui
kiri	xuiri-ke-ei	t ^h amar	em-en t ^h oq ʃi-en ui
?	reach- CAUS- CVB.AI	?	place- GEN governor.general- GEN matter

屋 及 弱 矢	及 亦	火 平 又 关	今 金 比	列 咄 忝 中 立 丰	弱 和
KNOW.u.ji.de	o.oi ₂	x.ul.ir ₂ .i	s.em.el	q.üen.is.l.ha.ai	ji.en
...-utʃi-te	o-oi	xuliri	semel	xyenisalqaai	ʃien
know-VN.UCI-DAT	become- CVB.AI	?	illness	?	during

Diligu

火	今 分 中 立 力 本	火 央 又	无 卡 升 火	又 只
HEAVEN	ú.dû.l.ha.a.ar	dau.ur ₂ .ir ₂	tau.su.o ₂ .ui	sh.û
...	utu-lqa-ar	tauur-ir	t ^h ausuo-ui	ʃu
heaven	be.peaceful- AUG-VN.AR.M	middle-ADJZ	pass-CVB.AI	Shu
九 火	杰		及 央 中 公	
g.ui	ong	227	u.ur ₂ .l.er	
Kui	onj	...	uur-l-er	
Kingdom	prince	?	before-DENV- VN.AR.M	

‘As the middle of the Chongxi period (1032-1055) was passing, he (...) advanced to Prince of the Shu Kingdom.’

Diligu 3-20/28

令 大	𠂔 为 出	𠂔 安 𠂔	几 卡	𠂔 火	𠂔 几 𠂔
t.ud ₂	SEAL.a.añ	dau.ur ₂ .ir ₂	ku.us	u.ui	c.g.en
t ^h ut	...-ap	tauur-ir	k ^h uus	u-ui	t ^h iken
serenity	ritual- VN.AR.F	middle-ADJZ	strength	give-CVB.AI	left

𠂔 化	𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 各 𠂔	𠂔 𠂔 𠂔 𠂔 𠂔
u.ur	p.i	is.ir ₂ .i	s.eng.un	p.o.ondo.l.ir ₂
uur	pi	isiri	segun	p ^h onto-lir
division	<i>pi</i>	<i>isiri</i>	field.marshal	become- VN.LIR.M

‘When he offered service (lit. he started offering service) in the middle of the Baoning period (969-979), he was made to become *Pi Isir* Field Marshal of the Left Division.’

Diligu 6-11/21

几 卡	𠂔 𠂔	𠂔	𠂔 𠂔
ku.us	u.ur ₂		o.o _{i2}
k ^h uus	u-ur	...	o-oi
strength	give-VN1.AR	NEG	be-CVB.AI

𠂔 𠂔	𠂔	𠂔 𠂔	𠂔 𠂔 𠂔 𠂔
eu.úr	THIRTY	is.de	t.ge.l.ir ₂
eur	...	is-te	t ^h eke-lir
age	thirty	nine-DAT	die-VN3.LIR.M

‘He died at the age of thirty-nine without offering service (lit. without being offering service).’

Diligu 6-31/38

天	令 火	丰 令 谷	小	及 化	分 及 丹 及 戈 火
HEAVEN	t.ud	ai.s.er	der	u.ur	pu.u b.u sh.iú
...	t ^h ut	ai-s-er	ter	uur	p ^h u pu fu
heaven	serenity	year-PL-INS	south	division	deputy.administrator

天	为	天	凡 安 和	用 中	丕 北
HEAVEN	REGION.a	HEAVEN	g.ur ₂ .en	il.bir	tai sī
...	...a	...	kur-en	ilpir	t ^h ai suu
heaven	region	heaven	empire-GEN	tribal.judge	tai si

丕 分 及	令 金 中 谷	令 旁	凡 用 和	旁 火	丕 及 全
	万				
tai pu.u	t.em.l.ge.y	t.ilt	g.ing.en	tu.ung tz	p.o.or
t ^h ai p ^h u	t ^h em-elke-ei	t ^h ilt ^h	kiŋ-en	t ^h uŋ tsuu	p ^h o-or
tai fu	sign-CAUS- CVB.AI	south	capital-GEN	tong zi	become-VN.AR.M

‘During the years of Tonghe period, after he was appointed to Deputy Administrator of the Southern Division, Tribal Judge of the Celestial Empire, Tai Si, and Tai Fu, he became Tong Zi of the Southern Capital.’

Diligu 7-27/37, 8-1/21

Dilu

Line 7-1/23

全 文 考 丕 安 和	雨 弱	关	为 丰	戈 及 北	全 九 矢
s.ie.en ₂ p.ung ₂ .en	cau.ji	232.i	a.ai	sh.o.or ₂	s.um.de
sjen p ^h uŋ-en	t ^h auŋ ^h i	...i	a-ai	foor	sum-te
xian feng	army	?	be-CVB.AI	?	arrow-DAT

公 及 子 丕 丰	旁 安 中
n.o.ol.ha.ai	tu.ur ₂ .bir
no-olqa-ai	t ^h uur-pir
hit-CAUS-CVB1	die-VN.PIR.M

Line 21-1/22

九 火 关 令 万	和 土 女	令 欠 又 关	丹 冬	万 土 弱
g.ui.i t.y	ci.eu.un	t.qo sh.i	b.as	y.eu.ji
gui tei	tʰeu-un	tʰok ʃi	pas	jeu-tʃi
Gui De	prefecture- GEN	governor.general	also	go-CVB.CI

又 及	山 火	令 欠 又 关	及 雨
m.o	ɲugu°.un	t.qo sh.i	o.oñ
mo	ñuku-un	tʰok ʃi	o-oɲ
elder.M	gold-GEN	governor.general	become-VN.AR.F

‘... he went also [to the position of] Governor-General of Guide prefecture, and then became Senior Golden Governor-General.’

Dilu 21-1/12

Gaoshi

又	令 考 分	兆 利	采 关	九 炎 和	才
GREAT	t.iau.du ₃	xu.177	kid.i	g.ur ₂ .en	ia
...	tʰjautu	xu...	kʰit-i	gur-en	ia
great.F	?	Liao	Khitan-ADJZ	empire-GEN	elder.brother

万 火	州 欠	丰 和	今 雨	杰 不	曲 冬 和
101.un	oñi.qo	ai.en	s.in	ong:on	go.er.en
...-un	oɲi-k	aj-en	sin	oɲg-on	koer-en
younger.brother- GEN	young- AGM.M	father-GEN	Qin	prince-GEN	house-GEN

九 炎 圣	万 火 又 火 中 雨	火 丰 九 火 九 火 杰
g.ie.im	ju.ung sh.iu ₂ l.ing	x.ai g.ui g.ung ong
kjeim	tʃuɲ ʃu liɲ	ɣai kui kuɲ oɲ
jointly	secretariat.director	dynasty.founding.duke.prince

伏 和	公 存 矢	五 凡 当	扎 中 丹 伏	杂 泰 比
ñ.en	n.ra.de	WRITE.g.eñ	or ₂ .l.b.ñ	ci.ge.el
jen	nera-te	...g-eɲ	orle-biɲ	ʃĩ-ge-el
jen	tomb-DAT	write-VN.AR.F	begin-VN.PIR.F	make-CAUS- CVB.AL

‘Having a preface made to the epitaph (lit. the text on the tomb) for the jointly Secretariat Director and Dynasty Founding Duke Prince jen of the Household of the Younger Brothers of the Great ... Liao Khitan Empire, ... ’

Gaoshi 1-1/25

Line 15-1/29

口	丰	中 关 雨	凡 央 伏	凡 及 女	及 米 及 女
323	ai	l.i.in	g.ui.ñ	g.u.un	o.udu.u.un
...	ai	lin	kui-ɲ	kuun	outu-un
DEM.DIST	year	Lin	Gui-ADJZ	jade	palace-GEN

雨 安	杂 [] 当	杂 冬 为 火	为 立 方	及 米 及 化	雨 弱
cau.ur ₂	ci.[]eñ	ci.as.a.iu ₂	a.ha.al	o.udu.u.ur.en	cau.ji
ʃ ^h auur	ʃ ^h i...eɲ	ʃ ^h asa-ju	a-qa-al	outu-ur-en	ʃ ^h auʃĩ
war	second?	clan.chief- AGM.F	be-CAUS- CVB4	palace-INS- PX3	army

五 卒	穴 谷	为 安	居 谷	为 出	困 中 丹 伏
hur ₂ .u ₂	nai.d	101.ur ₂	KNOW.er	a.añ	abad.l.b.ñ
quru	nai-t	...ur	...-er	a-aɲ	apat-la-piɲ
commander	chief-PL	together	know- VN.AR.M	be-VN.AR.F	self-DENV- VN2.PIR

尔 尔	叔 比 谷 万	六 丰	今 将 凡 亦	关 化	令 金 中 谷 万
ci.er	k.ii.ge ₂ .y	da ₂ .ai	s.iang g.ün	i.ri	t.em.l.ge.y
ʃ ^h i-er	k ^h el-ke-ei	tai	siaŋ kyn	iri	t ^h em-elke-ei
make- VN.AR.M	say-CAUS- CVB.AI	grand	general	title	mark-CAUS- CVB.AI

‘That year (Chongxi 13, 1044 CE) , becoming (lit. being made to be at) Second Clan Chief in the war of the Jade Palace of Lin Gui, he is said to have fulfilled being Joint Administrator of the Campaign Commanders’ Chiefs at that palace, and then he was appointed the title of Grand General, ...’

Gaoshi 15-7/29, 16-1/2

Gu

尔 央	乂 交 秀 伏	丕 乂 关 雨	丹 力 关	丹 力
au ₂ .ui	sh.ie.en ₂ .ñ	tai sh.i.in	b.aq.i	b.aq
auui	ʃeeniñ	tai ʃĩ-in	baq-i	baq ^h
madame	ʃeeniŋ	grand.preceptor- GEN	child-ADJZ	baq ^h
又 令 丙 刃	屏	丰	无	艾
GREAT t.iu.ir	dil	ai	tau	sair
... tiuir	dil	ai	tau	sair
Dakang	seven.F	year	five.F	month
宅	丕	丹 矢	佃 当	
TEN	ñeim	ñair	sui.eñ	
...	peim	pnair	suj-eŋ	
ten.F	eight.F	day	bear-VN.AR.F	

‘The Madame was the youngest child of the Grand Preceptor ʃeeniŋ. She was born on the eighteenth day of the fifth month of the seventh year of the Dakang period (1075-1085).’

Gu 6-34/36, 7-1/13

令 用 欠 伏	伞 将 几 亦	券	引 化 欠 丿	丰 空	舟 列 出
t.il.uh.ñ	z.iang g.ün	e	ja.ri.qo.on	ai.d	b.h.añ
t ^h ilukip	tsjaŋ kyn	e	ʃariq-on	ai-t	paq-aŋ
T ^h ilukip	general	this	prime.minister- GEN	male-PL	child-PL
约 构	列 化 芬	又 伞 分 升	宅	丰	去 安
		及 内			
ji ₃ .en	h.ur.er	GREAT	TEN	ai	eu.ur ₂
		u ₂ .du ₃ .o ₂ .o.oñ			
ʃen	qur-er	... utuo-oŋ	...	ai	euur
among	three- ORD.M	Da'an	ten.F	year	age
𠂇	无 矢	几 卡	尺 安	及 奈	
THIRTY	tau.de	ku.us	u ₃ .ur ₂	o.o _{i2}	
...	t ^h au-te	k ^h uus	u-ur	o-o _i	
thirty	five-DAT	effort	give-VN.AR.M	become- CVB.AI	
尺 及 伞 出	非 朱	来 考 央 关	吴 关	开 为 东 芬	女
dau.u	po.do	ci.iau.118.i	qid.i	REGION.a.ad.er	
z.ung ₂ .un					
tau tsuŋ-un	p ^h o-to	ʃ ^h au-...-i	k ^h it-i	...a-at-er	
Daozong- GEN	time-DAT	Zhao- AGM.F- ADJZ	Khitan- ADJZ	border-PL-INS	
立	来 来	火 利	又 雨 伏 芬	引 立 丰 中 立 为 方	
WRITE	ci.ci	ui.en	m.in.ñ.er	ja.ha.ai.l.ha.a.al	
...	ʃ ^h i-ʃ ^h i	uj-en	min-ij-er	ʃaqa-ailqa-al	
record	make-	matter-GEN	reign-PL-	indicate-CAUS-CVB.AL	

‘The General T^hilukij was the third among this Prime Minister’s sons. Having begun offering service in the tenth year of the Da’an period at the age of thirty-five, he was indicated by the Emperors (to) the Affair of Record Writer at the borders between the Song and the Khitan during the time of Daozong.’

Gu 9-14/32, 10-1/11

天 个 卡 中	无	个 考 夫	圣 为	丰	屯
泰 泰					
HEAVEN	tau	s.iau.118	im.a	ai	dur
pu.su.l.ge.er					
... p ^h usu-lke-	t ^h au	sjau-...	ima	ai	tur
er					
Tianqing	five.F	blue-AGM.F	goat	year	four.F
艾	禾	失 列	北 中 丹 伏	宅	
sair	siu	216.h	or ₂ .l.b.ñ	TEN	
sair	sju	...q	orle-pij	...	
month	white.F	rat	begin-VN.PIR.F	ten.F	
山	令 力 为	天		才 么 丰	
ñugu	t.aq.a	ñair		ia.ia ₂ .ai	
juku	taq ^h a	jair		iajaai	
yellow.F	rooster	day		uncles	
丹 力	令 丰 关 凡	安 关	又 交 万	泰 泰	
iun.aq	t.ai.i du ₂	ng.i	x.ie.201	ci.er	
iunaq ^h	t ^h ai tu	ŋi	xje...	ŋ ^h i-er	
child	grand.preceptor	ŋi	Xie...	make-	
				VN.AR.M	

In the tenth day, yellow rooster, from the beginning of the fourth month, white rat, of the fifth year, blue goat, of the Tianqing period, the Young Grand Preceptor of the Uncles, pi Xie..., made.

Gu 25-1/22

Han Dilie

令化芬	火同伏	万央九	令丰关 来	业安今	巧	来芬
		芬	安 今 将			
t.ur.er	x.ing.ñ	y.au g.e	t.ai.i ci.ng s.iang	p.ur ₂ .s	146	ci.er
t ^h ur-er	xinjn	jau ke	t ^h ai t ^h ing sjang	p ^h ur-s	...	t ^h i-er
four-ORD.M	Xinjn	Jau Ke	grand prime.minister	child-PL	NEG	make- VN.AR.M
‘The fourth [son] was the Grand Prime Minister Xinjn. He had (lit. made) no children.’						
Han Dilie 4-31/40						

Hongyong

又 今 为	无	丰	仑	艾	至
GREAT s.en	tau	ai	TEN	sair	ñeim
... isen	t ^h au	ai	...	sair	jeim
Shouchang	five.F	year	ten.F	month	eight.F
丹 矢	土 亥	了	无 矢	今 金 比	令 谷 当
				芬	
ñair.de	eu.ur ₂	FORTY	tau.de	s.em.ii.er	t.ge.eñ
jair-te	euur	...	t ^h au-te	semii-er	T ^h eke-ej
day-DAT	age	forty	five.F- DAT	illness- INS	die-VN.AR.F
‘She died of illness (lit. through illness) on the eighth day of the ten month of the fifth year of Shouchang period (1095-1101), at the age of forty-five.’					
Hongyong 14-13/25					

Hudujin

𠂇	𠂇 公	令 𠂇 𠂇	𠂇 𠂇 𠂇	𠂇 𠂇 𠂇	𠂇 𠂇
ai	mo.n	t.ge ₂ .eñ	or ₂ .a.an	101.du ₂ .i	s.al ₂
ai	mo-n	teke-eñ	oraan	...-tui	sal
father	mother-GEN	die-VN.AR.F	after	younger.brot her-ABL	separated
𠂇 𠂇 𠂇 𠂇	𠂇 𠂇	𠂇 𠂇	𠂇 𠂇 𠂇	𠂇 𠂇 𠂇 𠂇	𠂇 𠂇 𠂇
p.o.ol.ir ₂	p.in	go.er	û.ul.g.er	au.o.or ₂	
p ^h ol-ir	p ^h in	koer	u-lek-er	aw-or	
become-VN.IR.M	household	house	give- VN.LAQ1-INS	take-VN.AR.M	

‘After the death of his parents, he separated from his younger brother (lit. he became separated with his younger brother). He took households in gift.’

Hudujin 23-6/16

Huilian

𠂇 𠂇 𠂇	𠂇 𠂇	𠂇 𠂇
ia.LUCK.ñ	tir.bir	tai shi
ia...ñ	tir-pir	tai fī
Ia...ñ	Tir-VN.PIR.M	grand.preceptor

‘... the Grand Preceptor Ia...ñ Tirbir.’

Huilian 4-1/4

𠂇 𠂇	𠂇 𠂇	𠂇 𠂇 𠂇	𠂇 𠂇	𠂇 𠂇
em.en	ku.us	û.e.ci	ai.s	ci.er
em-en	k ^h uus	u-eŋ ^h i	ai-s	ŋ ^h i-er
place-PX3	strength	give-CVB.CI	year-PL	make-VN.AR.M

‘... he offered service for his own land, and they wrote those years.’

Huilian 9-26/30

Jue

公 存 矢	五 凡 当	北 中 符 伏	杂 答 北
n.ar.de	WRITE.g.eñ	or ₂ .l.b.ñ	ci.ge.el
nar-te	...k-en	orle-pij	ʃi-ke-el
tomb-DAT	record-VN.F	begin-VN.PIR.F	make-AUG- CVB.AL

‘... epitaph. The preface was made.’

Jue 1-19/23

北 列	奚 奚 关	奚 及	杂 关 奚 空 符 奚	奚 及
xu.177	kid.ir ₂ .i	m.o	ci.i.is.d.b.ir ₂	m.o
xu...	k ^{hit} -ir-i	mo	ʃ ^h is-te-pir	mo
Liao	Khitan-ADJZ- ADJZ	great.M	blood-DENV- VN.PIR.M	great.M
北 乃 州	弱 当 火		杂 各 火	叔 北 凡
078.am.oñi	ji.eñ iu ₂		c.eng.un	k.el.g
<078>amoni	ʃeɲ ju		ʃeɲun	k ^h el-k
?	ʃeɲ Ju		<i>changwen</i> ¹⁰¹	say-VN.Q

‘He is known as the Liao Khitan Great Filial Great (...) Changwen.’

Jue 1-27/29, 2-1/10

火 矢 凡 伏	虫 列	虫 虫 火
x.de.g.ñ	har.h	qa.ha.an
xetekij	q ^h ara-q	q ^h aq-an
Xetekij ¹⁰²	Q ^h araq	khagan.OBL-GEN

¹⁰¹ 敕稳 *chǎngwěn* ‘*changwen*, an official title of unclear interpretation’ EM tɕ^han̚ʔ-un̚ʔ LMC tɕ^hian̚ʔ-ʔun̚ʔ.

¹⁰² Xedegin Xaraɣ Khaghan was the ninth Yaonian *khaghan*. He belonged to the Jarud clan of the Xaryai sub-tribe. He was the elder brother of Liao Xuanzu (father of Liao Dezu), and uncle of Liao Taizu, founder of the Liao State. His

又	又 雨	万 土 化 泰 万
ir ₂	m.in	y.eu.ur.ge ₂ .y
ir	min	jeuur-ke-ei
?	reign	turn-CAUS-CVB.AI

‘... the ... reign of Xetekip Q^haraq Khaghan ended (lit. ‘turned’), and...’

Jue 2-34/39

灰 谷	公 尔 和	生 丰	巧 及 雨	谷 用 久	和 各 女
SIX.er	n.on.en	ab ai	do ₂ .o.oñ	d.il.uh	ci.eng.un
...-er	non-en	ap ai	toon	tiluk	ʃ ^h enjun
six.F-VN.AR.M	generation-GEN	grandfather	Toon	Tiluk	<i>Changwen</i>

又 及	丰 和	和 各 女	止 及 雨 中 又
m.o	ai.en	ci.eng.un	p.o.ondo.l.ir ₂
mo	aj-en	ʃ ^h enjun	p ^h onto-lir
great.M	father-GEN	<i>changwen</i>	become-VN.LIR.M

‘[His] ancestor of six generation was the Changwen Duowo Dilu. He was made to be Changwen of the First Patriarchal Houshold.’

Yelü Jue 3-39/49

令 尔 及 扎	公 尔 和	生 丰	列 圣 列	戈 为 夫
t.ad.o.or	n.on.en	ab ai	h.im.h	sh.a.ri ₂
t ^h a-toor	non-en	ap ai	ximix	ʃari
five-ORD2.M	generation-GEN	grandfather	Ximix	court.attendant

name in Chinese transcription was 痕得 *Héndé*, EM xən-təj̃, LMC xhən-təǎk.

仇 卡	𠂔	𠂔 𠂔
ku ₂ .us	146	û.er
k ^h uus	...	u-er
strength	NEG	give-VN.AR.M

‘[His] ancestor of fifth generation was the Court Attendant Xemeḡ. He did not offer service.’

Yelü Jue 3-50/56, 4-1/2

令 化 𠂔	𠂔 𠂔	𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔 𠂔 𠂔
t.ur.er	ab ai	kus.a	xe.il	sh.ha.or ₂	318.na.ra.l.de
t ^h ur-er	ap ai	k ^h usa	xeil	ṣaqor	...naralte
four-ORD.M	grandfather	K ^h usa	Xeil	chosen.envoy	?

𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔 𠂔
eu.ul	cau.úr	sh.ha.or ₂	a.ai	d.iá.iú	on.l.ir ₂
eul	ṭ ^h aur	ṣaqor	a-ai	tja-ju	on-lir
cloud	army	...	be-CVB.AI	enemy- AGM.F	fall-VN.LIR.M

‘The ancestor of fourth generation was the Chosen Envoy Kusa Xeil. While he was Chosen Envoy of the ... Cloud Army, he fell under the enemy.’

Jue 4-3/16

𠂔 𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 𠂔 𠂔
h.od.er	n.on.en	ab ai	cu.ñ	s.a.am	sh.i.ju
qo-ter	non-en	ap ai	ṭ ^h up	s.a.am	ṣi ṭu
three-ORD.M	generation- GEN	grandfather	ṭup	sam	chamberlain

爻 当	与 爻 火	爻 关 弓	止 及 用 中 爻
ir ₂ .ep	ep ₂ .u.ui	sh.i ju	p.o.ondo.l.ir ₂
irep	epuui	ʃi ʃu	p ^h onto-lir
?	household	chamberlain	become-VN3.M

‘The ancestor of third generation was the Chamberlain ʃuŋ Sam. He was made to be Chamberlain of ... household.’

Jue 4-17/29

生 中	列 艾 爻 杏	火 丹 爻	今 爻 火	令 杏 万
ab ai	h.ash.u.uñ	da ₂ .al ₂ .er	pu sh.iu ₂	t.ge.y
ap ai	qaʃuup	tal-er	p ^h u ʃu	teke-ei
grandfather	Qaʃuup	Taler	deputy.administrator	die-CVB.AI

令 金 中 杏 当	关 化	化 今 将	凡 用 今 当	爻 安 今 当
t.em.l.ge.eñ	i.ri	shǐ s.iang	g.ing s.ung ₂	sh.ng s.ung ₂
tem-elke-ep	iri	ʃi sjaŋ	kiŋsuŋ	ʃiŋsuŋ
confer-CAUS-VN.AR.F	name	governor	Jingzong	Shengzong

圣	杰 杰 尔 爻	仇 卡	尺 爻
jur	qa.ha.ad.er	ku ₂ .us	u ₃ .er
ʃur	q ^h aq-at-er	k ^h uus	u-er
two.F	khagan.OBL-PL-INS	strength	give-VN.AR.M

丞	又	关 化 矢	及 子 伏
035	GREAT	i.ri.de	o.ol.ñ
...	...	iri-te	o-oljñ
?	great.F	name-DAT	become-VN.AL.F

‘[His] grandfather was the Deputy Administrator Hu.TENT.u.uni Diler. The title conferred [to him] after he had died, was Military Governor. He offered service for the two emperors Jingzong and Shengzong. He reached the title (lit. he became to the title) of ... Great.’

Yelü Jue 4-30/52

全 哥 九 太 女	丹 列 出	丞	又 及	中 丙 伏	今 全 为	公 及
s.iang g.ung.un	b.h.añ	jur ^o	m.o	l.iu.ñ	pu s.a	n.u
sjaŋ kuŋ-un	baq-aŋ	ʃfur	mo	ljujñ	p ^h usa	nu
chancellor-GEN	child.OBL-PL	two.M	great	Ljujñ	P ^h usa	Nu

们 九 才 圣	比 为 央	来 各 女	司 忝 矢	又 央 化 全 比	无 卡 升 央
du g.ia.im	or ₂ .a.an	ci.eng.un	bai.is.de	x.ui.ri.s.el	tau.su.o ₂ .ui
tu kjaim	oraan	ʃ ^h enjun	paiss-te	xuiri-sel	t ^h auswo-ui
chief.supervisor	after	<i>changwen</i>	position-DAT	arrive- CVB.SEL	advance- CVB.AI

令 金 中 泰 当	关 化	圣 化 由	令 欠 又 关
t.em.l.ge.eñ	i.ri	xe.ri.320	t.qo sh.i
t ^h em-elke-eŋ	iri	xeri<320>	t ^h ok ʃi
confer-CAUS-VN.AR.F	name	?	regional.governor

‘The sons of the Chancellor were two. The elder one was the Chief Supervisor Liuin Pusa Nu. Later, the title conferred [to him] after he reached the position of Changwen, was ... regional governor.’

Yelü Jue 5-20/40

𠬞 安 全 𠬞	主 王 雨	非 朱	𠬞 力 杰 𠬞	𠬞 列 出
sh.ng s.ung ₂	hong.di.in	po.do	sh.a.ri ₂ .d	b.h.añ
ʃiŋsuŋ	χoŋti-in	p ^h o-to	ʃari-t	paq-aŋ
Shengzong	emperor-GEN	time-DAT	court.attendant-PL	child.OBL-PL

𠬞 𠬞	𠬞 𠬞	亦	全 用 𠬞	𠬞 用 𠬞 𠬞	𠬞 𠬞 用 𠬞 𠬞
ji.en	a.ai	ün	s.ing.en	b.ing m.a	p.o.ondo.l.ir ₂
ʃen	a-ai	yn	siŋ-en	piŋma	p ^h onto-lir
both	be-CVB.AI	Yn	Siŋ-GEN	soldier	become-VN.LIR.M

‘At the times of Emperor Shengzong [the two sons of Chancellor Qaʃuun Taler] were both Young Court Attendants, he became soldier of (...).’

Yelü Jue 5-40/52, cf. W 268

c.eng.un	l.iu.ñ	tai shī.en	m.as.qu	b.qo	ca.203
ʃeŋun	ljuin	tai ʃi-en	mas-gu	boqo	ʃa<203>
<i>changwen</i>	Ljuin	grand.preceptor-GEN ¹⁰³	elder-ADJVZ.M	child	?

n.ad.bú.en	t.il.én	s.ên.c	qa.ha.an	EIGHT.ri.er	n.on.en	ku
nadbu-en	tilen	sjentʃi	qag-an	<EIGHT>-ri-er	non-en	ku
lineage	Tilen	Sjentʃi	khagan.OBL-GEN	eight-ORD-ADJVZ.M	generation-GEN	person

deu	ór.l.b.ñ	c.iú fen	tai ui ^o	go.n ca.an	i.ri
deu	orle-bin	Tʃu Fen	tai ui	gon ʃa-an	iri
deu	Orlebin	?	grand.comm andant ¹⁰⁴	supervisor- GEN ¹⁰⁵	title

¹⁰³ <tai shī> is the Khitan transcription of the Chinese title 太師 *tàishī* ‘grand preceptor’ EM t^haj`-ʃr LMC t<sup>h</sup>aj`-ʃr.

¹⁰⁴ <tai ui^o> is the Khitan transcription of the Chinese title 太尉 *tàiwèi* ‘grand commandant’ (WJ 85) EM t^haj`-uj` LMC t^haj`-ʔyj`.

¹⁰⁵ WJ 98

t.em.l.ge ₂ .y	m.o	ai.en	du g.ia.êm	a.ai	c.er
tem-elge-ei	mo	ai-en	du gjem	a-ai	ŋ̊ier
confer-CAUS-CVB1	great.M	father-GEN	chief.supervi sor	be-CVB1	

‘The Field Marshal was the eldest child of the Grand Preceptor Ljuin. He was a descendant of eighth generation of Tilen Sjienc Khaghan. His younger brother was the Grand Commandant Orelbin Tŋu Fen. After having being conferred the title of supervisor, he was chief supervisor of the Elder Brothers (the lineage of Njamugu), ...’

June 7-24/53, cf. W 267

ih ta.ang	tai shĩ	l.iu	sh.ĩ g.ung	c.iú.un	b.qo	dil ^o
i tan	tai ʃĩ	Lju	ʃĩ guŋ	ʃu-un	boqo	Dil.M
	grand.preceptor	Lju	chamberlain-GEN ¹⁰⁶	child		Dil ¹⁰⁷
sh.ĩ c.eu.ung	t.l.b.e ₂	pu.is.ñ	jur.en	c.ur.én	b.qo	au
ʃĩ tʃeuŋ	Telbe	puisin	dʒur-en	dʒur-en	boqo	au
chamberlain	Telbe	lady ¹⁰⁸	two.F- GEN ¹⁰⁹	two- ADJVZ.F	child	Au

¹⁰⁶ After introducing the tomb owner and his brother, the author goes back to the above-mentioned uncle, in order to introduce other relatives. Perhaps as a matter of style, it is quite common in KSS texts that the same person is referred to in different ways. For instance, the same name may be written with different graphs, or different names and titles are chosen out of the full name – that is usually given at the first mention. As we have seen above, the uncle’s full name was Shizhong Sin Gau Lju, out of which Gau Lju is the childhood name, Sin the style, and Shizhong the official title. The second time, as he has been already introduced, his name is shortened into Shizhong Sin, leaving out the childhood name. The third time, he is called Shigongzhu Lju. The style is left out, while half of the childhood name is retained. Furthermore, the title is modified. Shigongzhu could be the a different way of writing Shizhong. In W 267, he is perhaps seen as a new person; Lju is glossed 劉, whereas before it was glossed 六, Shi is glossed 十 for 侍. On the contrary, I think they are two ways of naming the same person. It would not make sense to introduce a new person and his son without explaining what kind of the relation they had with the tomb owner. So it must be the repetition of a formerly mentioned relative.

¹⁰⁷ Lit. ‘Seven’.

¹⁰⁸ <pu.is.ñ> is a Chinese loanword from 夫人 *fūrén* ‘lady’ EM fu-rin’ LMC ʃyǎ/fuǎ-rin (cf. K 104, WJ 52). This words gives us important clues about Khitan phonology. Khitan has no /f/ and replaces it with /p/, and has no /z/ (the actual phonetic value of ‘r’, retroflex fricative) so that it replaces it with /s/. the absence of the labiodental fricative /f/ is a common phenomenon in Mongolic and Turkic languages, both ancient and modern. Generally loanwords that enter in these languages substitute original f’s with p’s.

¹⁰⁹ Note that the coordination structure for nouns made by enlisting nouns followed by the numeral corresponding to their quantity is common in Mongolic languages.

pu sh.iú	s.iang g.ung	a.am.ñ	c.i.is.er	x.zu.ge2.y	au.l.ir2
pu fu	sjaŋguŋ	amin	ʃĩs-er	xesu-ge-ei	au-lir
deputy.administrator	chancellor	?	blood-INS	piece-CAUS- CVB1	take- VN3.M ¹¹⁰

‘The child of the Chamberlain Liushi was Dil. The second child [daughter] of Chamberlain Shi and Lady Telbe was Au. She separated from the lineage of [her grandfather] Deputy Administrator Chancellor¹¹¹, when she was married.’

Yelü Jue 8-17/42, W 267

方	全 关 伏	凡 马 太 火	又 冬 余	丹 力
101	s.i.ñ	shi ju.ung.un	m.as.qu	b.qo
...	siŋ	ʃiʃuŋ-un	mas-ku	baq ^h
younger.brother	Siŋ	chamberlain-GEN	eldest-ADJVZ.M	child

斥	中 用 凡 太 火	又 为 夫	为 出
dil°	l.ing g.ung.un	sh.a.ri2	a.añ
Til	liŋkuŋ-un	ʃari	a-aŋ
Til	lord	court.attendant	be-VN1.F

力 冬 全 比	相 秀 太	丹 列 出	包
na.as.s.ii	sui.e2.ci	b.h.añ	hur3
naas-sii	sui-eʃ ^{hi} i	boq-aŋ	qur
move-CVB2	bear-CVB3	child.OBL-PL	three.F

‘After the eldest son of his younger brother Chamberlain Siŋ, Lord Dil became Court Attendant, he generated, and his children were three.’

Jue 10-6/18

na.as.s.ii	BORN.e2.c	b.hu.án	hur	GREAT	am hu.a
nas-sii	<BORN>-eʃ	bog-an	gur	<GREAT>	am qa

¹¹⁰ *Aulun* ‘[someone] married [her]’ is masculine because its subject – who has married Au – is omitted.

¹¹¹ Au is the cousin of the tomb owner. Their common grandfather was the abovementioned Deputy Administrator <hu.TENT.u.uni Diler>, that at the second mention (5-20/21) is called Chancellor.

move-CVB	be.born-PTCP	child.OBL.PL	three	great.F	Am Qa
aú.ui bú.d	na.án.er.en		ja.ri.gú.on	ia deu.un	xe.il
auui bu-d	naa-ner-en		dʒarigu-on	ia deu-n	keil
lady	other-PL	maternal.relative-PL- GEN ¹¹²	prime.minister- GEN ¹¹³	brothers-GEN	Keil
sh.a.rí.de			u.ul.ge.én ¹¹⁴		
ʃari-de			u-ulge-en		
court.attendant-DAT			give-CAUS-PST.F		

‘After he moved, [his] born children were three. The eldest child was Lady Am Qa. She was given [in marriage] to Court Attendant Keil [, one] of the brothers of the Prime Minister of the Other Maternal Relatives.’ Or ‘After he moved, he generated, and [his] children were three. [...]’

Yelü Jue 10-17/32

¹¹² *Bud na'aner* (more often *bud nayaner*) was the Khitan name of the 萧Xiao clan. They were called “the other maternal relatives” because were the other imperial clan (as opposite to the Yelü clan), namely the clan of empresses, hence maternal.

¹¹³ “Ji Shi translated [...] <ja.ri.qó> as ‘prime minister 宰相’ [zǎixiàng]” (K 52).

¹¹⁴ The verb ‘to give’ is more generally written <û.>.

c.ur.én	zu.g.e	aú.ui	b.al	a.ai	iu
ʃur-en	suge	auui	bal	a-ai	iu
two-GEN	Suge	Lady	young ¹¹⁵	be-CVB ¹¹⁶	NEG
‘The second child was Lady Suge. She died when she was a young girl.’					
Yelü Jue 10-33/38					

口	非朱	来尔	丙尔	几	丹力矢	令生方
						立本
323	po.do	ci.ad	mo.er	ku	b.aq.de	t.ab.al.ha.ci
...	p ^h o-to	ʃ ^h at	moer	k ^h u	paq ^h -te	t ^h apa-lqa- ʃ ^h i
DEM.DIST	time-DAT	?	way	person	child-DAT	bury-CAUS- CVB.CI ¹¹⁷

	来关泰空丹伏	丙尔	秀坐伏	比及弱	叔坐尔
	ci.i.is.d.b.ñ	mo.er	e ₂ .d ₃ .ñ	or.u.ji	k.d ₃ .er
	ʃ ^h is-te-pij	moer	etij	or-uʃi	ket-er
	Blood-DENV- VN.PIR.F	way	?	can-VN.UCI	say-VN.AR.M
	‘At that time he ¹¹⁸ said that if a person is buried by the son in ... way, you can ... the filial				

¹¹⁵ When a person is described briefly, that is without reporting titles or marriage relations, there are two frequent kinds of cases. First, the person died at a young age; the usual location is <SMALL>*gudu ewi*. Second, the person did not left any record of his/her life; the usual location is <RECORD>*g gi ʃer*; in this inscription we have seen another location, i.e. *pon gi* <RECORD>*er*. Here we have negative existential verb *iu*, so it clearly belongs to the first kind. A different location is used, i.e. *bal ai iu*. I think this sentence can be explained if we relate *bal* with OT “*bala*: originally ‘a young bird, nestling’, a meaning which seems to survive only in SW Osm.; thence, by extension, ‘the young of an animal’, and in modern times even ‘a human child’ ” (C 332). This word has entered Mongolic languages, however we have only modern attestations, like – with morphologic additions – Khal. *balčir* ‘infant [...]’ (L 80), Kalm. *balčr*, Bur. *balšar*. Even so, we cannot exclude that this word entered in from Turkic into Mongolic and Khitan in ancient times, and that it had a faster semantic development in Khitan than in other Turkic and Mongolic languages.

¹¹⁶ Oftenly, *-i* converbs seem to express a temporal relation of anteriority, instead in this case it must be ‘she died **when** she was a young girl’, thus the temporal relation is of simultaneity. This suggests that the *-i* converb is not a specialized converb, but a contextual converb. Other observations: the subject of the converbal clause is the same of the main clause; the use *-i* converb both as expressing anteriority and simultaneity, suggests that it is not coordinational, nor narrative. Of course, other evidence has to be investigated, but it is possible that *-i* converb pertains to Nedjalkov’s categories of conjunctive converbs, and contextual converbs.

¹¹⁷ The verb <t.bu.al.i> is translated 瘞 *yì* ‘to bury’ in W 44.

¹¹⁸ Apparently, the subject is the tomb owner’s younger brother, the Grand Commandant Tʃu Fen.

	way.’
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June 12-26/37, cf. W2 265

	北 为 本	天	冬 本	主 王 雨	又 雨	全 生 全 北
	or.a.ar	HEAVEN	as.ar	hong.ti.in	m.in	s.ab.s.el
	oraar	<HEAVEN>	as-ar	χon̄ti-in	min	sap-sel
	?	heaven	protect- VN.AR.M	emperor- GEN	reign	Succeed- CVB.SEL

	百 欠 天	天 凡 本	天 丹	天 及 全
	y.qo.ui	us.g.ci	tai.b	p.o.or
	joqui	usuk-ŋ ^{hi}	taibo	po-or
	once.again	letter-DENN	grand.protector	be-VN.AR.M
	‘When the Heaven Protector Emperor [translation of the <i>zunhao</i> of Daozong, 天佑 Tianyou ‘heaven protects’] had just succeeded to the throne, he once again was Grand Protector of the Scribes. Or: When the Heaven Protector Emperor succeeded to the throne, he once again became Grand Protector of the Scribes.’ ¹¹⁹			

June 16-16/25

Langjun

	天 欠 本	天 方 中 用 天	天 天 本	天 丙 天 令 天 方	天 天 全
	ta.ang.en	ki.ên l.ing.de	h.ui.ŋ	g.iu.ung t.ie.ên	y.iú.356
	tan-en	kjen liŋ-de	χui-ŋi	gjuŋ tjen	ju...
	Tang-GEN	Qianling-DAT	reach-CVB3	palace	?

	天 升 天 关	天 伏	天	天 中 列 天
	p.ó.ui.i	dau.ñ	gi ₂	or.l.hu.er
	pouii	dau-in	gi	or-lag-er
	?	see-VN4.F	NEG	can-UM1-INS

¹¹⁹ Note that the subject of the converbal clause, that is different from the subject of the main clause, is in the genitive case. Another explanation is that the subject of the converbal clause is *min* “position, throne”. In that case, the literary meaning of the clause would be “when the reign of the Heaven Protector Emperor succeeded”. Cf. the passage about the “reign of Sjenc” in this same inscription – another instance where *min* makes more sense if it is interpreted as “reign”.

	‘Since, when he arrived to the Qianling tombs of the Tang, the palace (was in ruin and ?) he could not see it...’
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Langjun 2-5/14, 3-1

Liang

凡 火 杰 丿	丹 列 出	无	列 化 公	中 丙 伏	凡 央 凡 丙
g.ui ong.on	b.h.añ	tau ^o	hu.ur.er	l.iu.ñ	g.au g.iu
kui oŋ-on	paq-aŋ	t ^h au	qur-er	ljuip	kau kju
prince-GEN	child.OBL-PL	five.M	three-ORD.M	Ljuip	Kau Kju

丕	杰	止 安 全 和	又 立 冬	关 化 全 公	达
tai	ong	p.ur2.s.en	m.ha.as	i.ir3.s.er	le
tai	oŋ	pur-s-en	maqa-s	iir-s-er	le
grand	prince	seed-PL-GEN	prince-PL	title-PL-INS	only

及 全 公	乃 全	邦 为 火	北 中 丹 伏	为 丹 中 立 中
o.or.er	am.s	REGION ^o .a.iu	or2.l.b.ñ	a.al2.l.ha.ai
o-or-er	am-s	...a-ju	orle-pip	al-alqa-ai
be-VN.AR.F-INS	border-PL	region-LOC	begin-VN.PIR.F	?-CAUS-CVB.AI

丙	凡	火 关 凡	今 泰 伏
mo	ku	x.i shī	pu.is.ñ
mo	k ^h u	xi fū	p ^h uisip
female	person	Xi fī	lady

‘The sons of the Prince were five. The third one was the Grand Prince Liuij Gau Giu. Since he had (lit. was through) positions of the Young Princes, after he was made to begin at the border regions, his wife was Lady Xi fī.’

Liang 3-11/34

丙	凡	止 及 雨 中 伏	安 及	为 艾
mo	ku	p.o.ndo.l.ñ	ur2.u	a.ash
mo	k ^h u	p ^h o-nto-lip	uru	a-aʃ
female	person	become-FIN.LIR.F	?	be-CVB.ASH

儿 仕	央 凡	央 关 秀 空 付 伏	公 及 朱	兮 空 付 伏
g.ñ ₂	au.du ₂	ci.i.is.d.b.ñ	n.o.do	SEAL.d.b.ñ
kij	au-tu	ʃ ^h is-te-pij	no-to	...-t-pij
?	elder.sister-DAT	blood-DENV-VN.PIR.F	spouse-DAT	seal-DENV-VN.PIR.F
‘She became (lit. was made to be) wife. Being ..., (while being) at (the title of) ... Madame, she was proclaimed Filial Spouse.’				

Liang 16-8/17

Nu

又	北 利	央 关	儿 央 利	央 立 央	央 凡 又
GREAT	xu.177	kid.i	g.ur ₂ .en	qa.ha.an	x.du ₂ .ir ₂
...	xu...	k ^h it-i	kur-en		xetu-ir
				q ^h aqa-an	
great.F	Liao	Khitan-ADJZ	empire-GEN	khagan.OBL-GEN	horizontal-ADJZ
曲 央	才	央 央	尺 分	央 央	
go.er	ia	101.un	dau.du ₃	ai.en	
koer	ia	...-un	tautu	aj-en	
house	elder.brother	younger.brother-GEN	middle	father-GEN	
儿 央 雨 伏	全 各 央	又 雨	央 凡 央		
g.ui.in.ñ	s.eng.un	m.in	WRITE.g.eñ		
kuiinij	sepun	min	...k-en		
Kuiinij	field.marshal	career	write-VN.AR.F		

爻 用	艮 中 舟 伏	艮 谷 北
m.ing	or ₂ .l.b.ñ	ci.ge.el
minj	orle-pij	ʃ ^h i-ke-el
poem	begin-VN.PIR.F	write-CAUS-CVB.AL
‘Having a preface (lit. a beginning) made to the poem written for our Field Marshal Guinij of the Middle Fathers of the Horizontal Tent of the Khagan of the Great Liao Khitan Empire, ...’		

Nu 1-1/18

爻	令 火	九 亥	中 全 谷	升 急 爻 雨	谷 火 半
HEAVEN	t.ud	um.ur ₂	ai.s.er	ja.ang m.in	d.un mu ₂
...	t ^h ut	umur	ai-s-er	ʃaŋ min	tun mu
heaven	harmony	before	year-PL-INS	Zhangmin	Dunmu

万 爻 考 火 用	包	九 丙 水 化 为
y.ie.en ₂ x.ing	hur ₃	g.iu.ung.ur.en
jen xing	qur	kjuŋg-ur-en
Yanqing	three.F	palace-INS-GEN
分 九 丙 水 化	刃 万 北	止 及 全
fu g.iu.ung shǐ	ir.y.el	p.o.oī ₃
fu kjuŋ ʃu	irj-el	p ^h o-oi
deputy.palace.master	come-CVB.AL	be-CVB.AI

爻	令 火	屏	中 矢	万 止 弱	万 爻 考 火 关 用
HEAVEN	t.ud	dil	ai.de	y.eu.ji	y.ie.en ₂ x.i.ing
...	t ^h ut	til	ai-te	jeu-ʃi	jen xing
heaven	harmony	seven.F	year-DAT	go-CVB.CI	Yanqing

九 丙 水 火	仃 九 丙 水 火	止 及 全
g.iu.ung.un	du g.iu.ung shi	p.o.oi ₃
kjung-un	tu kunj fi	p ^h o-oi
palace-GEN	capital.palace.master	be-CVB.AI

‘Through the first years of the Xianyong period (1065 to 1070) he came to be (lit. coming, he was) Deputy Palace Master of the three Palaces of Zhangmin, Dun Mu and Yanqing, then going into the seventh year of the Xianyong period (1071), he was Master of the Capital Palace of Yanqing Palace, and...’

Nu 12-13/31, 13-1/9

天	邦 为 央	为 安	居 及 弱 矢
HEAVEN	REGION°.a.an	101.ur ₂	KNOW.u.ji.de
...	...aan	...ur	...-ufi-te
heaven	region	together	know-VN.UCI-DAT
及 扎	口	非 朱	又 火 又 刃
o.or ₂	323	po.do	sh.iu ₂ m.ir
o-or	...	p ^h o-to	fu mir
become-VN.AR.M	that	time-DAT	secretary

为 丰	全 和	又 火 又 刃	为 丰	非
a.ar	s.en	sh.iu ₂ m.ir	a.ai	po
a-ar	isen	fu mir	a-ai	p ^h o
be-VN.AR.M	longevity	secretary	be-CVB.AI	time

‘He became Joint Administrator of the Heaven Region. At that time, he was Secretary. After being Secretary for a long time, the time ...’

Nu 14-9/23

Renxian

𠂔 化 𠂔	𠂔.𠂔.欠 伏	𠂔 艾 𠂔
ci.ur.er	𠂔.𠂔.ho2.ñ	h.ash.u
ʃ ^h ur-er	...qoŋ	qaʃu
two-ORD.M	...qoŋ	Qaʃu

𠂔 安 𠂔 𠂔	𠂔 𠂔 𠂔	𠂔 化 𠂔 𠂔	𠂔
p.ur2.s.en	m.ha.as	i.ri.s.er	le
pur-s-en	maqa-as	iri-s-er	le
descendant-PL-GEN	prince-PL?	title-PL-INS	only

𠂔 𠂔 𠂔	𠂔 𠂔 𠂔 𠂔	𠂔 𠂔	𠂔 𠂔	𠂔 𠂔	𠂔 𠂔
o.or.er	pu.u ci.ün	g.ün	ong.on	i.ir3	ci.er
o-or-er	p ^h u ʃ ^h yn	kyn	oŋ-on	iir	ʃ ^h i-er
be-VN.AR.M-INS	P ^h u ʃ ^h yn	prefecture	prince-GEN	title	make-VN.AR.M

‘The second [son] was ...kup qaʃu. Upon having only titles (lit. becoming through titles) of the Young Princes, he covered (lit. he made) the position of Prince of the Pu ʃ^hyn Prefecture.’

Renxian 6-45/58 L 693

𠂔	𠂔	𠂔	𠂔 化 𠂔	𠂔 𠂔 𠂔 𠂔	𠂔 𠂔 𠂔 𠂔 𠂔
TEN	is	ai	i.ri.de	s.a.ha.al	tau.su.l.ha.ai
...	is	ai	iri-te	sa-qa-al	t ^h ausu-lqa-ai
ten	nine.F	year	title-DAT	sit-CAUS-CVB.AL	advance-CAUS-CVB

𠂔 𠂔	一	𠂔 化	𠂔 𠂔 𠂔	𠂔 𠂔 𠂔
ui.i	NORTH	u.ur	dz ü.n	p.o.or
ui-i	...	uur	tsu yn	p ^h o-or
affair-ACC	north	division	administrative.office ¹²⁰	be-VN.AR.M

¹²⁰ The block <tz ü.n> in CWJ 1040 was glossed 知院 *zhīyuán* ‘administrative office’.

全 水	杰 尔	关 化	令 金 中 谷 中 爻
s.ung	ong.on	i.ir ₃	t.em.l.ge.l.ir ₂
sunj	onj-on	iir	t ^h em-elke-lir
Sunj	prince-GEN	title	confer-CAUS-VN.LIR.M

‘After in the nineteenth year [of Chongxi period, i.e. 1050] he was advanced in position, his occupation was the Administrative Office of the North Division. He was conferred the title of Prince of Sunj.’

Renxian 20-30/45

天 冬 本	主 至 雨	又 雨	全 生 全 比	天 冬 本	九 炎
HEAVEN as.ar	hong di.in	m.in	s.ab.s.el	HEAVEN as.ar	um.ur ₂
... as-ar	χonj ti-in	min	sap-sel	... as-ar	umur
Daozong	emperor-GEN	reign	succeed-CVB.SEL	Qingning	first

丰	令 方	九 用 方	劣 水 友
ai	t.ilt	g.ing.en	tu.ung tz
ai	t ^h ilt ^h	kiŋ-en	t ^h unj ʃi
year	south	capital-GEN	joint.administrator

出 及 全	九 文 圣 弓 水 爻 火 中 用 方	关 化	令 金 中 谷 中 爻
p.o.or	g.ie.im ju.ung sh.iu ₂ l.ing.en	i.ir ₃	t.em.l.ge.l.ir ₂
p ^h o-or	kjeim ʃunj ʃu liŋ-en	iri	t ^h em-elke-lir
be-VN.AR.M	concurrently zhongshuling-GEN	title	confer-CAUS-VN.LIR.M

‘Immediately after the reign of Emperor Daozong succeeded, in the first year of the Qingning period (1055-1065), he was joint administrator of the southern capital. At the same time, he was awarded the title of zhongshuling.’

Renxian 22-44/64

宅	中矢	百土弱	九安和	又火又刃	业及困中又
dur	ai.de	y.eu.ci	g.ur ₂ .en	sh.iu ₂ m.ir	p.o.ndo.l.ir ₂
tur	ai-te	jeu-tʰi	kur-en	ʃu mir	p ^h onto-lir
four.F	year-DAT	go-CVB.CI	state-GEN	secretary	become-VN.LIR.M

‘Going into the fourth year, he became Secretary of the Empire.’

Renxian 23-21/27

和 本	及 全 秀 和	关 化 全 公
ci.ar	o.or ₂ .e ₂ .ci	i.ir ₃ .s.er
tʰar	ooretʰi	iir-s-er
past	?	name-PL-INS

‘... in the past (...) with the titles ...’

Renxian 62-67/69

Renyi

火 关 用 全 出	主 至 和	戈 雨 关 关	主 介 火	辰 和
x.i.ing s.ung ₂	xong di.en	zh.in i.i	hong heu.un	qar ₄ .en
xin sun	xon ti-en	zin i	χon xeu-un	q ^h ar-en
Xingzong	emperor-GEN	Renyi	empress-GEN	tomb-GEN

九 丙 火 凡	仍 当	屋 为 火	五 凡 当	月 全
g.iu.ung.du ₂	ta ₂ eñ	cal.a.iu ₂	WRITE.g.eñ	TEXT.u ₂
kjuŋ-tu	ta-eŋ	tʰala-ju	...k-eŋ	...u
palace-DAT	put-VN.AR.F	stone-AGM.F	record-VN.AR.F	text

‘Inscription (lit. written text made on stone) placed at the tomb (lit. the palace of the mountain) of Empress Renyi of Emperor Xingzong.’

Renyi 3-1/15

又	今 丙 刃	圣	中 考 夫	支	丰
GREAT	t.iu.ir	jur	l.i.au.118	lu	ai
...	tʰjuir	tʃur	ljau-...	lu	ai
great.F	virtue	two.F	red-ADJZ.F	dragon	year

包	艾	中 岁 夫	支	北 中 中	灰
hur ₃	sair	l.iau.118	lu	or ₂ .l.bir	SIX
qur	sair	ljau-...	lu	orle-pir	...
three.F	month	red-AGM.F	dragon	begin-VN.PIR.M	six.F

天	承	令 力 力
ñair	su	t.aq.a
jair	su	t ^h aq ^h a
day	white.F	rooster

‘On the sixth day from the beginning of the month, white rooster, of the third month, red dragon, of the second year, red dragon, of the Dakang period ...’

Renyi 11

Tuguci

丕 主 丕	丹 列 出	丕	又 及	又 久 州	又 为 夫
tai ong:on	b.h.añ	jur ^o	m.o	m.o.oñi	sh.a.ir ₄
tai oŋ-on	boq-aŋ	ʃur	mo	m.o.oŋi	ʃair
grand.prince-GEN	child-PL	two.M	great.M	Moopni	count.attendant

州 余 朱	去 央	杂 化 茶	里	丕 主
oñi.ho ₂ .do	eu.ui	ci.ur.er	oh.ji.ñ	tai ong
oŋ-oq-to	eu-ui	ʃur-er	oqʃiŋ	tai oŋ
young.M-AGM.M-DAT	not.be-CVB.AI	two-VN.AR.M	Aguzhen	grand.prince

Tuguci 3-8/20

公 升 火	夫 又	北 矢	又 及 州	又 为 夫 有	万
n.o ₂ .un	ir ₄ .ir ₂	or ₂ .de	m.o.oñi	sh.a.ir ₄ .en	mo
no-un	ir-ir	or-te	moopni	ʃair-en	mo
spouse-PX3	receive-VN.IR.M	place-DAT	Moopni	court.attendant	female

几	出 央 丕 伏 炙	今 忝 伏 炙	力 冬 中 丕
ku	qar ₃ .an.sh.ñ.u	pu.is.ñ.de	na.as.l.ir ₂
k ^h u	q ^h aranfĩju	p ^h uisĩj-te	naas-lir
person	Q ^h aranshipu	lady-DAT	move-VN.LIR.M

Tuguci 4-7/16

力 冬 忝 伏	百	几	出 央 丕 伏 炙
na.as.b.ñ	mo	ku	qar ₃ .an.sh.ñ.iu ₂
naas-pĩj	mo	k ^h u	q ^h aranfĩju
move-VN.PIR.F	female	person	q ^h aranfĩju

今 忝 伏 忝	土 平 几	北 为 央
pu.is.ñ.en	eu.ul.g	or ₂ .a.an
p ^h uisĩj-en	eu-uleg	oraan
lady-GEN(o PX3?)	not.be-VN.LAK	after

After the death of the wife acquired (through levirate), his Lady Toanfĩju, ...

Tuguci 4-18/23

里 弱 伏	丕 杰 朱 央	佃 芬 央	忝 列 出	屯
oh.ji.ñ	tai ong.do.i	sui.e.ci	b.h.añ	dur
oqdĩj	tai oĩj-doi	suj-et ^h i	paq-aĩ	tur
Oqdĩj	grand.prince-ABL	be.born-CVB.CI	child-PL	four.F

‘Being born to the Grand Prince Aguzhen, the children were four.’

Tuguci 4-31/36

Xiangwen

方 及 雨	用 中 忝
do ₂ .o.oĩ	il.bir.en
toop	ilbir-en
Toop	tribal.judge-GEN

‘... of the Tribal Judge Doop.’

Xiangwen 8

𠂔𠂔𠂔	𠂔𠂔𠂔	𠂔𠂔𠂔	𠂔𠂔𠂔
b.y.eñ	s.iang g.ung	s.ie.en ₂ xong.en ¹²¹	
pjen	sjaŋ guŋ	sjen xoŋ-en	
Bjen	chancellor	former.emperor-GEN	

𠂔𠂔	𠂔𠂔𠂔	𠂔𠂔𠂔	𠂔𠂔
po.do	ku.u ₃ .us	u ₃ .ji ₃ .de	o.oi ₂
p ^h o-to	k ^h uwus	u-ŋi-te	o-oi
time-DAT	force	give-VN.UCI-DAT	become-CVB.AI

𠂔𠂔	𠂔	𠂔𠂔	𠂔𠂔𠂔	𠂔𠂔	𠂔𠂔	𠂔𠂔𠂔
k.em	191	el.de	b.as	ai	ir ₂ .oi ₂	s.iang g.ün
k ^h em	...	elte	pas	ai	uner	sjaŋ kyn
edict	?	?	again	year	?	general

𠂔𠂔𠂔𠂔	𠂔𠂔𠂔	𠂔𠂔𠂔𠂔	𠂔𠂔𠂔𠂔	𠂔𠂔𠂔
sh.au.a.ash	ñ.u ₃ .ur ₂	t.ho sh.i	p.i.is.ci	s.eng.un
ʃawaaf	juur	t ^h oq ʃi	p ^h isʃ ^h i	sejun
hawker?	tribe	governor.general	?	field.marshal

𠂔𠂔	𠂔𠂔	𠂔𠂔𠂔𠂔	𠂔	𠂔𠂔
eu.ul	em.en	t.ho ₂ sh.i	NORTH	u.ur
eul	em-en	toq ʃi	...	uur
cloud	region-GEN	governor.general	northern	division

𠂔𠂔𠂔𠂔	𠂔𠂔𠂔𠂔𠂔𠂔	𠂔𠂔
l.im.h.a	t.ie.im g.ie.im.d	eñ.ur ₂
limqa	t ^h jeim kjeim-t	epur
academician	chief.palace.superintendent-DAT	?

¹²¹ The Xiangwen inscription is dated 1091, so the former emperor was Xingzong, while the current one was Daozong.

屋爻灼木	及火	爻平火
KNOW.u:ji ₃ .en	o.ui	u.ul.i
...-uŋi-en	o-wi	uuli
administrate-VN.UCI-PX3	be-CVB.AI	Uuli

伏只爻	令余爻火	一:空	子利公
ñ.u ₃ .ur ₂	t.ho ₂ sh.i	NORTH:d	ju ₃ .177.n
juur	toq ŋi	...-t	ŋu...n
tribe	governor.general	north-DAT	?

令各火	令	火化令火	爻子爻
s.eng.un	t	i.ir ₃ .s.er	o.ol.ir ₂
sejun	et ^h	iir-s-er	o-olir
field.marshal	that	title-PL-INS	be-VN.LIR.M

Chancellor Bjen began giving service at the time of the former Emperor [Xingzong, r 1031-1055], after being (...) General, Governor General of the Hawkers Tribe, (...) Field Marshal, Governor General of the Cloudy Region, Academician of the Northern Divisions, and [one] of the Joint Chief Palace Superintendents, he had [lit. he was with] the titles of Governor General of the Uli Tribe, and Field Marshal of the Northern (...).

Xiangwen 10-32/33, 11-1/40, 12-1/4

令文考主火	非朱	几只卡	只灼火	爻火
s.ie.ên hong.en	po.do	ku.u ₃ .us	û.ji ₃ .de	o.o ₂
sjen xon-en	p ^h o-to	kuwus	u-ŋi-te	o-oi
former.emperor-DAT	time-DAT	force	give-VN.UCI-DAT	become-CVB.AI

‘...at the time of the former emperor (Xingzong)¹²² he became offering service, and...’

Xiangwen 11-1/5

土爻	义	屏火	雨爻	灼火火	而升火北
eu.ur ₂	iun	dil.de	cau.ur ₂	ji.en.i	024.ó.ui.el
euur	jun	til-te	ŋ ^h auur	ŋien-i	...owiel
age	sixty	seven.F-DAT	war	among-ADJZ	?

¹²² The *Xiangwen* inscription is dated 1091, so the former emperor was Xingzong, while the current one was Daozong.

又 化	不 今 北	因	劣 安 中
m.ir ₃	on.s.el	abad	tu.ur ₂ .bir
mir	on-sel	apat	t ^h uur-pir
horse	fall-CVB.SEL	self	die-VN.PIR.M

‘... at the age of sixty-seven during a battle (...) he fell from the horse, and soon after he died.’

Xiangwen 12

Xu

火	屋 关	万 土 弱	亥 火 冬
ui	KNOW.i	y.eu.ji	j.iu ₂ ui ^o
ui	...-i	jeu-tʃi	tʃu ui
matter	know-VN.I	go-CVB.CI	<i>zhuwei</i>

久 中	全 並 凡 亦	谷 金 中 谷 万
da.ai	s.iang ₂ g.ün	d.em.l.ge.y
taai	siaŋ kyn	tem-elke-ei
great	general	confer-CAUS-CVB.AI

‘... he went [to the position] of Manager of the Affairs, and then he was conferred [the title of] Zhuwei and of Grand General, and...’

Xu 11-5/13

列 化 当	万 急 今 文	[/]	[] [] 出 谷
h.ur.eñ	y.ang s.ie		[] [].añ.er
qur-eŋ	jaŋ sje		...-aŋer
three-ORD.F	Jaŋ Sje		maternal.uncle?-PL

公 金 全 伏	才	方 必	
n.em.d.ñ	ia	101.un	
nemtij	ia	...-un	
?	elder.brother	younger.brother-GEN	
雨 急 又 土 及	用 中	又 [] 夫 []	
ca.ang sh.eu.u	il.bir	sh.[] .ir4.[]	
ʃ ^h añ ʃeu	ilpir	ʃ...ir-...	
ʃ ^h añ ʃeu	tribal.judge	court.attendant?-GEN?	
丹 力	止 亥 全	孑	来 当
b.aq	p.ur2.s	146	ci.eñ
paq ^h	p ^h ur-s	146	ʃ ^h i-en
child	descendant-PL	NEG	make-VN.AR.F
‘The third daughter was Jan Sje. She gave (lit. made) no children to (lit. of) Tribal Judge Court Attendant ʃañ ʃeu of the ... Maternal Uncles.’			

Xuguo 52-15/29

Yongqing

中 必 安 火 矢	令 勺	包	丰 全	弱 木
l.un ng.iu2.de	t.g2	hur3	ai.s	ji.en
lun nju-te	tek	qur	ai-s	ʃien
<i>Analects</i> -DAT	thus	three.F	year-PL	through
丰 木	万 央 力 出	万 公	沙	央 平 及 平 凡
ai.en	y.au a.aɲ	mo.er	336	au.ul.u.ul.g
aj-en	jawa-aɲ	moer	...	auulu-ulek
father-GEN	go-VN.AR.F	way	NEG	change-VN.LAK

和 关 忝 谷 忬 伏	丙 谷	叔 北 只 弱	火 关
ci.i.is.d.b.ñ	mo.er	k.ii.u ₃ .ji	x.i
ʃʃis-de-pij̃n	moer	k ^h el-utʃi	x-i
blood-DENV-VN.PIR.F	way	call-VN.UCI	say-VN.I

‘In the Analects it is said thus: not to diverge from the way walked (lit. gone) by the father for three years, is called the filial way.’

Yongqing 25-42/47, 26-1/10

又 全 和	九 安	全 考 夫	伏 力	丰	灰
GREAT s.en	um.ur ₂	s.iau.118	ñ.aq	ai	SIX
... isen	umur	sjau-...	ɲaq ^h	ai	...
Shouchang	first	blue-AGM.F	dog	year	six.F

艾	丁	全 考 夫	业 及	丹	全 同 九 灸	九 亦
sair	juri	s.iau.118	p.o	ñair	z.ing g.ang	g.ün
sair	ʃuri	sjau-...	po	ɲair	tsiŋ kaŋ	kyn
month	twenty	blue-AGM.F	monkey	day	Jing.river	army

全 交 门 凡	叔 丙 九 火 力 乃	和 化 当 和
s.ie du shī	k.y g.ui na.am	ci.ur.eñ.en
sie tu ʃu	k ^h ei kui nam	ʃ ^h ur-eŋ-en
governor	kingdom.founder.baron	two-ORD.F-PX3

曲 公 伏	业 扎	关 化	伏 : 力
go.n.ñ	p.or ₂	i.ir ₃	ñ:aq
konij̃n	p ^h or	iir	ɲaq ^h
Konij̃n	childhood	name	ɲaq ^h

去 安	口	灰 矢	几 卡
eu.ur ₂	SEVENTY	SIX.de	ku.us
eur	...	...-te	k ^h uus
age	seventy	six-DAT	strength

及平凡矢关	羽平立丰	全为丰
u.ul.g.de.i	jau.ul.ha.ai	s.a.ai
u-u lek-tei	ʃau-ulqa-ai	sa-ai
give-VN.LAK-ABL	separate-CAUS-CVB.AI	sit-CVB.AI

网为丰	—	丹为关	丹为
COMPOSE.a.ar		b.aq.i	b.aq
...a-ar		paq ^h -i	paq ^h
compose-VN.AR.M		child-ADJZ	child

虫哭	凡才公及	来:公
qa.an	g.ia n.u	ci:er
q ^h an	kja nu	ʃ ^h i-er
Q ^h an	Kja Nu	make-VN1.M

‘In the twentieth day *jiashen* (yang blue monkey) of the sixth month of the first year *jiaxu* (yang blue dog) of Shouchang period (1095-1101, Daozong), the Governor of the Army of Jing river, Kingdom-founder Baron, with second name Konip and childhood name paq^h, at the age of seventy-six, when he was already resting (lit. sitting) after being dismissed from offering service, composed. His son Q^han Kja Nu made. ’

Yongqing 31-21/32, 32-1/28

Zhen

生 生 丰	来羽平	凡为夫	生 丰	列夫
ab ab ai	ci.iug.ul	sh.a.rì	ab ai	h.118
ap ap ai	ʃ ^h iukul	ʃari	ap ai	q...
great-grandfather	ʃ ^h iukul	court.attendant	grandfather	q...

们 凡才乃	矢 伞 分 丰 立 为 丰	尺 安 及	几 卡	尺 公
du g.ia.am	HEAVEN u ₂ .du ₃ .l.ha.a.ar	dau.ur ₂ .ir ₂	ku.us	u ₃ .er
tu kjam	... utu-lqa-ar	tauur-ir	k ^h uus	u-er
chief.supervisor	Chongxi	middle-ADJZ	strength	give-VN.AR.M

佃 中 立 为 本	中	全 分 中 立 为 本
sui.l.ha.a.ar	ai	u ₂ .du ₃ .l.ha.a.ar
sui-lqa-ar	ai	utu-lqa-ar
be.born-CAUS-VN.AR.M	father	Utulqaar
‘The great-grandfather was the Court Attendant ʃ ^h iukul. The grandfather was the Chief Supervisor ɣ... He offered service during the Chongxi period. His natural father (lit. generating father) was Utulqaar.’		

Zhenguo 4-12/29

Zhonggong

18) 爻 旁	凡 央	杰 丿	可 忝 矢	又 央 化 平 北
ir ₂ .e	g.ui	ong.on	bai.is.de	h.ui.ir ₃ .s.el
ire	kui	on-on	paiis-te	xuiir-sel
now	state	prince-GEN	position-DAT	reach-CVB.SEL
叔 中 令 安 关 旁 水 全 为 乃 北		付 雨	凡 央	
k.ai fu ng.i tu.ung s.a.am sī		b.in	g.ui	
k ^h ai fu ŋi t ^h uŋ sam suu		pin	kui	
commander.unequalled.in.honour		Bin	state	
凡 太		令 谷 当	因 矢	全 金 中 忝 旁
g.ung	t.ge.eñ	abad.de	d.em.l.ge ₂ .er	
kuŋ	t ^h eke-eŋ	apat-te	tem-elke-er	
duke	die-VN.AR.F	self-DAT	confer-CAUS-VN.AR.M	
‘Now, since he has reached the grade of Kingdom Prince, he has been posthumously appointed (lit. he was appointed on his dead self) to Commander Unequalled in Honour and Duke of the State of Bin’				

Zhonggong 5-41/57

分 又 为	凡 太 友 火 火	丹 列 出	无	
pu m.a	g.ung ₂ j ₂ .iu ₂ .un	b.h.añ	tau ^o	
p ^h u ma	kuŋ ʃu-un	paq-ap	t ^h au	
imperial.son.in.law	princess-GEN	child.OBL-PL	five.M	
又 冬 余	才 祭	丕 来	来 化 不	
m.as.ho ₂	ia.LUCK	tai ui ^o	ci.ur.er	
mas-oq	ia...	t ^h ai ui	ʃ ^h ur-er	
old-AGM.M	Ia...	grand defendant	two-ORD.M	
凡 火	杰	哭 又 关	又 兮 兮 升 及 肉	
g.ui	ong	kid.ir ₂ .i	GREAT u ₂ .du ₃ .o ₂ .o.oñ	
kui	oŋ	k ^h it-ir-i	... utuwo-oŋ	
state	prince	Khitan-ADJZ-ADJZ	Da'an	
六	采	又 化	丰	无
SIX	su ^o	m.ir ₃	ai	tau
...	su	mir	ai	tau
six.F	white.M	horse	year	five.F
艾	包	哭 矢	佃 不	
sair	hur ₃	ñair.de	sui.er	
sair	qur	j _n air-te	sui-er	
month	three.F	day-DAT	be.born-VN.AR.M	

‘The sons of the Imperial Son In Law and the Princess were five. The eldest son was the Grand Defendant Ia... The second son was the Prince of the Kingdom [of Yue]. He was born in Khitan times, on the third day of the fifth month of the sixth year, white horse, of the Da’an period (1085-1095).’

Zhonggong 6-16/40

𠂔	𠂔 矢	几 𠂔	𠂔 𠂔
TEN	EIGHT.de	ku.us	u ₃ .ur ₂
...	...-te	k ^h uus	u-ur
ten	eight.F-DAT	strength	give-VN.AR.F

𠂔 𠂔 子	𠂔 𠂔 𠂔	𠂔 𠂔
o.MR.ol	sh.a.ir ₄	b.aq
o-...-ol	fair	paq ^h
be-?-CVB.AL	court.attendant	child

仍 𠂔	丁	𠂔 矢	𠂔 𠂔 𠂔 𠂔 𠂔 𠂔	𠂔 𠂔 𠂔
ta ₂ .i	juri	SIX.de	pu.u g.iu.ung shi.ĩ	p.o.or
t ^h a-i	ɟuri	...-te	p ^h u kiunɟ fu	p ^h o-or
put-VN.I	twenty	six.F-DAT	deputy.palace.envoy	be-VN.AR.M

丁	𠂔 矢	𠂔 𠂔 𠂔 𠂔 𠂔	𠂔 𠂔 𠂔 𠂔 𠂔 𠂔
juri	dil.de	go.n ca shi.ĩ	d.em.l.ge ₂ .l.ir ₂
ɟuri	til-te	kon ɟ ^h a fu	tem-elke-lir
twenty	seven.F-DAT	investigator.envoy	confer-CAUS-VN.LIR.M

‘After he began to offer service (lit. being made to become service giver) at the age of eighteen, he did (lit. he put) the Young Court Attendant. At twenty-six he was Deputy Palace Envoy. At twenty-seven he was appointed Investigator Envoy.’

Zhonggong 7-56/59, 8-1/16

𠂔 𠂔 𠂔	𠂔 𠂔	𠂔 𠂔	𠂔 𠂔 𠂔	𠂔	𠂔 𠂔 𠂔
tai dz.ung ₂	ci.ar	a.añ	b.125.eñ	ui	m.ir.dz ₂
t ^h ai tsunɟ	ɟar	a-aɟ	p...-eɟ	ui	mirts
taizong	past	be-VN.AR.F	?-VN.AR.F	affair	secretary

𠂔 𠂔	𠂔 𠂔 𠂔 𠂔 𠂔	𠂔 𠂔 𠂔 𠂔	𠂔	𠂔 𠂔 𠂔 𠂔	𠂔 𠂔
eñ ₃ .i	ci.i.is.d.b.ir ₂	b.023.ra.er	227	b.ra.a.an	u.ur
eɟ-i	ɟ ^h is-te-pir	b...arer	...	baraan	uur
place-ACC	blood-VBLZ-VN.PIR.M	?	?	right	division

全焚咄火火木	芳公	及子並力方	丹刊出	全币並本
s.üe.üen x.ui ^o .en	cu.n	o.ol.ha.a.al	b.h.añ	d.od.ha.ar
syen xuj-en	ʃ ^h u-n	o-olqa-al	paq-aŋ	totqaar
<i>xuanhui</i> -GEN	office-GEN	become-CAUS-CVB.AL	child.OBL-PL	Tatar

全存又全	水	伙	全欠州中並方又
s.ar ₂ .ir ₂ .d	291	227	s.ho.oñi.l.ha.al.ir ₂
sarirt	...	...	soqoŋi-lqa-alir
?	?	?	build-CAUS-VN.LIR.M

‘Taizong changed (lit. made become) the previous place (the place that had been) of Affair Secretary ... into his Office of the Xianhui of the Right Division. The Young Tatars ... had it built. After having been only in that office for years ...

Zhonggong 19-1/23

半全	力半	天全丙芬	宅	毛	半
ai.s	a.ai	HEAVEN d.iu.er	TEN	ñe	ai
ai-s	a-ai	... tjuer	...	je	ai
year-PL	be-CVB.AI	Tianhui	ten	one.F	year

丹央几关关	久半全将几亦	令金中泰万
b.au g.i.i	da.ai s.iang g.ün	t.em.l.ge ₂ .y
pau kii	tai sjaŋ kyn	t ^h em-elke-ei
<i>piaoqi</i>	grand general	confer-CAUS-CVB.AI

丹存力央	及化	全焚咄火火木
b.ra.a.an	u.ur	s.üe.üen x.ui ^o
baraan	uur	syen xui
right	division	<i>xuanhui</i>

百方並方	及子及	全丙公	宅	宅	丰
y.al.ha.al	o.ol.ir ₂	d.iu.er	TEN	dur	ai
jalqa-al	o-olir	tiuer	...	tur	ai
change-CVB.AL	become-FIN.LIR.M	Tianhui	ten.F	four.F	year

秀关	几亥和	帝为丰	为艾	兮	乘
ts.i	g.ur ₂ .en	363.a.ar	a.ash	SEAL	164
ts ^h i	kur-en	...aar	a-af	...	...
Qi	state-GEN	?	be-CVB.ASH	ritual	?

Zhonggong 19-24/55

和土	火火化泰公	全丙公	宅	无	丰
ci.eu	x.ui.ir ₃ .ge ₂ .er	d.iu.er	TEN	tau	ai
tʃ ^h eu	xuiir-ke-er	tjuer	...	t ^h au	ai
prefecture	reach-CAUS-VN.AR.M	Tianhui	ten.F	five.F	year

伞及	几又	泰无气伞并
dz.o	g.m	ui ^o sh.ang s.al ₃
tso	gim	ui ʃaŋ sjang
left	gold	defense.supreme.general

全金中泰公	天全金丙公	九亥
d.em.l.ge ₂ .er	HEAVEN d.em.y.er	um.ur ₂
tem-elke-er	... temj-er	umur
confer-CAUS-VN.AR.M	Tianjuan	first

丰矢	方乘	全伞泰	无考及凡
ai.de	al.164	tai z.i ₂	sh.iau.u shi
ai-te	al...	t ^h ai tsu	ʃau ʃi
year-DAT	?	crown.prince	junior.preceptor

令 金 中 泰 万	全 交 与 全 交 与 们		全 圣 凡 交 圣	
t.em.l.ge ₂ .y	d.ie.en ₂ s.ie.en ₂ du		d.im g.ie.im	
t ^h em-elke-ei	tjen sjen tu		tim kjeim	
confer-CAUS-CVB.AI	<i>dianqian du</i>		<i>dianjian</i>	

出 及 子 比	全 焚 虫 火 火	力 乃 伏 谷	力 本	口 列
p.o.ol.el	s.üe.üen x.ui ^o	na.am.ñ.er	a.ar	323.h
p ^h ol-el	syen xui	naam-ijner	a-ar	...-q
become-CVB.AL	<i>xuenhui</i>	?-PL	be-VN.AR.M	that-ADJZ

中	戈 夹	兮	网 关	穴 和	止 又
ai	sh.an	SEAL	COMPOSE.i	nai.en	p.m
ai	fan	...	...-i	naj-en	p ^h im
year	?	ritual	compose-VN.I	chief-GEN	village

万 余 火	刃 万 中 立 冬 比	圣 伞 谷	戈 考 及 凡
y.ho ₂ .ui	ir.y.l.ha.as.el	tai dz.ĩ ₂	sh.iau.u shĩ
joqui	irj-alqa-asel	t ^h ai tsu	fau fu
?	?-CAUS-CVB.SEL	crown.prince	junior.preceptor

九 平 只 火	中 用	比	火 戈 急 伞 哥 凡 亦
191.ul.u ₃ .ui	l.iung	xu	ui ^o sh.ang s.iang g.ün
...ulu-ui	ljuŋ	xu	ui faŋ sjaŋ kyn
?-CVB.AI	dragon	tiger	defense.supreme.general

出 及 子 丹 又	令 金 万 谷	圣	中	方 夹
p.o.ol.b.ir ₂	t.em.y.er	jur	ai	al.164
p ^h ol-pir	t ^h emj-er	tfur	ai	al...
become-VN.PIR.F	confer-VN.AR.M	two.F	year	?

Zhonggong 20

安 雨	全 用	凡 杰 笈	久 丰 关 兮
ng.in	s.ing	g.ong lu	da.ai.i pu
ŋin	siŋ	koŋ lu	tai p ^h u
silver	blue	<i>guanglu</i>	grand.master

令 金 巾 峇 比	屋 巾 列 东	关 化 全
t.em.l.ge ₂ .ii	KNOW.l.h.ad	i.ri.s
t ^h em-elke-ei	...-laq-ad	iri-s
confer-CAUS-CVB.AI	know-VN.LAK-PL	title-PL

为 乃 伏 峇	为 丰	全 金 万 峇	包	丰 矢	方 矣
a.am.ñ.er	a.ar	d.em.y.er	hur ₃	ai.de	al.164
aam-ijer	a-ar	temj-er	qur	ai-te	al...
?-PL	be-VN.AR.M	confer-VN.AR.M	three.F	year-DAT	?

全 万 伞 雨	令 金 巾 峇	雨 急 又 火	万 丰 及 来 安	巫 矣
d.y dz.in	t.em.l.ge.ii	ca.ang sh.iu ₂	y.eu.u ci.ng	qa.an
tei tsin	t ^h em-elke-ei	ʃ ^h aŋ fu	jeu ʃ ^h iŋ	q ^h aan
<i>tejin</i>	confer-CAUS-CVB.AI	<i>shangshu</i>	<i>youcheng</i>	Q ^h aan

凡 火	凡 火	止 及 子 巾	令 止 因 巾 付 伏	尤 安
g.ui	g.ung	p.o.ol.bir	t.p abad.l.b.ñ	um.ur ₂
kui	kuŋ	p ^h ol-pir	t ^h ep ^h apat-la-piŋ	umur
state	duke	become-VN.PIR.M	Huangtong	first

丰 矢	仔 乃	火 用 峇	安 关 为 太 全 为 乃 比	令 金 巾 峇 峇
ai.de	ta.am	x.ing.er	ng.i tu.ung ₂ s.a.am sī	t.em.l.ge.er
ai-te	t ^h aam	xiŋ-er	ŋi t ^h ung sam su	t ^h em-elke-er
year-DAT	T ^h aam	?-INS	<i>yitong sansi</i>	confer-CAUS-VN.AR.M

固中丹伏	圣	丰	叔丰兮安关劣水全乃乃北
abad.l.b.ñ	jur	ai	k.ai pu ng.i tu.ung s.a.am sǐ
apat-la-pij̃n	ʃfur	ai	k ^h ai p ^h u ŋi tuŋ sam suu
self-DENV-VN.PIR.F	two.F	year	commander.unequalled.in.honor

全金中泰芬	固中丹伏	无	丰矢	中为夹	中用
d.em.l.ge ₂ .er	abad.l.b.ñ	tau	ai.de	l.a.an	l.ing
tem-elke-er	apat-la-pij̃n	t ^h au	ai-te	lan	liŋ
confer-CAUS-VN.AR.M	self-DENV-VN.PIR.F	five.F	year-DAT	Lan	hill

凡亦	杰	令金中泰芬	固中丹伏	六
g.ün	ong	t.em.l.ge ₂ .er	abad.l.b.ñ	SIX
kyn	oŋ	t ^h em-elke-er	apat-la-pij̃n	...
prefecture	prince	confer-CAUS-VN.AR.M	self-DENV-VN.PIR.F	six.F

Zhonggong 21-1/58

丰矢	雨凡	全用	焚考木
ai.de	in.g	d.ing	üe.en ₂ .en
ai-te	inig	diŋ	yen-en
year-DAT	?	?	?-GEN

屋当	力立出芬	笑夹
KNOW.eñ	na.ha.añ.er	THOUSAND.an
...-ep̃n	naqa-aŋer	...-an
know-VN.AR.F	maternal.uncle-PL	thousand-GEN

关化	公亦全芬	夫北	百止及	来安	为乃伏芬
i.ir ₃	n.ad.s.er	ir ₄ .el	y.eu.u	ci.ng	a.am.ñ.er
iir	nat-s-er	ir-el	jeu	ʃ ^h iŋ	aam-iŋer
title	?-PL-INS	receive-CVB.AL	right	Cheng	?-PL

为 丰	困 中 丹 伏	屏	丰 矢	业 用 引 急 友 用 凡 谷
a.ai	abad.l.b.ñ	dil	ai.de	p.ing ja.ang dz ₂ .ing sh ĭ.ĩ ₂
a-ai	apat-la-pij	til	ai-te	p ^h ij ʃaŋ tsij ʃu
be-CVB.AI	self-DENV-VN.PIR.F	seven.F	year-DAT	<i>pingzhang zhengshi</i>

业 及 子 比	杂 安	杰	令 金 中 谷 谷	困 中 丹 伏
p.o.ol.el	ci.ng	ong	t.em.l.ge ₂ .er	abad.l.b.ñ
p ^h ol-el	ʃ ^h ij	oŋ	t ^h em-elke-er	apat-la-pij
become-CVB.AL	Cheng	prince	confer-CAUS-VN.AR.M	self-DENV-VN.PIR.F

丕	丰 矢	丕 业 丕 雨 急 又 火	又 丕 有
Ñeim	ai.de	xa.ang ₂ tai ca.ang sh.iu ₂	sh.iang ₂ .en
neim	ai-te	xaŋ t ^h ai ʃ ^h aŋ ʃu	ʃaŋ-en
eight.F	year-DAT	<i>hangtai shangshu</i>	<i>sheng</i> -GEN

伞 及 杂 安 伞 并	业 及 子 比	伞 关	杰
z.o ci.ng s.iang	p.o.ol.ii	z.i	ong
tso ʃĩŋ sjaŋ	p ^h ol-ii	tsi	oŋ
<i>zuo chengxiang</i>	become-CVB.AL	Ji	prince

谷 金 中 谷 谷	口 列	丰	雨 急 又 火	万 去 及 杂 安 伞 并
d.em.l.ge ₂ .er	323.h	ai	ca.ang sh.iu ₂	y.eu.u ci.ng s.al ₃
tem-elke-er	...-q	ai	ʃ ^h aŋ ʃu	jeu ʃ ^h ij sjaŋ
confer-CAUS-VN.AR.M	that-ADJZ	father	<i>shangshu</i>	<i>you chengxiang</i>

业 及 子 比	伞 关	杰	令 金 中 谷 谷	口 列	丰
p.o.ol.el	dz.i	ong	t.em.l.ge ₂ .er	323.h	ai
p ^h ol-el	tsi	oŋ	t ^h em-elke-er	...-q	ai
become-CVB.AL	Ji	prince	confer-CAUS-VN.AR.M	that-ADJZ	year

丹冬	列圣用並力方	乃火 戈火 中用	及北	口列
b.as	h.im.il.ha.a.al	Ju.ung sh.iu ₂ l.ing	o.or ₂	323.h
pas	qimilqaal	ʃuŋ ʃu liŋ	o-or	...-q
pas	?	<i>zhongshuling</i>	become-VN.AR.M	that-ADJZ

Zhonggong 22-1/60

中	丹冬	乃火 九才乃 今丙 九火 凡	止及子中	口列	中
ai	b.as	Tu.ung g.ia.am s.iu g.ui shī	p.o.ol.bir	323.h	ai
ai	pas	t ^h uŋ kjam siu kui ʃi	p ^h ol-pir	...-q	ai
year	also	<i>tongjian xiuguo shi</i>	become-VN.PIR.M	that-ADJZ	year

丹冬	乃余及子	圣宅及	中用 今乃乃 戈並 凡	友用	杰
b.as	y.ho ₂ .o.ol	tai pu.u	l.ing s.a.am sh.iang ₂ shī	dz ₂ .ing	ong
pas	joqo-ol	t ^h ai p ^h u	liŋ sam ʃaŋ ʃu	tsiŋ	oŋ
also	?	<i>tai fu</i>	<i>lingsansheng shi</i>	Zheng	prince

Zhonggong 23-1/21

天	今丙 月	九安	中矢	乃止弱	今央	杰	止及今
HEAVEN	d.iu.ir	um.ur ₂	ai.de	y.eu.ji	s.au	ong	p.o.oi
...	tiuir	umur	ai-te	jeu-ʃi	sau	oŋ	p ^h o-oi ₂
heaven	virtue	before	year-DAT	go-CVB.CI	Cao	prince	be-CVB.AI

‘Going into the first year of the Tiande period (天德 1049), he became prince of Cao and...’

Zhonggong 23-22/29

天	今丙 月	九安	中矢	乃止弱
HEAVEN	d.iu.ir	um.ur ₂	ai.de	y.eu.ji
...	tjuir	umur	ai-te	jeu-ʃi
Tiande		first	year-DAT	go-CVB.CI

全 央	杰	止 及 全
s.au	ong	p.o.or
sau	onj	p ^h o-or
Sau	prince	be-VN.AR.M

‘During the first year of Tiande period (1149) he was Prince of Sau.’

Zhonggong 23-22/29

天	全 丙 刃	圣	丰	穴	艾 矢	丰 全	主 丩
HEAVEN	d.iu.ir	dʒur	ai	nai	ash.de ¹²³	l.u ₂	ong.on
...	tjuir	ʃfur	ai	nai	sair-te	lu	onj-on
heaven	virtue	two.F	year	head	month-DAT	Lu	prince-GEN

及 火	万 土 弱	艾 旁	凡 火	主	全 金 中 泰 公
u.un	y.eu.dʒ	sair.e ₂ ¹²⁴	g.ui	ong	d.em.l.ge ₂ .er
uun	jeu-ʃi	ye	gui	onj	tem-elke-er
title?	go-CVB.CI	Yue	state	prince	confer-CAUS-VN.AR.M

‘In the first month of the second year of the Tiande period (1150), he went [to the title?] of Prince of Lu, and then he was conferred [the title of] Prince of Yue State.’

Zhonggong 24-21/34

Zongjiao

又	令 考 旁	吴 关	兆 利	凡 安 和
GREAT	t.iau.du	qid.i	xu.177	g.ur.en
...	t ^h jautu	k ^h it-i	xu...	kur-en
great.F	?	Khitani-ADJZ	Liao	empire-GEN

令 泰 公	—	凡 杰 中 用	凡 亦
t.ge.er		g:ong l.ing	g.ün
teke-er		konliŋ	kyn
die-VN.AR.M		Guangling	prefecture

¹²³ Here, 艾 <adʒu> ‘tent’ stands for 艾 <sair> ‘month’.

¹²⁴ Here, 艾 <sair> ‘month’ stands for 艾 <üe> /ye/.

杰:丕	公 存 矢	盍 凡 当	月 兮
ong:on	n.ar ₂ .de	WRITE.g.eñ	TEXT.u ₂
on-on	nar-te	...k-ep	...u
prince-GEN	tomb-DAT	write-VN.AR.F	text

‘Epitaph (lit. text written on the tomb) of the deceased Prince of Guangling prefecture of the Great ... Khitan Liao Empire.’

Zongjiao 1-1/13

令 欠 爻 关	止 币 关	央 关	万 止 弱	小
t.ho sh.i	p.od.i	ui.i	y.eu.ji	del
t ^h oq̃jī	p ^h ot-i	ui-i	jeu-ŋjī	tel
governor.general	return-VN.I	matter-ACC	go-CVB.CI	south

爻 化	兮 止 爻 爻 央	令	关 化 兮 央	力 中
u.ur	pu p.u sh.iú	t	i.ir ₃ .s.er	a.ai
uur	p ^h u p ^h u fū	et ^h	iir-s-er	a-ai
division	deputy.administrator	these	name-PL-INS	be-CVB.AI

‘...going again (lit. returning) [to the] affairs of Governor General, he had these titles [including] Deputy Administrator of the Southern Division, and...’

Zongjiao 11-32/34, 12-1/10

万	凡	王 谷 雨	万	来 习 弱	禾 凡 兮
mo	ku	di.ge.in	mo	ci.iug.ji	is.g.s
mo	k ^h u	tikein	mo	ŋ ^h ukŋjī	iskis
female	person	Tikein	female	ŋ ^h ukŋjī	Iskis

力 止 出 央 力	州 欠	中 力	伏 丰 余 伏
na.ha.añ.er.en	oñi.ho	ai.en	ñ.ar.qu.ñ
naqa-añer-en	on-oq	ai-en	parkun
maternal.relative-PL-GEN	small-ADJVZ.M	male-GEN	parkun

令 用 分	令 将 凡 水	圣 中 伏	分 忝 伏	圣 相	令 亦 及 内
t.il.du ₃	s.iang g.ung	xe.l.ñ	pu.is.ñ	jur.en	t.ad.o.oñ
t ^h iltu	sjaŋkuŋ	xeljɿ	p ^h uisijɿ	ʃur-en	t ^h a-to-op
T ^h iltu	minister	Xeljɿ	lady	two.F-GEN	five-DAT-ORD.F

丹 力	巫 夹	火 火	分 忝 伏 相	关 化	杂 当
b.aq	qa.an	x.ui	pu.is.ñ.en	i.ir ₃	ci.eñ
paq ^h	q ^h an	xui	p ^h uisijɿ-en	iri	ʃ ^h i-eɲ
child	Q ^h an	kingdom	lady-GEN	name	make-VN1.F

‘His wife was Madame Tikein. She was the fifth daughter of the Minister parkuŋ T^hiltu of the Younger ʃ^hukʃi Iskis Maternal Uncles and Lady Xeljɿ. She covered (lit. made) the position of Lady of the Q^han Kingdom.’

Zongjiao 19-22/30, 20-1/14

APPENDIX B – KSS GRAPHS

The following table compares KSS romanizations and transcriptions used in the present and previous studies. The columns are presented in the following order: 1) KSS graph; 2) romanization adopted here; 3) transcription adopted here; 4) romanization in Chinggeltei & Wu & Jiruhe (2017); 5) transcription in Chinggeltei & Wu & Jiruhe (2017); 6) romanization in Shimunek (2017); 7) romanization in Wu & Janhunen (2010); 8) romanization in Kane (2009); 9) serial number in Chinggeltei & Wu & Jiruhe (2017); 10) accumulative number in Chinggeltei & Wu & Jiruhe (2017). All graphs recognized by Chinggeltei & Wu & Jiruhe (2017) are enlisted. Symbol × indicates a graph was not included in one of the previous lists. Symbol / indicates no reading was given in the list.

Gr.	Rom.	Tr.	CWJ r.	CWJ tr.	S	WJ	K	S. n.	A. n.
一	NORTH	...	hoi	xɔi?	×	NORTH	ABOVE ~ NORTH	1	1
丁	juri	ʃuri	jur ₂	tɛyr	ʃuri	TWENTY	TWENTY	2	2
万	003	...	/	/	×	/	tś	3	3
永	siu	sju	siu	siu	×	WHITE	WHITE	4	4
永	su	su	siu ^o	siu-n?	×	WHITE ^o	¹²⁵	5	5
永	har ₃	qar	har ₃	xar ~ xara	×	MOUNTAIN	MOUNTAIN ~ TOMB ~ MOUND	6	6
丕	ñeim	jeim	naim	naim	ñêm	EIGHT	EIGHT	7	7
丕	ñeim ^o	jeim	naim ^o	naim-n?	ñêm?	EIGHT ^o	/ ¹²⁶	8	8
丕	NORTHd	...t	hoit	xɔi-t?	×	NORTHd	/ ¹²⁷	9	9
丕	NORTHi	...i	hoii	xɔi-i?	×	/	/	10	10
丕	an	an	an	an	an	an	an	11	11
丕	012	...	/	/	×	/	012	12	12
丕	013	...	/	/	×	/	013	13	13
丕	hur ₂	qur	hu ₂	xu	qur	húr	hur	14	14
丕	jau	ʃau	jau	ʃau ~ tɕau	ʃau	jau	HUNDRED [jau]	15	15

¹²⁵ “Dotted form of ‘white’” (K 36)

¹²⁶ “Dotted form of ‘eight’” (*ibid.*)

¹²⁷ “A contraction of 一 2.001 ‘above, upper’ and the plural ending 仝 <d>, so ‘the upper ones, the superiors’” (*ibid.*)

𠂇	od	ot	od	t ~ t'	od	od	od	16	16
𠂈	dai	tai	dai	dai	/	/	só	17	17
𠂉	017.1	...	...	...		×	×	17.1	18
𠂊	in	in	in	in	in	in	in	18	19
𠂋	iu	iu ~ ju	iu	iu	iu	iu	iu	19	20
𠂌	y	j- ~ -ei	y	i ~ j	y	y	ei ¹²⁸	20	21
𠂍	mo	mo	em	muo ~ em	omo	mo	MOTHER ~ FEMALE ~ mó	21	22
𠂎	cau	t ^h au	cau	tɕ'	čau	cau	cau	22	23
𠂏	ngi ₂	ŋi	i ₂	i	×	×	×	22.1	24
𠂐	022.2	...	/	/	×	×	×	22.2	25
𠂑	023	...	/	/	/	/	iũ	23	26
𠂒	024	...	/	/	×	/	ěr	24	27
𠂓	INHERIT	...	...	...	×	/	xĩ	25	28
𠂔	ONE	...	emu	əmu	/ ¹²⁹	ONE	ONE	26	29
𠂕	ONE ^o	...	emu ^o	əmu-s?	/ ¹³⁰	ONE ^o	/ ¹³¹	27	30
𠂖	sh	ʃ	sh	ʃ	š	sh	ś	28	31
𠂗	tau	t ^h au	tau	t'au	tau	tau	FIVE [tau]	29	32
𠂘	tau ^o	t ^h au	tau ^o	t'au	tau [?]	tau ^o	/ ¹³²	30	33
𠂙	ts	t ^h	chi	ts'i	×	/	ts	31	34
𠂚	031.1	...	/	/	×	×	×	31.1	35
𠂛	031.2	...	/	/	×	×	×	31.2	36
𠂜	032	...	/	/	×	/	těn	32	37
𠂝	is	is	is	is	iši	is	NINE ~ [is]	33	38
𠂞	is ^o	is	is ^o	isu-n?	iši [?]	is ^o	/ ¹³³	34	39

¹²⁸ “𠂇 is commonly used transcribe Chinese initial y. As a final, it is probably [ei]” (K 37)

¹²⁹ S 425 has “one” in the column “Logographic meaning (if any)”.

¹³⁰ S 426 has “one (masculine) in the column “Logographic meaning (if any)”.

¹³¹ “Dotted form of ‘one’” K (38).

¹³² “Dotted form of ‘five’” K (39).

¹³³ “Dotted form of ‘nine’” K (39).

𠂇	035	...	/	/	×	/	/	35	40
𠂈	035.1	...	/	/	×	×	×	35.1	41
𠂉	035.2	...	/	/	×	×	×	35.2	42
𠂊	ug ₂	uk	iû ₂	iu ~ iuk	×	×	×	35.3	43
𠂋	xu	xu	xu	xu	qu	xu	xu	36	44
𠂌	di	ti	dī	tī	dī	dī	dī	37	45
𠂍	zh ₃	ʒ	ri ₃	...	×	zhi ₃	/	38	46
𠂎	zh ₄	ʒ	ri ₄	ri	×	×	×	38.1	47
𠂏	039	...	...	...	×	/	kâi	39	48
𠂐	WEST	...	ör	ör?	×	WEST	WEST	40	49
𠂑	us	us	su	s~ su	r	su	kâ ~ der?	41	50
𠂒	hus	qus	kus	kuf ~ kus	×	/	/	42	51
𠂓	maud	maut	mod	maut ~ mot	×	/	/	43	52
𠂔	043.1	...	...	...	×	×	×	43.1	53
𠂕	044	...	...	...	×	/	/	44	54
𠂖	045	...	...	...	×	/	/	45	55
𠂗	046	...		...	×	hor ^x	/	46	56
𠂘	qar ₅	q ^h ar	hor	xol ~ xor	×	hor	hor	47	57
𠂙	hul	qul	hul	yul ~ qol	/	/	nên	48	58
𠂚	ilt ₂	ilt ₂	le ₂	le	×	ai ₂	/	49	59
𠂛	050	...	/	/	×	/	lī	50	60
𠂜	ha	qa	ha	ya	ya	ha	ha	51	61
𠂝	WRITE	...	RECORD	ya?	/ ¹³⁴	RECORD	RECORD	52	62
𠂞	WRITE ₂	...	RECORD ₂	ya?	×	×	×	52.1	63
𠂟	qa	q ^h a	qa	xα	qa	qa	qa	53	64
𠂠	054	...	/	/	×	/	mù	54	65
𠂡	055	...	...	...	×	/	/	55	66

¹³⁴ S 427 has “record” in the column “Logographic meaning (if any)”.

𠂇	056	...	...	...	×	/	/	56	67
𠂈	056.1	...	...	...	×	×	×	56.1	68
𠂉	xo	xo	xo	xuo	×	xo	xo	57	69
𠂊	058	...	...	...	/	/	mǐ	58	70
𠂋	uñ	uŋ	uni	un ~ unj?	uñ	uni	uni	59	71
𠂌	060	...	...	...	/	bai ₂	/ ¹³⁵	60	72
𠂍	bai	pai	bai	bai ~ ba	/	bai	kě	61	73
𠂎	iang ₂	jang	iáng	iaŋ	iang	iáng	iáŋ	62	74
𠂏	ETERNAL	...	ETERNAL	un ~ unj?	×	ETERNAL	ETERNAL	63	75
𠂐	063.1	...	...	...	×	×	×	63.1	76
𠂑	lu ₂	lu	lu ₂	lu	×	lu ₂	lu	64	77
𠂒	065	...	...	...	×	/	/	65	78
𠂓	etu	et ^h u	/	/	/	/	tǔ	66	79
𠂔	066.1	...	...	...	×	×	×	66.1	80
𠂕	eu	eu	eu	ou	eu	eu	eu	67	81
𠂖	068	...	us	biŋʔ/usʔ	/	us	us	68	82
𠂗	ri ₂	ri	rí	rǐ	rǐ	rí	rí	69	83
𠂘	v	v	w	v	w	w	w	70	84
𠂙	ong	oŋ	ong	uaŋ ~ oŋ	ong	ong	oŋ	71	85
𠂚	EAST	...	dor ₂	dor	udur	EAST	EAST	72	86
𠂛	en ₂	...	ên	en	ên	ên	ên	73	87
𠂜	tel	t ^h el	tir	t ^h el	×	tir	tir	74	88
𠂝	hong	xoŋ	hong	yuaŋ	ɣong	hong	hoŋ	75	89
𠂞	or ₂	or	or	ər ~ ʊr	oɣ/ɣ ¹³⁶	ho	ho	76	90
𠂟	077	...	...	...	×	/	/	77	91
𠂠	078	...	...	...	×	/	/	78	92
𠂡	079	...	...	...	×	/	/	79	93

¹³⁵ “Allograph of 061” (K 41).

¹³⁶ S 428 has <oɣ> after consonants and <ɣ> after vowels.

𠂇	el	el	li ₂	li	Awr	ii	ii	80	94
𠂈	sair	sair	MONTH	sær	sayr ²	MONTH	MONTH	81	95
𠂉	üe	ye	üe	ue	ÿ	üe	y	82	96
𠂊	ash	aʃ	aju	aɖʒa ~ aɖʒu	×	×	×	82.1	97
𠂋	sī	suu	sī	sī	sī	sī	ss	83	98
𠂌	ar ₂	ar	ra	ri	ar	ra	ra	84	99
𠂍	ar ₂ ^o	...	ra ^o	/	×	×	/	84.1	100
𠂎	SIX	...	SIX	nir?	¹³⁷	SIX	SIX	85	101
𠂏	SIX ^o	...	SIX ^o	nir-n?	¹³⁸	SIX ^o	¹³⁹	86	102
𠂐	dz ₂	ts	jī	tʂ	ǰ ⁱ	jī	tz	87	103
𠂑	088	...	/	/	×	/	/	88	104
𠂒	d ₄	t	d ₃	d	×	zu	zǔ	89	105
𠂓	o ₂	o	ó	u	u	ó	ó	90	106
𠂔	do ₂	to	do ₂	do	×	/	/	91	107
𠂕	um	um	om	om	ud	ud ₃	yǔ	92	108
𠂖	ilt	ilt ^h	le	le	/	/	gě	93	109
𠂗	094	...	/	ə	×	/	/	94	110
	094.1	...	/	/	×	×	×	94.1	111
𠂘	095	...	/	/	×	/	/	95	112
𠂙	096	...	/	/	×	/	/	96	113
𠂚	ur ₂	ur	úr	ur	ur	úr	úr	97	114
𠂛	al	al	al	al	Al	al	al	98	115
𠂜	jī	ǰu	jīh	tʂī	×	×	×	98.1	116
𠂝	ad	at	ad	t	ad ~ d ¹⁴⁰	ad	ad	99	117
𠂞	eñ ₂	eɲ	én ₂	ən ~ en	en	én ₂	én	100	118
𠂟	eñ ₃	eɲ	én ₃	ən ~ en	×	×	×	100.1	119

¹³⁷ S 428 has “six” in the column “Logographic meaning (if any)”.

¹³⁸ S 428 has “six (masculine)” in the column “Logographic meaning (if any)”.

¹³⁹ “Dotted form of 𠂎” (K 45).

¹⁴⁰ S 429 has <ad> after consonants and <d> after vowels.

𠂔	eñ ₄	eɲ	én ₄	ən ~ en	×	×	×	100.2	120
𠂔	101	...	deu	dəu	deu	deu	YOUNGER BROTHER [deu]	101	121
𠂔	cu	ɣ ^h u	cu	tɕ ^h u	×	cu	cu	102	122
𠂔	103	...	us ₂	/	×	us ₂	/ ¹⁴¹	103	123
𠂔	j ₃	ɣ	dz ₂	tɕi	j	dz ₂	dz	104	124
大	ud ₂	ut	ud ₂	t	ud	ud ₂	ud	105	125
太	ung ₂	uŋ	ung ₂	uŋ	ung	ung ₂	uŋ	106	126
𠂔	oi ₂	oi	oi ₂	uei	oi	oi ₂	oi	107	127
𠂔	108	...	/	/	×	/	/	108	128
𠂔	e ₂	e	e ₂	ə	e	e ₂	e	109	129
𠂔	110	...	/	/	×	/	/	110	130
𠂔	111	...	/	/	×	/	/	111	131
𠂔	ge	ke	ge ₂	gə ~ ɣə	ge	ge ₂	ge	112	132
𠂔	ĩ ₂	uu	ĩ ₂	ĩ	ĩ	ĩ ₂	ĩ	113	133
𠂔	i ₃	i	î ₂	i	×	î ₂	î	114	134
𠂔	le	le	ol	ol	×	SOME	dã	115	135
𠂔	116	...	/	/	×	/	/	116	136
𠂔	117	...	/	/	×	qú ^x	/	117	137
𠂔	118	...	qú	g ~ gə	qu	qú	qú	118	138
𠂔	da ₃	ta	dau	tə	dau	dau	dau	119	139
𠂔	sha ₂	ʃa	shi	ʃi	×	/	/	120	140
𠂔	121	...	un ₂	iun ~ un	×	/	/	121	141
𠂔	ai	ai	ai	ai	ai ~ ^a i ¹⁴²	ai	ai	122	142
𠂔	ar	ar	ar	ar	ar ~ ^a r ¹⁴³	ar	ar	123	143
𠂔	124	...	/	/	×	/	/	124	144
𠂔	125	...	aû	ru/iau	×	aû	íau	125	145

¹⁴¹ “Allograph of 𠂔 068 above” (K 47).

¹⁴² S 429 has <ai> after consonants and <^ai> after vowels.

¹⁴³ S 430 has <ar> after consonants and <^ar> after vowels.

𠂇	126	...	/	/	×	/	/	126	146
𠂈	ib	ip	ib	ib	×	an ₂	an	127	147
𠂉	zh ₂	ɜ	ri ₂	ri	×	zhi ₂	zǎi	128	148
𠂊	129	...	/	/	×	/	/	129	149
𠂋	129.1	...	/	/	×	×	×	129.1	150
	xa	xa ~ x	xa	h ~ ha	×	xa	xa	130	151
𠂌	u	u	u	u	u ^w	u	u	131	152
𠂍	132	...	/	/	×	m ^x	/	132	153
𠂎	m	m	m	m	m	m	m	133	154
𠂏	jur	ɸur	jur	ɸur	ǰur	TWO	TWO	134	155
𠂐	jur ^o	ɸur	jur ^o	ɸur-n?	ǰur [?]	TWO ^o	TWO ^o	135	156
𠂑	135.1	...	/	/	×	×	×	135.1	157
𠂒	136	...	/	/	×	/	dò	136	158
𠂓	ir	ir	ir	rə/gu	r	ir	rèn	137	159
𠂔	137.1	...	/	/	×	×	×	137.1	160
𠂕	ug	uk	iuk	iuk	×	iû	iû	138	161
𠂖	na	na	na	na	na	na	na	139	162
𠂗	139.1	...	/	/	×	×	×	139.1	163
𠂘	en	en	en	ən	en	en	en	140	164
𠂙	dil	til	dol	dol	dalū	SEVEN	SEVEN	141	165
𠂚	dil ^o	til	dol ^o	dol-n	×	×	×	141.1	166
𠂛	KNOW	...	MANAGE	/	×	MANAGE	KNOW	142	167
𠂜	xua	xwa	xua	yua/hua	×	xua	xua	143	168
𠂝	ir ₂	ir	ir ₂	ir	eñ ~ ñ ¹⁴⁴	ún	ún	144	169
𠂞	FORTY	...	FOURTY	tuf [?]	¹⁴⁵	FORTY	FORTY	145	170
𠂟	NOT	...	es	es?	gi	gi	giù	146	171
𠂠	ju	ɸu	ju	ɸu	ǰu	ju ₃	jú	147	172

¹⁴⁴ S 430 has <eñ> after consonants and <ñ> after vowels.

¹⁴⁵ S 431 has “forty” in the column “Logographic meaning (if any)”.

𠂇	148	...	/	/	×	ju ₂	jú	148	173
子	ol	ol	l ₂	l	ǰ	ju	ju	149	174
𠂇	ja	ǰa	ja	ǰ ~ ǰa	ǰa	ja	ja	150	175
𠂇	h	q	hu	ɣ	ɣ	hu	hu	151	176
𠂇	ji	ǰi	ji	uǰ ~ uǰɟ	ǰ	ji	ji	152	177
𠂇	ji ₂	ǰi	ji ₂	uǰ ~ uǰɟ	×	ji ₂	¹⁴⁶	153	178
𠂇	on	on	on	ɔn	on	on	on	154	179
乙	FIFTY	...	FIFTY	tʰæb?	¹⁴⁷	FIFTY	FIFTY	155	180
𠂇	156	...	/	/	×	/	/	156	181
𠂇	ol ₂	ol	l ₃	l?	×	/	/	157	182
𠂇	ol ₃	ol	l ₄	l?	×	/	/	158	183
𠂇	ñair	ɲair	DAY	nær?	ñayr?	DAY	DAY	159	184
𠂇	160	...	/	/	×	giu	/	160	185
𠂇	160.1	...	/	/	×	×	×	160.1	186
𠂇	au	au	au	au	au	au	au	161	187
𠂇	ci	ǰ ^h i ~ ǰ ^h	ci	ǰ ~ ǰ	č	ci	c ~ ci	162	188
𠂇	ki	k ^h i	ki	x ~ k [*]	ki	ki	ki	163	189
𠂇	164	...	/	/	×	/	/	164	190
𠂇	g ₂	k	gu	gu	gu	gu	gu	165	191
𠂇	g ₃	k	gu ₂	gu	×	×	×	165.1	192
𠂇	hur	qur	gor	ɣur	ɣur	THREE	THREE ¹⁴⁸	166	193
𠂇	hur ^o	qur	gor ^o	ɣur-n?	ɣur?	THREE ^o	/ ¹⁴⁹	167	194
𠂇	aq	aq ^h	qo	xi ~ x	aq	qo	qo	168	195
𠂇	ho	qo ~ oq	qó	g ~ gu	qo	qó	qó	169	196
𠂇	MR	...	MR	/	×	MR	bái	170	197
𠂇	da	ta	da	t	×	da	da	171	198

¹⁴⁶ “Allograph of 152.” (K 53).

¹⁴⁷ S 431 HAS “FIFTY” IN THE COLUMN “Logographic meaning (if any)”.

¹⁴⁸ “Possibly [hur].” (K54).

¹⁴⁹ “Dotted form 𠂇 166” (K55).

久	ug	uk	uh	u	u	uh	uh	172	199
久	173	...	jel	jel	×	uh ^o	/	173	200
冬	as	as	as	as	as ~ s? ¹⁵⁰	as	as	174	201
各	eng	eŋ	eng	əŋ	iang	eng	êŋ	175	202
刈	bu	pu	bot	bot?	bu	bú	bú	176	203
刈	177	...	ur	ur ~ ul	ulji	/	rǎ	177	204
儿	177.1	...	/	/	×	×	×	177.1	205
儿	ku	k ^h u	ku	k [‘] u	ku	ku	ku	178	206
凡	178.1	...	ku ^o	juan?	×	×	×	178.1	207
凡	178.2	...	/	/	×	×	×	178.2	208
凡	du ₂	tu	dú	tə	du	dú	dú	179	209
凡	179.1	...	/	/	×	×	×	179.1	210
凡	179.2	...	/	/	×	×	×	179.2	211
凡	shī	ʃu	shī	ʃi	ši	shī	sh	180	212
凡	iung	juŋ	iúŋ	uŋ	×	iúŋ	iúŋ	181	213
凡	182	...	/	/	×	/	/	182	214
全	cal	ʃ ^h al	car	ʃar ~ ʃal	×	car	car	183	215
全	183.1	...	car ^o	/	×	×	×	183.1	216
乃	am	am	am	am	am	am	am	184	217
乃	185	...	mor	mor	×	am ^o	ǎm	185	218
及	o	o	o	o	o	o	o	186	219
及	186.1	...	ak	ak	×	×	×	186.1	220
衆	MYRIAD	...	tum	t [‘] um	tum	MYRIAD	TEN THOUSAND	187	221
州	oñi	opi	SMALL	ba	/	SMALL	zǒ	188	222
为	a	a	a	ɑ	a	a	a	189	223
刈	190	...	/	/	×	/	ǎ	190	224
丸	191	...	tou	tou	/	mó	/	191	225

¹⁵⁰ S 432 has <as> after consonants and <s> ? after vowels.

九	MRS	...	MRS	/	×	MRS	śi	192	226
九	193	...	nas	nas	×	/	/	193	227
𠂇	194	...	/	/	×	/	/	194	228
午	dal	tal	tal	tal	/	CHIEF	ũ	195	229
生	ab	ap	abu	po ~ apo	°bu ~ bu	bu	bu	196	230
𠂇	ah	aq	ai ₂	ai	ai	ah	ah	197	231
𠂇	198	...	/	/	×	/	/	198	232
𠂇	198.1	...	/	/	×	×	×	198.1	233
𠂇	ang	aŋ	ang	aŋ	ang	ang	aŋ	199	234
𠂇	200	...	/	/	×	/	/	200	235
𠂇	201	...	/	/	×	/	/	201	236
𠂇	tu	t ^h u	tu	t' ~ t'u	tu	tu	tu	202	237
𠂇	203	...	/	/	×	/	lā ¹⁵¹	203	238
𠂇	204	...	/	/	×	/	shǐ	204	239
𠂇	de	te	de	tə	de	de	de	205	240
𠂇	li	li	li	li	li	li	lí	206	241
𠂇	THOUSAND	...	ming	miŋ	ming	ming	THOUSAND	207	242
𠂇	lu	lu	lu	lu	lu	lu	lu	208	243
𠂇	209	...	lu°	/	×	lu°	/	209	244
𠂇	au ₂	au	/	/	au	aú	aú	210	245
𠂇	210.1	...	/	/	×	×	×	210.1	246
𠂇	210.2	...	/	/	×	×	×	210.2	247
𠂇	THIRTY	...	THIRTY	yɔŋ?	/ ¹⁵²	THIRTY	THIRTY	211	248
𠂇	211.1	...	THIRTY°	/	×	×	×	211.1	249
𠂇	211.2	...	nai	naŋ	×	×	×	211.2	250
𠂇	212	...	od ₂	od	×	/	/	212	251
𠂇	to	t ^h o	to	t'o	to	to	to	213	252

¹⁵¹ “Possibly <lā>.” (K 59).

¹⁵² S 433 has “thirty” in the column “Logographic meaning if any”.

生	213.1	...	/	/	×	×	×	213.1	253
才	213.2	...	/	/	×	×	×	213.2	254
六	da ₂	ta	da ₃	t	da	da ₂	dá	214	255
久	da	ta	da ₂	t	×	da	da	215	256
失	216	...	/	/	×	/	/	216	257
犬	216.1	...	/	/	×	×	×	216.1	258
朱	do	to	do	ta ~ to	do	do	do	217	259
𠂇	SEAL	...	dor	dor	×	SEAL	doro ~ SEAL ~ RITUAL	218	260
𠂇	eñ ₃	eɲ	/	/	×	én ₃	/	219	261
行	am ₂	am	mú	m?	mu	mú	mú	220	262
伏	221	...	/	/	×	ñ ^x	/	221	263
伏	ñ	ɲ	ñ	n	ñ	ñ	ń	222	264
仕	223	...	/	/	×	mu ^x	/	223	265
仕	ñ ₂	ɲ	mu	m?	m	mu	mu	224	266
伏	224.1	...	/	/	×	×	×	224.1	267
付	bi	pi	bi	pi	×	bi	bi	225	268
𠂇	ü	y	ü	ue	×	ü	ü	226	269
𠂇	227	...	/	/	/	/	jǐn	227	270
𠂇	au ₃	au	/	/	×	lú	lú	228	271
𠂇	ta	t ^h a	ta	t ^h a	ta	ta	ta	229	272
𠂇	230	...	/	/	×	/	/ ¹⁵³	230	273
𠂇	231	...	/	/	×	/	/ ¹⁵⁴	231	274
𠂇	232	...	/	/	×	/	/	232	275
𠂇	ku ₂	k ^h u	ku ₂	ku?	×	kú	kú	233	276
𠂇	ta ₂	t ^h a	/	/	/	ta ₂	rèn	234	277
𠂇	ir ₃	ir	ri	ri	ir	ri	ri	235	278

¹⁵³ “Allograph of 𠂇.” (K 62).

¹⁵⁴ “Allograph of 𠂇.” *Ibid.*

化	ur	ur	ru	ru ~ ud	ur	ur	ur	236	279
仃	du	tu	du	tu	×	du	du	237	280
𠂔	sui	sui	sui	sui	/ ¹⁵⁵	BORN	BORN	238	281
𠂔	239	...	/	/	×	LI	bǎ	239	282
𠂔	TEN	...	ab	p'ō ~ ap'ō	par	TEN	TEN	240	283
𠂔	TEN°	...	ab°	p'ō ~ ap'ō	×	×	×	240.1	284
𠂔	pu	p ^h u	pu	fu ~ p'u	pu	pu	pu	241	285
𠂔	fu	fu	fu	fu ~ p'u	fu	fu	fu	242	286
𠂔	HEAVEN	...	HEAVEN	yū?	/ ¹⁵⁶	HEAVEN	HEAVEN	243	287
𠂔	s	s	s	s	s	s	s	244	288
𠂔	u ₂	u	ú	u	u	ú	ú	245	289
𠂔	ho ₂	qo ~ oq	qu	g ~ gə	qu	qu	qu	246	290
𠂔	t	t ^h ~ et ^h	t	t ~ t'	t	t	t	247	291
𠂔	YOUNG	...	YOUNG	/	×	YOUNG	YOUNG	248	292
𠂔	du ₃	tu	dû	t' ~ t	rdu	dû	dû	249	293
𠂔	xeu	xeu	heu	yau	qau	heu	heu	250	294
𠂔	n	n	n	n	°n ? ~ n ¹⁵⁷	n	n	251	295
𠂔	o ₃	o	ô	ɔ	o	ô	ó	252	296
𠂔	o ₄	o	ô ₂	ɔ	o	ô ₂	/	253	297
𠂔	d	t	d	t' ~ t	d	d	d	254	298
𠂔	or	or	ri ₅	li ~ ri	or	or	or	255	299
𠂔	256	...	/	/	×	em ₂	×	256	300
𠂔	256.1	...	/	/	×	×	×	256.1	301
𠂔	em	em	em ₂	mə	em	em	em	257	302
𠂔	dz ₂	ts	z	ts	ts	z	z	258	303
𠂔	hur	qur	hut	yut	yur	hur	THIRD ¹⁵⁸	259	304

¹⁵⁵ S 434 has “born” in the column “Logographic meaning (if any).”

¹⁵⁶ S 434 has “heaven” in the column “Logographic meaning (if any).”

¹⁵⁷ S 435 has <°n> ? after consonants and <n> after vowel.

¹⁵⁸ K 66 suggests <hur> as well.

令	t ₂	t ^h	t ₂	t ~ yur	t	t ₂	FOURTH	260	305
𠂇	l	l	l	l	l	l	l	261	306
𠂈	261.1	...	/	/	×	×	×	261.1	307
𠂉	ui	ui	ui	uei	ui	ui	ui	262	308
𠂊	ui ^o	ui	ui ^o	uei	×	ui ^o	ui	263	309
𠂋	ng	ŋ	ng	ŋ	ng	ng	ŋ	264	310
𠂌	264.1	...	e ₃	ə ~ gə	×	×	×	264.1	311
𠂍	ui ₂	ui	ui ₂	uei	×	ui ₂	/	265	312
𠂎	SIXTY	...	SIXTY	ʃar?	/	SIXTY	SIXTY	266	313
𠂏	iun	jun	yun	yun	×	×	×	266.1	314
𠂐	267	...	/	/	/	SIXTY ^o _o	/	267	315
𠂑	xe	xe	xe	he	×	xe	yǐ	268	316
𠂒	er ₂	er	/	/	×	er ₂	/	269	317
𠂓	im	im	ém	em	êm	ém	êm	270	318
𠂔	271	...	/	/	×	/	/	271	319
𠂕	bu ₂	pu	búl	pul	×	bú ₂	bú	272	320
𠂖	un	un	un	un	un	un	un	273	321
𠂗	ia ₂	ia	íá	ia	ia	íá	íá	274	322
𠂘	275	...	/	/	×	LUCK ₂	/	275	323
𠂙	275.1	...	/	/	×	×	×	275.1	324
𠂚	276	...	/	/	×	LUCK ₃	/	276	325
𠂛	LUCK	...	/	/	×	LUCK	qudug	277	326
𠂜	278	...	/	/	×	LUCK ₄	/	278	327
𠂝	278.1	...	/	/	×	×	×	278.1	328
𠂞	po	p ^h o	po	p [´] o	po	po	po	279	329
𠂟	279.1	...	/	/	×	×	×	279.1	330
𠂠	ang ₂	aŋ	áng	aŋ	ang	áng	áŋ	280	331
𠂡	281	...	/	/	×	×	×	281	332

非	282	...	/	/	×	/	fèi	282	333
叔	k	k ^h	k	k‘	k	k	k	283	334
上	284	...	/	/	×	/	/	284	335
山	ñig	ɲik	GOLD	nügu ?	nigu	GOLD	/	285	336
山	ñig°	ɲik	GOLD°	nügu-n ?	nigu [?]	GOLD°	GOLD [♂]	286	337
生	qar	q ^h ar	xar	xar	×	to ₂	/	287	338
中	bir	pir	bir	bir	beñ	bun	bun	288	339
火	iu ₂	ju ~ u	iú	iu	u	iú	iú	289	340
出	añ	aɲ	án	an	an	án	án	290	341
水	ETERN AL ₃	...	/	/	×	/	/	291	342
多	292	...	/	/	×	/	/	292	343
类	293	...	si	si	×	/	/	293	344
小	del	tel	dele	dele	/ ¹⁵⁹	SOUTH	SOUTH ~ TRIBE ~ siò	294	345
1	294.1	...	/	/	×	×	×	294. 1	346
2	294.2	...	/	/	×	×	×	294. 2	347
止	p	p ^h	p	p‘ ~ f	p	p	p	295	348
步	296	...	/	/	×	/	/	296	349
共	296.1	...	/	/	×	×	×	296. 1	350
出	pu ₂	p ^h u	gú	gu	pu	pú	pú	297	351
尚	co	ɣ ^h o	co	tso	×	co	co	298	352
将	299	...	/	/	×	/	/	299	353
口	SEVEN TY	...	SEVEN TY	dal	/ ¹⁶⁰	SEVEN TY	EIGHT Y	300	354
冂	SEVEN TY°	...	SEVEN TY°	dal	/ ¹⁶¹	SEVEN TY°	/	301	355
用	il	il	il	il ~ ir	il [?]	il	il	302	356
用	ing	inj	ing	inj	ing	ing	inj	303	357

¹⁵⁹ S 436 has ‘south’ in the column “Logographic meaning (if any)”.

¹⁶⁰ S 437 has ‘seventy’ in the column “Logographic meaning (if any)”

¹⁶¹ S 437 has ‘seventy’ in the column “Logographic meaning (if any)”

𠂔	ndo	nto	du ₂	du	×	/	gỏ	304	358
𠂔	305	...	/	/	×	/	rỏ	305	359
𠂔	306	...	/	/	×	/	/	306	360
𠂔	307	...	/	/	×	/	/	307	361
𠂔	COMPOSE	...	COMPOSE	/	/ ¹⁶²	COMPOSE	COMPOSE	308	362
𠂔	abad	apat	bod	bod	/	hỏ	hỏ	309	363
𠂔	il ₂	il	li ₄	li ~ ri	×	COMPOSE ₂	/	310	364
𠂔	desh	tef	dus	dus	×	×	×	310.1	365
𠂔	310.2	...	/	/	×	×	×	310.2	366
𠂔	310.3	...	/	/	×	×	×	310.3	367
𠂔	b	p	b	p	b	b	b ~ bo	311	368
𠂔	al ₂	al	lu ₃	lu	tum	tum	tũmu	312	369
𠂔	al ₃	al	/	/	lu	lo	lỏ	313	370
𠂔	iang	jaŋ	iang	iaŋ	iang	iang	iaŋ	314	371
𠂔	she	fe	she	fi	×	she	iãŋ	315	372
目	316	...	zhul	ful ~ đur	×	/	mũh	316	373
月	316.1	...	/	/	×	×	×	316.1	374
月	TEXT ₂	...	COMPOSE ₂	đỏ ?	×	×	×	316.2	375
月	TEXT	...	/	/	×	TEXT	TEXT	317	376
𠂔	318	...	na ₂	na	×	/	/	318	377
𠂔	318.1	...	/	/	×	×	×	318.1	378
𠂔	go	ko	go	ko	go	go	go	319	379
𠂔	320	...	/	/	/	/	yỏ	320	380
𠂔	qar	q ^h ar	har	xar	×	yo	yỏ	321	381
𠂔	qar ₂	q ^h ar	har ₂	xar	×	×	×	321.1	382
𠂔	oñ	on	ón	on ~ ɔn	on	ón	ón	322	383

¹⁶² S 437 has ‘compose’ in the column “Logographic meaning (if any)”

口	323	...	te	tə	qai	qi	qi	323	384
𠵹	üen	yen	üen	en	ên	üen	iên [üen]	324	385
𠵹	324.1	...	/	/	×	×	×	324.1	386
𠵹	324.2	...	ong	oŋ?	×	×	×	324.2	387
𠵹	324.3	...	/	/	×	×	×	324.3	388
𠵹	325	...	/	/	×	/	dên	325	389
文	326	...	/	/	×	ie ^x	iě	326	390
𠵹	ie	je	ie	e ~ ie	iê	ie	ie	327	391
主	xong ₂	xoŋ	kei	kəi?	ɣong	hong ₂	hoŋ ¹⁶³	328	392
亦	ün	yn	ün	iun	ün	ün	ün	329	393
𠵹	zh	ʒ	zh	z _ɿ	×	zh	ž	330	394
𠵹	neu	neu	neu	nou	neu	neu	neu	331	395
𠵹	nai	nai	nai	nai	nai	nai	nai	332	396
𠵹	QUEEN	...	QUEEN	ru ~ lu?	×	QUEEN	/ ¹⁶⁴	333	397
𠵹	g	k	g	k	g	g	g ~ gi	334	398
𠵹	ia	ia	ia	ia	ia	ia	ia	335	399
𠵹	NOT ₂	...	ul ₂	ul?	gi	gi ₂	/	336	400
𠵹	336.1	...	/	/	×	×	×	336.1	401
𠵹	336.2	...	/	/	×	×	×	336.2	402
𠵹	336.3	...	/	/	×	×	×	336.3	403
𠵹	ji ₃	ʃi	ji ₃	uʃ ~ uɟʒ	ǰ	ji ₃	ji	337	404
𠵹	fēn	fēn	pēn	pən	×	×	×	337.1	405
𠵹	337.2	...	/	/	×	×	×	337.2	406
𠵹	ngi	ŋi	ih	i	×	ih	i'i	338	407
𠵹	i	i	i	i	i	i	i	339	408
𠵹	339.1	...	/	/	×	×	×	339.1	409

¹⁶³ K 74 has 主 instead of 主 for n. 328.

¹⁶⁴ “Possibly *qātun*.” (K 75).

𣎵	339.2	...	/	/	×	×	×	339.2	410
𣎵	x	x	h	x ~ k	k	x	x	340	411
𣎵	er	er	er	ər	er ~ r ¹⁶⁵	er	er	341	412
𣎵	WINE	...	WINE	/	/ ¹⁶⁶	WINE	/ ¹⁶⁷	342	413
𣎵	343	...	/	/	×	/	/	343	414
𣎵	343.1	...	/	/	×	×	×	343.1	415
火	ud	ut	ud	t	ud	ud	ud	344	416
𣎵	ung	uŋ	ung	uŋ	ung	ung	uŋ	345	417
𣎵	ung ₂	uŋ	ung ₃	uŋ	×	ung ₂	uŋ	346	418
𣎵	oi	oi	oi	uei	oi	oi	ói	347	419
𣎵	e	e	e	ə	e	e	e	348	420
𣎵	ge	ke	ge	gə ~ ɣə	ge	ge	ge	349	421
𣎵	350	...	/	/	×	d ₂	/ ¹⁶⁸	350	422
𣎵	351	...	/	/	×	/	/	351	423
𣎵	ĩ ₃	u	í	i	×	í	î	352	424
𣎵	ĩ	u	ĩ	ĩ	ĩ	ĩ	ĩ	353	425
𣎵	j	ɟ	s ₂	s	×	dz	dž	354	426
米	udu	utu	udu	ut' ~ ut	ordu	udu	ordu	355	427
𣎵	355.1	...	/	/	×	×	×	355.1	428
𣎵	d ₄	t	te ₂	te	/	/	cèn	356	429
𣎵	ung ₃	uŋ	úng	uŋ	ung	úng	úŋ	357	430
𣎵	mu ₂	mu	mû	mu	×	mû	mû	358	431
𣎵	359	...	/	/	×	/	/	359	432
𣎵	pong	p ^h oŋ	pong	p'au ~ faŋ	pong	pong	poŋ	360	433
𣎵	eñ	eŋ	én	ən ~ en	en	én	én	361	434

¹⁶⁵ S 438 has <er> after consonants and <r> after vowels.

¹⁶⁶ S 438 has 'wine' in the column "Logographic meaning (if any)".

¹⁶⁷ "It could possibly mean 'wine' and possibly be derived from 酒." (K 76)

¹⁶⁸ "An allograph of 𣎵 110 or 𣎵 <d>." (K 77).

为	361.1	...	/	/	×	×	×	361.1	435
号	iau	jau	iau	iau	iau	iau	io	362	436
帛	che	ʃe	che	ʃe	×	/	/	363	437
...	364	...	dele ₂	dele	×	/	/	364	438
采	kid	k ^h it	qid	qīt	qita	qid	qid	365	439
平	ul	ul	ul	ul	wl	ul	ul	366	440
采	zhung	zuŋ	rung	ruŋ	×	zhung	zuŋ	367	441
屯	dur	tur	dur	du ~ dur	dur	FOUR	FOUR	368	442
屯	dur ^o	tur	dur ^o	dur-n?	dur [?]	FOUR ^o	/ ¹⁶⁹	369	443
𠂔	370	...	/	/	/	REGIO N ^x	/	370	444
𠂔	BORDE R	...	ja ₂	ja?	/ ¹⁷⁰	REGIO N	REGIO N ¹⁷¹	371	445
𠂔	u ₃	u ~ w	û	u	uw	û	û	372	446
又	GREAT	...	GREAT	/	/ ¹⁷²	GREAT	GREAT	373	447
𠂔	tai	t ^h ai	tai	t'ai ~ tai	tai	tai	tai	374	448
𠂔	ca	ʃ ^h a	ca	t'ṣa ~ ṣa	ča	ca	ca	375	449
𠂔	376	...	/	/	×	/	/	376	450
𠂔	oh	oq	oh	ak	×	oh	oh	377	451
𠂔	377.1	...	/	/	×	×	×	377.1	452
；	DITTO	repeats preceding graph	DITTO	/	¹⁷³	DITTO	/ ¹⁷⁴	378	453

Comments

001 一 <NORTH>. The reading <hoi> is based on guess that ‘north’—such is the meaning of this logograph—in Khitan was [xɔi], calqued on, and back-derived from, Written Mongol *χoyina* ‘back, north’. Unfortunately, evidence to confirm this reading was not found yet in sources.

¹⁶⁹ “An allograph of 屯, used with masculine nouns.” (K 79).

¹⁷⁰ S 440 has ‘region’ in the column “Logographic meaning (if any)”.

¹⁷¹ “This graph seems to mean ‘border, border area” (K 79).

¹⁷² S 440 has ‘great’ in the column “Logographic meaning (if any)”.

¹⁷³ S 440 has ‘(repeats a grapheme preceding it)’ in the column “Logographic meaning (if any)”.

¹⁷⁴ “Indicates repetition.” (K 81).

002 𠂔 <juri>. This logograph means ‘twenty’. Its reading depends on a correspondence given in *Qidan guo zhi* between SK 晝里昏呵 LTNWC *tʃeu-li hon-ʔa LMC *triw`-li xun-ʔa EM \*tʃiw`-li~ xun-ʔ MSM zhòulǐ hūn`ā and Ch. 羊二十口 yáng èr shí kǒu ‘twenty sheep’. According to this, SK 晝里 must mean ‘twenty’. Romanization <jur₂> is based on the reconstruction *tɛyr obtained in CWJ 151. How the latter was obtained is not explained clearly. It is based on the stem for ‘two’, there pronounced [ʃuru-] (Chinggeltei, 1997), and apparently its vocalic nucleus was modified to conform to some LMC or EM reconstruction of 晝—that is not reported. Some LMC and EM reconstructions—such as Pulleyblank’s reported here— incidentally, have rhyme [-iw]. The stem-final vowel [-u-] probably does not exist, and in fact the same authors reconstruct numeral ‘two’ as *ʃur (CWJ 213-214). Probably for this reason [-u-] of Chinggeltei (1997) was removed without explanation. Apparently, affricate palatalization (tʃ > tɕ: i/y) typical of northern Sinitic but not proved to exist in Khitan, was presumed to occur. As a result, [tɛyr] is obtained.

In my opinion, LMC and EM reconstructions indicate that the character 晝 might have been used to render Khitan [ʃu], since probably sequences like [ʃiu] [ʃju] [ʃy] did not exist in native words, as they were extraneous to Khitan phonology (see §2.2). We obtain [ʃuri]. Such a form allows morphological analysis. It might be a derivation from ʃur ‘two’ by means of a ten-forming suffix -i, hypothetically reconstructed from PM tens *kor-i ‘twenty’, *gut-i ‘thirty’, *dot-i ‘fourty’, *tab-i ‘fifty’. I recognize my hypothesis still include an impacting amount of speculation. Nevertheless, I retain reasonable to tentatively use <juri> ʃuri, since it may be a convincing way of explaining word-final [-i] in Sino-Khitan.

007 𠂔 <ñeim>. The reading <naim> [naim] (CWJ 155-156, 341) apparently aims at a closer link between the Khitan and Mongolic words for ‘eight’, e.g. MM *nayiman* ~ *naiman*. CWJ 155 mention the correspondence in sources between graph n. 7 𠂔 and 伏 𠂔 𠂔 <ñ.ie.im> *neim* (according to CWJ romanization and transcription <ñ.ie.ém> [nieem ~ neem]). The link between the Khitan and Mongolic word is explainable without applying adaptation. Probably, the historical development was PSM **naim* > PM **naim*; Kh. *neim*. Proto-Serbi-Mongolic **n* merged with **n* in Proto-Mongolic. On the other hand, it was preserved in Khitan. In this word, [n] caused palatalization of the following vowel. Therefore, low back [a] was raised and fronted to [e].

014 𠂔 <hur₂>. It was read <húr> in K 37, according to Wang (1986). CWJ proposed modifying into <hu₂> [xu]. However, the correspondence on which the decipherment is based is 𠂔 𠂔 =斛祿 LMC *xhəwk-ləwk EM *xu`-lu` MSM *húlù*. Graph n. 245 𠂔 was safely deciphered as <u₂> [u] (in CWJ

<ú> [u]), so graph n. 14 𠂔 should be read <hul> [qul], or <hur> [qur] if Chinese [l] represents Khitan [r]. It is in fact the case, as the correspondence between the Khitan title 𠂔 𠂔 𠂔 𠂔 <cau.ji hur₂.u₂> *ǰ^hauŋi quru* ‘campaign commander’ with the Middle Mongol title *ča’ut quri ~ ja’ut quri* ‘commandant of one hundred’ demonstrates (Vovin, 2021). As a result, here I read <hur₂>.

021 𠂔 <mo>. It was read <mo> in K 38, according to C. In CWJ it was modified to maintaining different pronunciation in different context [muo ~ əm]. This hypothesis allows the author to read graph n. 21 𠂔 as [əmə] when it occurs in the meaning ‘female, mother’ and to relate it to MM *eme* ‘woman, wife’. Nevertheless, up to now available evidence all point to <mo> [mo]. In fact, the first decipherment as <mo> was based on the correspondence between 𠂔 <mo> ‘mother’ and SK 麼 LTNWC *ma LMC *mua EM *mɔ MSM *mó*, in LS glossed as 母 *mǔ* ‘mother’. Moreover 𠂔 𠂔 <mo.er> *mor* ‘way’ is connected to MM *mör* ‘way, trace’. These evidences point to <mo> [mo].

022.1 𠂔 <ngi₂>. See under graph n. 338.

025 𠂔 <INHERIT>. No evidence is yet available for its pronunciation. However it occurs in the base of the verb 𠂔 ~ 𠂔 𠂔 which meaning is 承祧 *chengtiao* ‘inherit’ (CWJ 366). Therefore, we may give to it a semantic reading as <INHERIT>.

026 𠂔 <ONE>. The pronunciation of this graph was discussed in many studies: 1) Readings based on Para-Mongolic in Manchu-Tungusic for ‘eleven’ suppose the numeral ‘one’ should be something like [om ~ oms]. Unfortunately, we have no evidence from KSS corpus confirming this hypothesis. 2) Readings based on ordinal numeral ‘first’ suppose the shape [mas]. Very often, cross-linguistically the word for ‘first’ has no relation to the word for ‘one’, but rather with other words meaning ‘head’, ‘before’, ‘beginning’. Although the relation between ‘first’ and ‘one’ cannot be excluded yet, we still need evidence from KKS to establish it. By some authors [oms] of hypothesis (1) and [mas] of hypothesis (2) are coexisting and cognate. The same root would have produced [oms] for ‘one’ and [mas-] for first. This also remains in need of evidence. Until we do not get more solid evidence, it is hard to explain how [oms] and [mas-] may be connected, since we hardly know something on developments such as ablaut in Serbi-Mongolic.

031 𠂔 <ts>. CWJ 166 give the correspondence 𠂔 𠂔 = 齐 (T 齊) LTNWC **tshiei* (JGJ *tcī*) LMC **tshiaj* EM **ts^hi'* MSM *qí* = 𠂔 𠂔 = 漆 LMC **ts^hit* EM **ts^hi*ˊ MSM *qī* (Shen, 1980; Liu *et al.*, 1995; Yan 1982). On this base they romanize <chi> and pronounce [tʰi]. CWJ's romanization with sequence <ch> suggests a post-alveolar [tʰ] rather than an alveolar affricate [tʰ], that is in fact what we have in their phonetic transcription, i.e. [tʰi]. Moreover, <i> [i] is not needed since in the correspondence it is already expressed by graph 𠂔 <i>. Thus, it is more correct to read <ts> [tʰ] like in K 39.

035.3 𠂔 <ug>. Chen *et al.* (1998) found the correspondence 𠂔 𠂔 𠂔 = 淑 (叔 LTNWC **śuk* (QZW *shug*) MSM *shū*) LMC **śhiwk* EM **śy'* MSM *shú/ū*. The graph n. 035.3 𠂔 is read as <iû₂> in WJ and in CWJ 167. The latter allows for both pronunciations [iu] and [iuk]. Since a correspondence of 淑 to [ʃiu] or [ʃu] in KSS could be rendered by *𠂔 𠂔 <sh.iu₂> or *𠂔 𠂔 <sh.u>, the usage of a special graph suggests that the proper names 淑儀 = 𠂔 𠂔 𠂔 𠂔 (CWJ 167), 淑儀 = 𠂔 𠂔 𠂔 = 𠂔 𠂔 𠂔 (CWJ 162), 仁懿 = 𠂔 𠂔 𠂔 𠂔 = 𠂔 𠂔 𠂔 𠂔 (CWJ 319), 懿州(之) = 𠂔 𠂔 𠂔 (𠂔) were codified into KSS more than once in different periods (see also under graph n.338 𠂔 <ngi> [ŋi]). Probably 𠂔 𠂔 𠂔 𠂔 is to be read <sh.ug₂.u ng.i> [ʃuku ŋi] and was codified and fixed in the language in Middle Chinese times when pronunciation was **fuk(u)-ŋi*, whereas 𠂔 𠂔 𠂔 and 𠂔 𠂔 𠂔 is to be read <is.iu₂.ngi ~ is.iu₂ ngi₂> [isiuŋi] and was codified and fixed in the language in Liao Chinese times when pronunciation was **śiu-ŋi*. Thus, they might be different diachronic versions of the same Chinese name. While in the logographic Chinese the older pronunciation gets lost as the language develops, in the phonographic KSS Khitan different pronunciations may become coexisting and give life to different variants or words.

038 𠂔 <zh₃>. It is an allograph of graphs n. 038.1 𠂔 <zh₄> and n. 128 𠂔 <zh₂> (see here below under graph n. 38).

038.1 𠂔 <zh₄>. CWJ 168 read <ri₄> [ri] based on Yuan & Liu (2005) who give the correspondence 𠂔 𠂔 = 如 LTNWC **nzu* (DZJ, EJ *zhu*, Kbr *śū*) LMC **riǎ* ~ *ryǎ* EM **ry*ˊ MSM *rú*. Assuming that it also occurs in native words—note that all the candidates, such as 𠂔 𠂔, 𠂔 𠂔, 𠂔 𠂔, 𠂔 𠂔 etc. (see CWJ 1699) are unintelligible—they suppose that Chinese retroflex vibrant [ɽ] should represent Khitan [r]. Actually, no solid evidence has been found that this graph and its two allographs occur in native words. Moreover, Kh. [r] is commonly rendered with LC [l]. Additionally, what in Yuan &

Liu was reconstructed as [ɾ]—i.e. the descendant of EMC [ɲ]—has possibly never been a vibrant, but rather a fricative [z] just like in modern times. LC retroflex [ʐ] was probably represented in Khitan by a simple post-alveolar [ʒ] (see §Phonology). Thus, I preferred romanizing with <zh₄> = [ʒ] rather than with <r> = [r] (see §Romanization and transcription).

40 𐰺 <WEST>. The reading <ör> [ör?] in CWJ 168 is hypothetically based on Mongolian¹⁷⁵ *öro* ~ *ör* ‘west’. There is no evidence to confirm this hypothesis, so it is safer to maintain <WEST> like in K 39 and WJ.

41 𐰺 <us>. As pointed out in several works, the decipherment of this graph is closely connected to the word 𐰺 𐰺 𐰺 <sh.eu.041> in *Xu Lid* corresponding to Ch. 露 *lù* ‘dew’ in the same source (Chinggeltei *et al.*, 1977; Ji, 1982; Wang, 1986; Chinggeltei, 2002; K 40; CWJ 169-170). Before CWJ, most studies reasonably attempted to connect this word with MM (HY) *ši’üderin* ‘dew’ and Mongolian¹⁷⁶ *sigüder* [ʃu:dər]¹⁷⁷ ‘dew’. Counterevidence was found pointing to the proper name 𐰺 𐰺 𐰺 <t.ug.041> in *Renxian* 48 being transcribed into Ch. 圖古斯 *túgūsī* (Ji, 1996)¹⁷⁸, and 𐰺 𐰺 𐰺 <pu.udu.u₃.er> emended into 𐰺 𐰺 𐰺 𐰺 <pu.041.u₃.er> in *Yongqing* 12 being transcribed into Ch. 蒲速里 *púsùlǐ* (Yuan & Liu, 2005). These correspondences pointed to a possible reading *<s>. CWJ in order to adjust the word 𐰺 𐰺 𐰺 <sh.eu.041> ‘dew’ to the new reading, connected it to Mongolian¹⁷⁹ *sigüsü* [ʃu:s] ‘sap, juice; food (usually meat) for offerings; food for officials; whole sheep cooked and offered to honored guests’¹⁸⁰. Noteworthy, if it were not for the abovementioned new evidence, it would not be so straightforward to connect these words, since the meaning ‘sap, juice’ is attested only in modern languages, whereas historically we have MM (SH) *ši’üsün* ‘ration’ (H 142), RH *süsün* ‘provision for travelling’ (N 499), (Ph.) *ši’üsü* ‘food, provision’ (*ibid.*). Incidentally, the Khitan word for ‘dew’ itself becomes the prove that the meaning of ‘a certain kind of filtered liquid’ was already present in Proto-Serbi-Mongolic. Moreover, the Mongolic forms apparently misled former decipherment attempts. The CWJ reading <su> is based on the Written

¹⁷⁵ It was not specified in which Mongolian language ‘west’ is *örö* ~ *ör*. This is a reconstructed but not attested form. We have the Middle Mongol word *hörene* ~ *höröne* ‘west’ in SH (H 77). Note that according to the Middle Mongol form, if we were to hypothesize a connected form in Khitan then it would be **p^hur* (romanized <pur>), since PSM [**p^h-*] > MM [h-], Kh. [p^h-]; PSM [**ö*] > MM [ö], Kh. [u].

¹⁷⁶ In this case the unspecified Mongolian language should be Written Mongol with Standard Inner Mongolian pronunciation.

¹⁷⁷ These the forms mentioned in CWJ 169. Other noteworthy forms are MM (SH) *ši’üderin*, (RH) *sü:derin*, and WM (FL) *sigüder(i)* (N 498).

¹⁷⁸ For further detail on this identification, see under graph n. 172 𐰺 <ug> [uk].

¹⁷⁹ In this case the unspecified Mongolian language should be Written Mongol with Standard Inner Mongolian pronunciation.

¹⁸⁰ Gloss from FL (704).

Mongol form. Both pronunciations [su ~ s] were allowed by CWJ, [su] based on Written Mongol *sigüsü* and [s] based on Modern Mongolian [ʃu:s]. Nevertheless, the existence of two pronunciation variants was given no reason, nor criteria for their usage were given.

In fact, we can find a clear reason for excluding final [-u] in this reading. First of all, decipherment based on Mongolic is anachronistic, since Proto-Mongolic class noun morpheme **-sU(n)* corresponds to Kh. *-s*, e.g. MM *čisun* ‘blood’, Kh. 朮 关 忒 <c.i.is> *ɣʰis* ‘blood, relatives’. WM *-u* developed only in PM lineage as a connective vowel between the original PSM morpheme **-s* and PM unstable *-n*. Since unstable *-n* did not develop in Khitan lineage, there is no need to reconstruct *-u*.

Instead we may insert [u-] before [-s], since the graph always occurs after other graphs ending in [-u]. Thus, we may read <us> [us].

43 𐰺 <maud>. The preliminary decipherment leads CWJ 43 to <maut>. Thereafter, for unexplained reason, the variant <mot> was added, and the romanization chosen was eventually <mot>. Pronunciation [maut] is already correct without need of further adjustment. The development PSM **ahu* > Kh. *au*, PreclM. *ayu*, MM *a'u ~ awu ~ au* is well demonstrated, and further development of Kh. *au* > *o* is not attested.

69 𐰺 <ir₄>. 𐰺 𐰺 𐰺 <sh.a.69> is a Khitan title corresponding to Chinese 郎君 *langjun* transcribed in LS 116 as 沙里 LTNWC *ša-li* LMC *ša:-li* EM *ša-li*˘ MSM *shā-lǐ* (K 42-43, CWJ 178) ~ 舍利 LTNWC *śa-li* LMC *śia'-li*˘ EM *ṣe~li*˘ MSM *shèlǐ* (CWJ 178). This evidence provisionally suggests [li]. A further correspondence is between 𐰺 𐰺 <m.69> ‘small village’ and 彌里 LTNWC **mi-li* LMC **mji-li* EM **mi'-li*˘ MSM *mǐlǐ* ~ 抹里 LTNWC **mai~mēi-li* LMC **muaj'-li* EM **muj'-li*˘ MSM *mèilǐ*, 抹里 LTNWC **mar-li* LMC **muat-li* EM **ma~mɔ~li*˘ MSM *mòlǐ* (cf. WF 430, K 107). In fact, this word occurs only once in the whole CWJ corpus (Xingzong 2-12), in genitive form, i.e. 𐰺 𐰺 𐰺 <m.69.en>. This evidence alone, also gives no clue about the value represented by Chinese [l], that can stand for [l] or [r]. We still have [li]. Fortunately, ‘small village’ is also written 𐰺 𐰺 <m.ir₃> [mir] which already stands for ‘horse’ (see under graph n. 235). It is not certain whether the two meanings are etymologically connected. Nevertheless, this variance proves that n. 69 𐰺 has to be read <ir₄> [ir].

84 𐰺 <ar₂>. Correspondences given in CWJ 187-188 would firstly point to <al>, differently from readings <ra> (K, WJ, [ra]) R <ra> [ri] (CWJ), with the liquid segment following and not

preceding the vowel. Chinese transcriptions clearly point to vowel [a] rather than [i]. It is well known that Chinese [l] may represent both [l] and [r]. Here it represents [r], thus the preliminary reading has to be changed into <ar₂>. Former studies although using [r], do not mention convincing evidence for its presence. K does not mention evidence, CWJ 187-188 under graph n. 84 mention a provisional evidence that should be verified (<m.ie.ra.d> [mjerit] = Mongolian [mœrt] ‘with horse’). The really convincing evidence is in fact indirectly given under graph n.169 in CWJ 235-236, where we see that graphs n. 84 𠂔 and n.84.1 𠂔 are interchangeable with graph n. 123 𠂔 <ar> [ar] (in CWJ <ar> [ar]).

169 欠 <ho>. CWJ 235 mentions the correspondences from Wang Hongli (1986) 𠂔 𠂔 欠 <c.ab.169>¹⁸¹ = 阻 卜 LTNWC ...-pok~puk LMC *tʂəaʼ-pəwk EM *tʂuʼ-puʼ MSM zǔbǔ, from Ji (1996a) 伏 𠂔 欠 伏 <ñ.ar₂.169.ñ>¹⁸² = 涅里古 ~ 涅里袞 LTNWC *niar-li-kə ~ / LMC *niat-li-kuǎʼ ~ kunʼ EM *[njɛʼ]-liʼ-kuʼ ~ kunʼ¹⁸³ MSM nièlǐgǔn, 伏 行 欠 伏 <ñ.am₂.169.ñ> = 涅木古 LTNWC *niar-mok-kə LMC *niat-məwk-kuǎʼ EM *[njɛʼ]-muʼ-kuʼ MSM nièmùgǔ ~ 粘木袞¹⁸⁴ LTNWC */-mok-/ LMC *nriam-məwk-kunʼ EM * [njɛmʼ]-muʼ-kunʼ MSM niánmùgǔn ~ 粘睦姑 LTNWC */-muk-ko LMC *nriam-məwk-kuǎ EM * [njɛmʼ]-muʼ-kuʼ MSM niánmùgū ~ 粘米袞 LTNWC */-/-/ LMC *nriam-mjiǎjʼ-kunʼ EM * [njɛmʼ]-miʼ-kunʼ MSM niánmǐgǔn, 𠂔 𠂔 欠 <ci.ab.169> = 阻 卜 zǔbǔ (see above in this entry) ~ 直不姑 LTNWC *džək-pu-kə¹⁸⁵ LMC *trhiäk-put-kuǎ EM *tʂiʼ-puʼ-kuʼ MSM zhíbùgū. The correspondences—together with the genitive form 𠂔 𠂔 欠 𠂔 <ci.ab.169.on>, where genitive suffix -on suggests [o] in the preceding syllable—point to two pronunciation variants: 1) [oq] in final position or in medial position before vowel; 2) [qo] in medial position before consonants. I conventionally base my romanization on the second form. In Chinese transcriptions the velar is always unvoiced unaspirated [k]. Additionally, in the first syllable of the three Khitan words we have nucleus [a], suggesting back harmony. Thus, I transcribe the consonant segment with unvoiced unaspirated uvular [q]. In the romanization used here <q> corresponds to unvoiced aspirated [qʰ], while <h> corresponds to unvoiced unaspirated [q]. Therefore, I replace former romanization <qó> with <ho>.

¹⁸¹ Ji also mentions the genitive form 𠂔 𠂔 欠 𠂔 <ci.ab.169.on> (C 235).

¹⁸² Toyoda (1997) mentions variant 伏 𠂔 𠂔 <ñ.ar₂.u₃>, where according to C 𠂔 <u₃> is probably a transcription mistake for 欠 <169>, and Liu (1993c) 伏 𠂔 欠 <ñ.ar.169> (C 235–236).

¹⁸³ Square brackets are from P.

¹⁸⁴ LS has T 袞 gǔn.

¹⁸⁵ SC has several reconstructions for 不 bù. For Late Tang times he has “(1a) CSZ *pu (colloquial reading) [...] (1b) [*pə ~ pʌ] (unstressed colloquial reading) [...] (2) CSZ *fu (literary reading = 否) [...] CollSZ *不 *pu; *pə ~ pʌ”.

172 欠 <ug>. Correspondences given in CWJ 237 to decipher graph n. 172 欠 are 𠂔 欠 <v.172> = 武 EMC *mjuX LTNWC *mvu LMC *vjyǎʼ ~ vuǎʼ EM *vuʼ MSM wǔ, 𠂔 欠 <b.172> = 仆 = 僕¹⁸⁶ LTNWC *bok LMC *phǎwk EM *pʰuʼ MSM pú, 𠂔 欠 <l.172> = 祿 LTNWC *lok LMC *lǎwk EM *luʼ MSM lù. CWJ 187-188 mentions the correspondence 𠂔 𠂔 𠂔 𠂔 𠂔 <y.ra.u.ud g.u.172> = 耶律固 *Yélǜ Gù*. Reconstructions for 固 *gù* are EMC *kɔʰ LTNWC *ko ~ ku LMC kuǎʼ EM *kuʼ. Romanization <uh> (CWJ, WJ, K) is due to velar final stop -k in Middle Chinese. The fact that two out of four words do not have -k lead CWJ to keep <uh> as provisional romanization, \evidence reported in CWJ 169 from Ji (1996a) seems to corroborate the presence rather than the absence of the velar. It is the correspondence between 屯 圖 古 斯 LTNWC ... *do-ko-si LMC *tʰun tʰuǎ-kuǎʼ-sɿ EM *tʰunʼ tʰuʼ-kuʼ-sɿ MSM tún túgǔsī¹⁸⁷ = 令 𠂔 令 欠 𠂔 <t.un t.172.us>. This identification suggests n. 172 = <ug> [uk], completing thus the picture into <t.un t.ug.us> [tʰun tʰukus]. As we can see, rather than a fricative as implied by -h in former romanizations, this evidence suggests a plosive.

235 𠂔 <ir₃>. CWJ 262 give <ri> [ri]. K 62 and R 156, 159 both give <ri> but allow two variant in pronunciation, i.e. [ri ~ ir]. Shimunek reads <ir>. Decipherment of this graph was based on 1) word 𠂔 𠂔 <m.235> meaning ‘horse’ (K 62, CWJ 262); 2) word 𠂔 𠂔 欠 <ja.235.ho> meaning ‘prime minister’ (CWJ 262); 3) word 𠂔 𠂔 𠂔 <di.235.g> for proper name 梯里己 *tīlǐjǐ* (*ibid.*); 4) word 𠂔 𠂔 𠂔 <235.g.en> for title 夷離堇 *yílijǐn* (K 62). Word (1) and (2) have no Chinese transcription, so they cannot be used as primary evidence, but only as secondary corroboration. Word (3) is a proper name transcribed in LS as 梯里己 LTNWC */-li-/ LMC *tʰiaj-li-kiʼ EM *tʰi-liʼ-kiʼ MSM tīlǐjǐ. This evidence provisionally suggests for n. 235 𠂔 reading [li]. Word (4) is a title of Turkic origin, written 𠂔 𠂔 𠂔 <235.g.en> in Khitan and transcribed into Chinese as 夷離堇 LTNWC *i-li-kin¹⁸⁸ LMC *ji-li-kinʼ EM *jiʼ-liʼ-kinʼ MSM yílijǐn. This evidence provisionally suggests a reading <ili> [ili]. Comparing to the original OT *irkin* ‘a title borne by tribal chiefs, inferior to *xağan* but superior to *beg*’ (GC 225), we may correct the reading into <ri ~ ir>. Possibly, it is pronounced [ri] in medial position, and [ir] in initial and final position. I conventionally choose romanization <ir₃>. Upon this

¹⁸⁶ CWJ uses simplified sinograms, therefore they have 仆 *pū* which was already a traditional sinogram as well with meaning ‘to prostrate’ and reconstructions LMC *pʰǎwk EM *pʰuʼ. However, as shown by the reconstructions reported in CWJ (bʼuk—bʼu—pʼu), and by the sinogram reported in K 55 (僕 *pú* ‘servant’), it must be intended as the simplified form of 僕 *pú*.

¹⁸⁷ Tun Tugusi was the Great Prince of Zubu state mentioned in LS 20, where he is related to an event happened in Chongxi 16 (1047 CE, Xingzong).

¹⁸⁸ SC has not Late Tang reconstruction for 夷 *yí*, for which I report ONWC *i, and has not 堇 *jǐn* for which I use the Late Tang reconstruction given for 謹 *jǐn*.

decipherment, we get <m.ir> [mir] for ‘horse’, and <ja.ir.ho> [ʃarjoq] ‘prime minister’.

338 酒 <ngi>. The decipherment of graph n. 338 酒 and its variant n. 22.1 𪚩 is based on the correspondence with Ch. 儀 LTWNC **ɣi* [ɣgi] (QZW ‘gi) LMC **ɣi* EM **ji*’ MSM *yí* in LS and 懿 LMC **ʔi*’ EM **ji*’ MSM *yì* in *Renyi* and *Xuanyi* (CWJ 162, 319). Liao Chinese preserves Middle Chinese initial [ɣ-]. A further corroboration is offered by the variant 𪚩 <ng.i> also corresponding to Ch. 儀 *yí* (Chen *et al.* 1998, cited in CWJ 167). Graph n. 264 𪚩 was safely deciphered as <ng> [ɣ] (C; K 67; CWJ 280).

APPENDIX C - LEXICAL COMPOSITION AND STRATIFICATION

The Khitan lexicon comprises multiple strata of varying chronological and geographical provenance. The core vocabulary exhibits clear genetic affiliation with the Mongolic family. Superimposed upon this foundation are several loanword layers, the most extensive of which derives from Liao Chinese and consists predominantly of noble and official titles. A smaller stratum of earlier Chinese loans, presumably from Northwest Middle Chinese, is distinguished by the retention of final stop consonants that had been lost in Liao Chinese. Noble and official titles associated with nomadic tribal organization are largely borrowed from Turkic languages, most likely Old Uyghur or Old Turkic. A limited number of titles show Iranian etymologies, while others constitute *Wanderwörter* of the steppe empires whose ultimate origins remain undetermined. Beyond this specialized administrative vocabulary, the basic lexicon divides into two principal components: terms of transparent Serbi-Mongolic provenance and elements of obscure etymology. The following subsections examine representative portions of the lexicon organized by the following semantic fields:

- a) numerals
- b) kinship
- c) time
- d) animals
- e) colours
- f) verbs
- g) titles
- h) tribal organization
- i) others

When the Khitan items are regarded as cognates with Middle Mongol items, I mentioned the possible Middle Mongol cognates, and proposed Proto-Mongolic and Proto-Serbi-Mongolic etymological reconstructions. The scheme used is: Khitan item; Middle Mongol item < Proto-Mongolic reconstruction < Proto-Serbi-Mongolic reconstruction. This scheme means that the Proto-Serbi-Mongolic item generated Khitan and Proto-Mongolic items as different lineages, and the Proto-Mongolic item generated the Middle Mongol element.

In some cases, I mentioned Middle Mongol or Written Mongol items which resemble Khitan items, but presenting some phonetic or semantic idiosyncrasies that bring us to question whether we are here dealing with cognates, or loanwords, or even mere coincidences. In case of items attested only

in Written Mongol, and not in Middle Mongol, a further hinder to confirm common origin is uncertainty about temporal depth of Written Mongol items. The scheme used is: Khitan item, cf. Middle Mongol or Written Mongol item.

In case of loanwords, the source item and language are indicated. The scheme used is Khitan item ← source item.

Relevant loanwords from Serbi-Mongolic languages to other language families are eventually added at the end of the entry preceded by the source language name and symbol →. When, although recognizing Serbi-Mongolic family as the source of the loanword, I was not certain on the exact source language, I did not specify it. When I was not certain on the loaning direction, I introduced the loaned item with “cf.” instead of →, and close the entry with (lw.).

When I regard loanword proposals as noteworthy to mention, but still in need of further investigation in order to be assessed, these are followed by a question mark.

Khitan data given in this list are usually included in both K and CWJ wordlists (K 83-130, CWJ 357-488). If it is not the case, this will be specified.

In some cases, Khitan ordinal numerals presents many variants. I initially quote only one feminine form. At the end of the item, I mention the remnant inflectional word forms and variants.

For Mongolic items, (n) at the word end indicates the Mongolic “unstable -n”.

a) Numerals

The cardinal numerals that can be safely reconstructed are 1, 2, 3, 4, 5, 7, 8, 9, 20, and 100. These can all be related to Mongolic.

- 1) 伏 𐰺 ~ 𐰺 <ñ.e~e₂> *je* ‘one, only’¹⁸⁹; MM *nike(n)*¹⁹⁰ ~ *nigen*¹⁹¹ ‘one’ < PM * *ni-ke(n)* < PSM * *ni* ‘id.’
- 2) 𐰺 𐰺 <ci.ur.eñ> *ʃʰur-ep* [two-ORD.F] ‘second (F)’, 𐰺 / 𐰺 <jur/jur°> *ʃʰur* ~ *ʃʰur* ‘two’; MM *ji-tö:r* [two.F-ORD] ‘jealousy’¹⁹², *ʃirin* ‘two (F)’¹⁹³, *ʃirqo’an* ‘six’¹⁹⁴, *ʃira(n)* ‘sixty’ PM

¹⁸⁹ Cf. Peng, 2023; Aruna, 2025:169.

¹⁹⁰ H 117. Also *niken* in HY and “*niken* (o *nigen*?)” in Muq (N 460).

¹⁹¹ GK 193-194.

¹⁹² This lexeme is attested in Muq (N 390). It derives from Proto-Mongolic **ji-tüxer* ‘second (wife)’, originally a gender-specific form of the ordinal ‘second’ restricted to female referents. Subsequently, the meaning narrowed to ‘second wife’ and underwent semantic shift to ‘jealousy’ (cf. N 390; J 16).

¹⁹³ H 90 “zwei, beide”. Nine occurrences are indicated as designating female beings, two as designating male beings (cf. VR 70, J 16).

¹⁹⁴ SH P (VR 70). MM *ʃirqo’an* ‘six’ is the reflex of PM **ʃir-qu* + *-Gan* [two-three + NUM] ‘two times three, i.e. six’ (cf. J 17). It has many variants (VR 70): *ʃirwa’an* ~ *ʃirwaan* (SM), *ʃirghu’an* ~ *ʃirghaan* ~ *ʃirghuun* ~ *ʃurghu’an* ~ *ʃurghaan* (AM).

- **fi-r* ‘two’ < PSM **ti-r* ‘id.’ → Ju. *jir-xon* ‘twelve’¹⁹⁵, Al. *tir-kən* ‘id.’¹⁹⁶, Ma. *jor-gon* ~ *jor-hon biya* ‘twelfth month’¹⁹⁷. Other inflectional form: 𐰇𐰏𐰤 <ci.ur.er> *f^hur-er* [two-ORD.M] ‘second (M)’. Variants: 𐰇𐰏𐰤 <j₂.ur.eñ> *f^hur-ep*¹⁹⁸, 𐰇𐰏𐰤 <j₂.ur.er> *f^hur-er*.
- 3) 𐰇𐰏𐰤 <h.ur.eñ> *qur-ep* [three-ORD.F] ‘third (F)’, 𐰇 / 𐰇 <hur₃/hur₃^o> (116/48) *qur* ‘three’; MM *qu.tu’ar* ~ *qu.ta’ar* ‘third’¹⁹⁹, *qurban*²⁰⁰ ~ *yurban*²⁰¹ ‘three’ < PM **qu-r-pa(n)* ‘id.’ < PSM **qu-r* ‘id.’ → Ju. *gor-xon*, ‘thirteen’²⁰², Al. *kə-xo* ‘id.’²⁰³. Other inflectional form: 𐰇𐰏𐰤 <h.ur.er> *qur-er* [three-ORD.M] ‘third (M)’. Variants: 𐰇𐰏𐰤 <h.od.eñ> *qo-ten*, 𐰇𐰏𐰤 <h.od.er> *qo-ter*²⁰⁴, 𐰇𐰏𐰤 <hur.eñ> *qur-ep*, 𐰇𐰏𐰤 <hur.er> *qur-er*.
- 4) 𐰇𐰏𐰤 <t.ur.eñ> *t^hur-ep* [four-ORD.F] ‘fourth (F)’; MM *dörben*²⁰⁵ ~ *dürben*²⁰⁶ ‘four’, *dö.tü’er*²⁰⁷ ~ *dö.te’er*²⁰⁸ ‘fourth’ < PM **tø-r-pe(n)* ‘four’ < PSM **tø-r* ‘id.’ → Ju. *dur-xon* ‘fourteen’²⁰⁹, Al. *tu-xu* ‘id.’²¹⁰. Other inflectional form: 𐰇𐰏𐰤 <t.ur.er> *t^hur-er* [four-ORD.M] ‘fourth (M)’. Variants: 𐰇𐰏𐰤 <d.ur.eñ> *tur-ep*²¹¹, 𐰇𐰏𐰤 <d.ur.er> *tur-er*.
- 5) 𐰇 / 𐰇 <tau/tau^o> *t^hau* ‘five’²¹², 𐰇𐰏𐰤 <t.od.o.oñ> *t^ho-toon*²¹³ ~ 𐰇𐰏𐰤 <t.ad.o.oñ> *t^ha-toon*²¹⁴ [five-ORD.F] ‘fifth (F)’; MM *tabun* ‘five’²¹⁵, MM *tab.tu’ar*²¹⁶ ‘fifth’ < PM

¹⁹⁵ Kane & Miyake, 2024: 96. The hyphen is my addition to distinguish the two elements composing the item. The second element could mean ‘twenty’ and be related to PM **q^ho-har* ~ *q^ho-jar* ‘two’ and PM **q^ho-r-i(n)* ‘twenty’. Para-Mongolic numerals in Jurchenic from 12 to 19 were probably composed by the “anticipated counting system” found in Old Turkic, perhaps suggesting an areal influence from some Turkic language, since no such a system is found in any other Serbi-Mongolic language. As it appears from data now available, it was a peculiar innovation of the Serbi-Mongolic language that provided the 11 to 19 numerals to Jurchen and Alchuka, with some residuals in Manchu and Kilen. For further details on this question, and to compare different reconstructions, please refer to Pritsak (1985), Janhunen (2003b: 399-400), Hölzl (2017), and Shimunek (2018).

¹⁹⁶ Hölzl, 2017: 104. The hyphen is my addition (see footnote n. 195).

¹⁹⁷ Vovin, 2024: 120. The hyphen is my addition (see footnote n. 195).

¹⁹⁸ K 143.

¹⁹⁹ SH (VR 70).

²⁰⁰ SH, HY (N 344); SM, PhM, AM (VR 70).

²⁰¹ Muq (N 344), GK 112.

²⁰² Kane & Miyake, 2024: 96. The hyphen is my addition (see footnote n. 195).

²⁰³ Hölzl, 2017: 104. The hyphen is my addition (see footnote n. 195).

²⁰⁴ K 143.

²⁰⁵ SM, PhM, AM (VR 70); SH, HY, Muq (N 318). N for SH follows Haenisch’s system, i.e. *dorben*, which in the system used here stands for *dörben*.

²⁰⁶ SM (VR 70)

²⁰⁷ SH (VR 70); HY (N 319).

²⁰⁸ AM (VR); Muq (N 319). N transcribes *döter*.

²⁰⁹ Kane & Miyake, 2024: 96. The hyphen is my addition (see footnote n. 195).

²¹⁰ Hölzl, 2017: 104. The hyphen is my addition (see footnote n. 195).

²¹¹ K 98.

²¹² K 98.

²¹³ CWJ 437. In the original “第五”.

²¹⁴ CWJ 439. In the original “第五”.

²¹⁵ SM, PhM, AM (VR 70); SH, HY, Muq (N 509).

²¹⁶ Form attested in SH, quoted according to VR 70. I omitted other variants mentioned there, choosing only the ones with the most archaic shape.

- *t^hapu(n)* ‘five’ < PSM **t^hapu* ‘id.’ → Ju. *tob(u)-xon* ‘fifteen’²¹⁷, Al. *t’ɔf-xɔ* ‘id.’²¹⁸, Ma. *tofo-hon* ‘id.’²¹⁹. Other inflectional forms: 令币及北 <t.od.o.or₂> *t^ho-toor* [five-ORD.M] ‘fifth (M)’, 令亦及北 <t.ad.or₂> *t^ha-toor* ‘id.’
- 6) 屏 <dil> *til* ‘seven’, 六丹癸 <da₂.al₂.er> *tal-er* ‘seventh’²²⁰; MM *dolo’an*²²¹ ~ *dolon*²²² ~ *doloon*²²³ ~ *dolaan*²²⁴ ‘seven’, *dolo.du’ar*²²⁵ ‘seventh’, *dal(an)*²²⁶ ‘seventy’ < PM **tal-u-pa(n)* ‘seven’ < PSM **tal-* ‘id.’ → Ju. *dal(u)-xon*²²⁷ ‘seventeen’, Al. *tɔ-xɔŋ* ‘id.’²²⁸
- 7) 伏交全 <ñ.ie.im> *jeim* ‘eight’²²⁹; MM *naiman*²³⁰ ~ *nayiman*²³¹ ‘id.’ < PM **naim* ‘id.’ < PSM **naim* ‘id.’
- 8) 𠂔 <is> *is* ‘nine’, 𠂔化当 <is.ir₃.eñ> *is-iren* [nine.F-ORD.F] ‘ninth (F)’; MM *yesün*²³² ~ *yisün*²³³ ‘id.’, MM *yisü.deer* ‘ninth’²³⁴, MM *yer(en)*²³⁵ ~ *yiren*²³⁶ ‘ninety’ < PM **jer-sü-n* ‘nine’ < PSM **jer-s* ‘id.’. Other inflectional forms: 𠂔𠂔𠂔 <is.d.h> *is-taq* ‘at (the age of) nine’, cf. Khal. ec дэх *yəs-tə-x* [nine-DAT-ADJZ ?] ‘ninth, lit. (the one) being at nine’. Variants: 𠂔𠂔𠂔 <is^o.d.er> *is-ter* [nine.M-ORD.M] ~ 𠂔𠂔𠂔 <is.ir₂.er> *is-irer* [nine.F-ORD.M]
- 9) 𠂔 <juri> *ɟuri* ‘twenty’²³⁷ < PreKh. **ɟur-i* [two-DER] ‘twenty’ < PSM **ti-r* ‘two’
- 10) 𠂔𠂔 <jau> *ɟau* ‘hundred’; MM *ja’un*²³⁸ ~ *ɟawun*²³⁹ ~ *ɟaun*²⁴⁰ ‘id.’ < PM **ɟahu(n)* ‘id.’ < PSM **ɟahu* ‘id.’

²¹⁷ Kane & Miyake, 2024: 96. The hyphen is my addition (see footnote n. 195).

²¹⁸ Hölzl, 2017: 104. The hyphen is my addition (see footnote n. 195).

²¹⁹ Vovin, 2024:120. The hyphen is my addition (see footnote n. 195).

²²⁰ CWJ 419. In the original “第七”. For ‘seventh’ only the masculine form is attested.

²²¹ SM (VR 70); SH, HY (N 318).

²²² SH (VR 70).

²²³ SM (VR 70).

²²⁴ AM (VR 70).

²²⁵ SH (VR 70).

²²⁶ SM, AM (VR 70); SH, HY, Muq (N 311).

²²⁷ Kane & Miyake, 2024: 96. The hyphen is my addition (see footnote n. 195).

²²⁸ Hölzl, 2017: 104. The hyphen is my addition (see footnote n. 195).

²²⁹ Cf. CWJ 155-156

²³⁰ SM, AM (VR 70); SH, HY, Muq (N 45). VR has the variant *nayiman* for P as well.

²³¹ PhM (VR 70).

²³² HY (N 545).

²³³ SM, AM (VR 70).

²³⁴ AM (VR 70).

²³⁵ SM (VR 70).

²³⁶ SM, AM (VR 70).

²³⁷ Cf. CWJ 151; see Appendix B, graph n. 002.

²³⁸ SM, AM (VR 70) *jaun* as well for A. N 384 gives *ja’un* for HY, Muq. He gives *ɟau(n)* for SH. He further gives the variant *ɟawun* for IV, LV.

²³⁹ AM (VR 70).

²⁴⁰ AM (VR 70).

b) Kinship

- 11) 全 丰 <ab ai> *ap ai* ‘grandfather, ancestor’, cf. WM *aba* ~ *abu* ‘father, grandfather’²⁴¹
- 12) 丰 <ai> *ai* ‘male, father’, 丰 丹 力 <ai b.aq> *ai paq^h* ‘son, lit. male child’, 丰 几 <ai ku> *ai k^hu* ‘husband, lit. male person, i.e. man’, cf. LOK *api* ‘father’²⁴² (lw.?)
- 13) 央 <au> *au* ‘elder sister’, cf. WM *abayai* ‘wife of a prince, lady’, *abaqai* ‘princess, daughter, young lady’²⁴³
- 14) 丹 力 <b.aq> *paq^h* ‘child’, cf. WM *baya* ‘young, younger, childhood’²⁴⁴
- 15) 才 <ia> *ja* ‘elder brother’
- 16) 百 <mo> *mo* ‘female, mother’, cf. MM *eme* ‘woman, wife’²⁴⁵; 百 丹 力 <mo b.aq> *mo paq^h* ‘daughter, lit. female child’; 百 几 <mo ku> *mo k^hu* ‘wife, lit. female person, i.e. woman’
- 17) 力 立 出 芬 ~ 力 出 芬 <na.ha.añ.er ~ na.añ.er> *naga-ner* ~ *naa-ner* [maternal.relative-PL] ‘maternal relatives’; MM *naqaču*²⁴⁶ ‘maternal relative’ <PSM **naqa-* ‘maternal relative’
- 18) 公 及 <n.o> *no* ‘spouse’
- 19) 公 不 <n.on> *non* ‘generation’²⁴⁷
- 20) 伏 考 <ñ.iau> *jau* ‘(younger) sibling, younger relative’²⁴⁸; Tab. *Ñu+ñar* [younger relative-PL] ‘Ruanruan, lit. younger siblings, younger relatives’²⁴⁹; MM *nu’un* ‘son, boy, child’, WM *niyun* ‘boy, son’²⁵⁰ <PSM **jaqu* ‘younger relative’²⁵¹
- 21) 土 央 <p.ur> *p^hur* ‘descendent’; MM *hüre*²⁵² ~ *hüren*²⁵³ ‘seed, fruit, effect’ <PM **hyr-e* ‘seed, fruit’ <PSM **p^hyr* ‘id.’

²⁴¹ FL 2, 5

²⁴² Vovin (2017: 208-209) suggested that the Khitan *ai* ‘male, father’ might be of Koreanic origin, connected with LOK *api* ‘father’, perhaps entered in Khitan in the historical context of Parhae dynasty.

²⁴³ FL 3

²⁴⁴ FL 67

²⁴⁵ N 328 (SH ‘woman, wife’, Muq ‘woman, female’). N has *eme gü’ün* ‘woman’ (HY) as well. GK 97 for *eme* (pl. *emes*) has ‘woman, female’, and quotes the use of *eme kümün* as well. H 43 has for *eme* (pl. *emes*) ‘Frau, Gattin’. The vocalism in the two languages does not correspond. The forms may be unrelated. It is common knowledge that many languages develop words meaning ‘mother’ out of the sound *m*.

²⁴⁶ SH, HY (N 451). H 112 has “Oheim mütterlicherseits” ‘maternal uncle’.

²⁴⁷ A peculiar feature of the noun *non* ‘generation’ is that takes masculine gender agreement.

²⁴⁸ Rykin, 2025: 110, 115. In the original “ñaw”. According to the system explained in §2.3.1, I represent the same sounds as **jau*. I would like to thank prof. Rykin for personally sending to me its new article on *Journal Asiatique*, a very valuable investigation on the etymology of the ethnonym Ruanruan (and variants) and its cognates in other Serbi-Mongolic languages. For further forms in other languages, variants, and meanings, refer to this article.

²⁴⁹ Rykin, 2025: 115.

²⁵⁰ *Ibid.*

²⁵¹ *Ibid.* In the original “*ñagu”. According to the system explained in §2.1.5, I represent the same sounds as **jaqu*.

²⁵² HY (N 370).

²⁵³ Muq (N370).

22) 𠂔 𠂔 ~ 𠂔 𠂔 <x.iu₂ ~ k.iu₂> *xju* ~ *k^hju* ‘younger sister’

c) Time

23) 𠂔 <ai> *ai* ‘year’, cf. MK *háy* ‘year’²⁵⁴ (lw.?)

24) 𠂔 𠂔 <eu.ur₂> *euur* ‘age’; MM *e’üre* ‘long time’²⁵⁵, WM *egüri* ‘long time, long ago, old, ancient’²⁵⁶ < PM **ehyr-e* ~ **ehyr-i* ‘long time’ < PSM **ehyr* ‘id.’

25) 𠂔 𠂔 <ci.ar> *f^har* ‘past, in the past’, cf. Ma. *cala* ‘previously, before’²⁵⁷ (lw.?)

26) 𠂔 𠂔 <xeu.ur₂> *xeuur* ‘spring’; MM *qabur* ‘id.’²⁵⁸ < PM **q^hapur* ‘id.’ < PSM **q^hapur* ‘id.’

27) 𠂔 𠂔 <ju.un> *f^hun* ‘summer’; MM *j^hun* ‘id.’²⁵⁹ < PM **f^hun* ‘id.’ < PSM **f^hun* ‘id.’

28) 𠂔 𠂔 <n.am.ur₂> *namur* ‘autumn’; MM *namur* ‘id.’²⁶⁰ < PM **namur* ‘id.’ < PSM **namur* ‘id.’

29) 𠂔 <ñair> *nair* ‘sun, day’; MM *naran* ‘sun’²⁶¹ < PM **nar-a(n)* ‘id.’ < PSM **nar* ‘sun’

30) 𠂔 𠂔 <or₂.a.an> *oran* ‘after’²⁶²

31) 𠂔 <po> *p^ho* ‘time, hour’; MM *hon* ‘year’²⁶³ < PM* *ho-n* ‘id.’ < PSM **p^ho* ‘time’

32) 𠂔 <sair> *sair* ‘moon, month’; MM *sara* ‘id.’²⁶⁴ < PM* *sar-a* ‘moon’ < PSM **sar* ‘id.’

33) 𠂔 𠂔 <s.uñ> *sun* ‘night’; MM *söni*²⁶⁵ ~ *süni*²⁶⁶ ‘id.’ < PM **søni* ‘id.’ < PSM **søni* ‘id.’

34) 𠂔 𠂔 <u.ul> *uul* ‘winter’; MM *übül*²⁶⁷ ~ *öbül*²⁶⁸ ~ *üwül*²⁶⁹ ~ *ö:l*²⁷⁰ ‘id.’, UM *ebül* ~ *übül* ‘id.’²⁷¹ < PM **epyl* ‘id.’ < PSM **epyl* ‘id.’

²⁵⁴ Vovin (2017: 209) suggested that Kh. *ai* ‘year’ might be of Koreanic origin, connected with MK *háy* ‘year’, perhaps entered in Khitan in the historical context of Parhae dynasty.

²⁵⁵ H 47. In the original “(auf) lange (Zeit)”.

²⁵⁶ FL 302.

²⁵⁷ K 118.

²⁵⁸ H 55. In the original “(im) Frühling”.

²⁵⁹ H 95. In the original “Sommer”.

²⁶⁰ H 113. In the original “Herbst”.

²⁶¹ H 113. In the original “Sonne”.

²⁶² CWJ 384. In the original “后”.

²⁶³ H 77. In the original “Jahr”.

²⁶⁴ H 132. In the original “Mond [...] Monat”.

²⁶⁵ HY, Muq (N 504).

²⁶⁶ SH (N 504).

²⁶⁷ SH, HY (N 537).

²⁶⁸ Muq, RH (N 537).

²⁶⁹ ZY (N 537).

²⁷⁰ Muq (N 537).

²⁷¹ GK 89, 303.

d) Animals

35) 𪛗 𪛗 <h.or₂> *qor* ‘crow’²⁷²

36) 𪛗 𪛗 ~ 𪛗 𪛗 <im.a ~ im.ia> *ima* ~ *imja* ‘goat’; MM *ima’an*²⁷³ ~ *ima:n*²⁷⁴ ‘goat’, UM *imaya/n*²⁷⁵ ← OT *imğa* ~ *amğa* ‘wild mountain goat’²⁷⁶ → Ju. *imu’a*²⁷⁷ ‘wild sheep, goral’, Ma. *imaha* ‘goat’²⁷⁸, *niman* ‘billy-goat’²⁷⁹ (lw. to Jurchenic through Mongolic)

37) 𪛗 <lu> *lu* ‘dragon’; MM *luu*²⁸⁰ ~ *lu*²⁸¹ ‘id.’ ← OT *luu* ‘id.’²⁸² ← Ch. 龍 OC *[mə]-roŋ EMC *[jowng] MSM *lóng* ‘id.’²⁸³

38) 𪛗 𪛗 <m.ir₃> *mir* ‘horse’; MM *mori(n)*²⁸⁴ ‘id.’ < PM **mori-n* < PSM **mori/miri* → Ma. *morin* ‘id.’²⁸⁵ (lw. to Jurchenic from Mongolic)

39) 𪛗 𪛗 <ñ.aq> *naq^h* ‘dog’, SK 捏褐²⁸⁶ **naq^h* LTNWC **niar*²⁸⁷ / LMC **niat-xhat* EM *[nje`-xɔ] ²⁸⁸ MSM *niēhè*; Tab. **naq^han* ‘id.’²⁸⁹; MM *noqai*²⁹⁰ ‘id.’ < PM **noq^ha-i* < PSM **noq^ha* → Ju. *niaha*²⁹¹ ‘small dog’, Ma. *niyahan* ‘puppy’²⁹², *niohe* ‘wolf’²⁹³ (the items with *a* are lw. from a Serbi language to Jurchenic; the item with *o* is a lw. from Mongolic to Jurchenic)

40) 𪛗 𪛗 𪛗 <ñ₂.or₂.o> *poro* ‘snake’

41) 𪛗 𪛗 ~ 𪛗 𪛗 𪛗 <p.o ~ p.o.o> *p^ho* ~ *p^hoo* ‘monkey’, cf. Ma. *bonio* ‘id.’ (lw.)

42) 𪛗 𪛗 𪛗 <qa.ha.as> *q^haqaa*s ‘tiger’

²⁷² Possibly of onomatopoeic origin.

²⁷³ HY, Muq (N 372). Only in the plural form *ima’at* in SH (H 82, N 372).

²⁷⁴ Muq (N372).

²⁷⁵ GK 124.

²⁷⁶ GC 158.

²⁷⁷ Vovin, 2004: 120.

²⁷⁸ Vovin, 2004: 121.

²⁷⁹ Poppe, 1966: 190.

²⁸⁰ GK 170.

²⁸¹ PhM (GK 170).

²⁸² GC 763; Vovin, 2004: 124. GC rewrites this word as *lu*.

²⁸³ According to Vovin (2004: 121, 124-125) the word entered in Old Turkic through an unknown language whose phonotactics did not allow -ŋ in final position. This would explain why this Middle Chinese word loaned into Old Turkic lost the velar nasal coda, which is usually retained in other Middle Chinese loanwords into Old Turkic.

²⁸⁴ SH *mori(n)* (H 111), *morin* HY, Muq (N 446).

²⁸⁵ Vovin, 2004: 119.

²⁸⁶ LS, QDGZ (K 93).

²⁸⁷ SC has not 捏 *niē*. Presuming that the pronunciation was similar, I reported his reconstruction for 涅 *niè*.

²⁸⁸ P has not 捏 *niē*. I reported his reconstruction for 涅 *niè*. Square brackets are from P.

²⁸⁹ Vovin, 2007. I adapted his reconstruction **njaqan* to fit my reconstruction and romanization of Proto-Serbi-Mongolic.

²⁹⁰ SH, HY, Muq (N 462).

²⁹¹ K 93.

²⁹² *Ibid.*

²⁹³ Janhunen, 2003b: 397; 2015: 582.

- 43) SK 昏阿²⁹⁴ **q^huna* ‘sheep’ EM **xun-ɔ* LTNWC **hon*²⁹⁵-ʔ LMC **xun-ʔa* MSM *hūnā/à*;
MM *qoni/n*²⁹⁶ ~ *yonin*²⁹⁷ ‘id.’ ← OT *qōh* ‘id.’²⁹⁸ → Ju. *honi* ‘id.’²⁹⁹, Ma. *honin* ‘id.’³⁰⁰ (lw.
to Jurchenic throug Mongolic)
- 44) 叉 𪛗 𪛗 <sh.au.a> *fawa* ‘falcon’; MM *šiba’un* ‘bird’³⁰¹ < PM **sipa-hun* ‘id.’ < PSM **siba-*
‘id.’
- 45) 令 𪛗 𪛗 <t.aq.a> *t^haq^ha* ‘chicken’; MM *takiya*³⁰² ~ *taqiya*³⁰³ ~ *taqi’a*³⁰⁴ ‘id.’ ← OT *takı:ǵu*
‘a domestic fowl’³⁰⁵ → Ju. *tiko* ‘id.’³⁰⁶, Ma. *coho* ‘id.’³⁰⁷
- 46) 𪛗 𪛗 𪛗 <tau.li.a> *t^haulia* ‘hare’; MM *taulai*³⁰⁸ ~ *ta’ulai*³⁰⁹ ~ *tu:lai*³¹⁰ ‘id.’ ← B **tabula?*
‘id.’³¹¹; OT *tabiš-ǵan* [hare-DER] ‘id.’³¹² < PT **tabul?* ‘id.’³¹³
- 47) 𪛗 <ui> *ui* ‘pig’³¹⁴
- 48) 𪛗 <uñ> *uñ* ‘ox’; MM *üniyen*³¹⁵ ~ *üne’en*³¹⁶ ~ *üneyen*³¹⁷ ‘cow’ < PM **yne-hen* (regressive
assimilation) < PM **yni-hen* < PSM **yñi*

²⁹⁴ QDGZ (Ji, 1986; K 35).

²⁹⁵ SC has not 昏 *hūn*. Presuming that the pronunciation was similar, I reported his reconstruction for 婚 *hūn*.

²⁹⁶ SH, HY, Muq (N 419).

²⁹⁷ Muq (N 419).

²⁹⁸ GC 631. Clauson has *qo:ñ*. Alternative romanization *qōh* was pointed out to me by prof. Khabtagaeva.

²⁹⁹ Vovin, 2004.

³⁰⁰ Vovin, 2004.

³⁰¹ SH (H 139, in H’s romanization *šibao’un*), HY, Muq (N 488).

³⁰² SH, HY (N 510).

³⁰³ LV (N 510).

³⁰⁴ Muq (N 510).

³⁰⁵ GC 468.

³⁰⁶ K 88

³⁰⁷ *Ibid.*

³⁰⁸ SH (H 145, in H’s romanization *taolai*), HY, LV, IV (N 514). Probably, PhM *t^havlayi* (*ibid.*) also represents MM *taulai*.

³⁰⁹ Sh, Muq (N 514).

³¹⁰ Muq, IV (N 514).

³¹¹ My tentative reconstruction.

³¹² GC 447. Clauson has *tavišǵan*. At the same time, he points out that -ǵan is an old derivational suffix. Alternative form *tabiš-ǵan* was pointed out to me by prof. Khabtagaeva.

³¹³ My tentative reconstruction.

³¹⁴ Apparently without related words in other languages. It might possibly have onomatopoeic origin. I owe this interesting suggestion to prof. Khabtagaeva.

³¹⁵ SH (H 165, in H’s romanization *uniyen*).

³¹⁶ HY (N 541).

³¹⁷ Muq (N 541).

e) Colors

- 49) 𐰽𐰺𐰍 / 𐰽𐰺𐰍 <l.iau.ho₂/l.iau.118> *ljaw-oq*/... [red-ADJVZ.M/F] ‘red (M/F)’
- 50) 𐰽𐰺𐰍 / 𐰽𐰺𐰍 ~ 𐰽𐰺𐰍 <³¹⁸ñig ~ ñig^o ~ n.i.g₂> *nik* ‘golden, yellow’, SK 𐰽𐰺𐰍³¹⁹ **nik* LTNWC **hi* ~ *ny-ko* LMC *nrið* ~ *nryð-kuð* EM *ny-ku* MSM *nügü*
- 51) 𐰽𐰺𐰍 ~ 𐰽𐰺𐰍 / 𐰽𐰺𐰍 ~ 𐰽𐰺𐰍 <³²⁰qar.iu₂ ~ qar₂.iu₂/qar.u ~ qar₅.u ~ qar.ir₂> *q^har-iu/q^har-u/q^har-ir* [black-ADJVZ.F / black-ADJVZ.M / black-ADJVZ] ‘black’³²¹; MM *qara* ‘black’³²² ← OT *qara* ‘id.’³²³
- 52) 𐰽𐰺𐰍 ~ 𐰽𐰺𐰍 / 𐰽𐰺𐰍 <³²⁴s.iau.ho₂ ~ s.au.ho₂/s.iau.118> *sjaw-oq* ~ *saw-oq/sjau*-... ‘green, blue (M/F)’
- 53) 𐰽𐰺𐰍 / 𐰽𐰺𐰍 <su/su^o> *su* ‘white’ ← Ch. 素 LTNWC **so* LMC **suð* EM **su* MSM *su* ‘undyed silk, plain, simple, white’³²⁵

f) Verbs

- 54) 𐰽𐰺𐰍 <a.> *a-* ‘to be’; MM *a-*³²⁶ ‘to be, to stay, to exist, to live’ < PM **a-* ‘to be’ < PSM **a-* ‘id.’
- 55) 𐰽𐰺𐰍 <ar.ó.o.> *aroo-* ‘to bless’
- 56) 𐰽𐰺𐰍 <as.> *as-* ‘to protect’; MM *asara-*³²⁷ ‘to take care of, to nourish, to show mercy/compassion, to defend’ < PM **asa-ra-* ‘to take care, to take charge’³²⁸ < PSM **asa-*
- 57) 𐰽𐰺𐰍 <ci.> *g^hi-* ‘to make’
- 58) 𐰽𐰺𐰍 <eu.> *eu-* ‘not to be (negative copula), to decease’; MM *ebde-*³²⁹ ~ *öbde-*³³⁰ ‘to break (tr.), to destroy, to ruin’ < PM **ep-te-* ‘to break (tr.)’ < PSM **ep-* ‘to break (intr.)’

³¹⁸ Aruna, 2025: 176.

³¹⁹ *Ibid.*

³²⁰ Aruna, 2025: 177.

³²¹ CWJ 308-309, O3 76-77.

³²² SH, HY, Muq (N 404).

³²³ GC 643. Clauson has *kara*:. Alternative romanization *qara* was pointed out to me by prof. Khabtgäeva.

³²⁴ Aruna, 2025: 174-175.

³²⁵ Hereby, I tentatively propose that Kh. *su* ‘white’ is a loanword from Chinese.

³²⁶ SH, HY (N 263), GK 1.

³²⁷ SH, HY, Muq, LV (N 274), GK 20.

³²⁸ Kempf (2013: 129) reconstructs verb stem **asa-* from segmenting the Middle Mongol verb as *asa-ra-* where *-ra-* stands for the medial deverbal suffix *-rA-* (Kempf, 2013: 124-131). The transitive verb *asara-* ‘to take care, to take charge’ is one of the exceptions to the general function of *-rA-* as deriving intransitive verbs (Kempf, 2013: 129). Probably for this reason the reconstructed stem **asa-* was provisionally left without translation. The Khitan date may be seen as corroborating this reconstructed stem and suggesting a meaning more or less synonymous to the derived stem, i.e. ‘to protect’.

³²⁹ SH, Muq (N 322); GK 88.

³³⁰ SH (N 322). In Haenisch’s romanization *obde-*.

- 59) 丙 <iu> *ju* ‘not existent, there is not, deceased’
- 60) 𠂔 <ja.> *ʃa-* ‘to indicate’; MM *ʃa’a*-³³¹ ‘to indicate, to announce, to promise’ < PM **ʃa*-ha- ‘id.’ < PSM **ʃa-* ‘id.’
- 61) 𠂔 𠂔 𠂔 <jau.ul.ha.> *ʃau-ulqa-* ‘to separate’; MM *ʃaba* ‘crack’³³², MM *ʃabsar* ‘gap, crack, space or time between, interval’³³³, *ʃabdu-* ‘to prepare, to take the time to do’³³⁴, *ʃabqa-* ‘to lose, to miss’³³⁵, WM *ʃab* ‘interval, spare time’³³⁶ < PSM **ʃap-* ‘to separate’ < PSM **ʃap-* ‘id.’
- 62) 𠂔 𠂔 𠂔 <l.iu.ir.> *liuir-* ‘to die’
- 63) 𠂔 𠂔 <na.as.> *naas-* ‘to move’
- 64) 𠂔 𠂔 <n.o.> *no-* ‘to hit’; MM *ono-* ‘to hit, to consider, to examine’³³⁷, WM *onu-* ~ *no-* ‘to hit a target’³³⁸ < PM **ono-* ‘to hit’ < PSM **ono-* ‘id.’
- 65) 𠂔 <o.> *o-* ‘to become’³³⁹, cf. PTu. **oo-* ‘id.’³⁴⁰ (lw?)
- 66) 𠂔 <on.> *on-* ‘to fall’; MM *una*-³⁴¹ ‘id.’ < PM **una-* ‘id.’ < PSM **una-* ‘id.’
- 67) 𠂔 𠂔 <or₂.l.> *orle-* ‘to begin’
- 68) 𠂔 𠂔 <p.o.> *p^ho-* ‘to be’; MM *bü-* ~ *bö-* ‘to be, to exist’³⁴² < PM **py-* ‘id.’ < PSM **py-* ‘id.’
- 69) 𠂔 𠂔 <p.od.> *p^hot-* ‘to go back, to return’
- 70) 𠂔 𠂔 𠂔 <p.o.ol.> *p^hol-* ‘to become’; MM *bol-* ‘id.’ ← OT *bol*-³⁴³ ‘id.’
- 71) 𠂔 𠂔 𠂔 𠂔 <pu.us.l.ge.> *p^huuselke-* ‘to celebrate’
- 72) 𠂔 𠂔 <s.a.> *sa-* ‘to sit, to reside’; MM *sa’u*-³⁴⁴ ~ *su*:-³⁴⁵, UM *sayu-* ‘to sit, to stay’³⁴⁶ < PM **sa-hu-* [sit-DER-?] ‘to sit’ < PSM **sa-* ‘id.’

³³¹ SH, HY, Muq (N 378).

³³² SH (H 84). In the original “Felsspalte”; N 378 gives for the reconstruction **ʃaba* the meanings ‘gap; gorge, ravine’.

³³³ HY, Muq (N 378).

³³⁴ GK 128.

³³⁵ SH (H 84). In the original “verlieren, nicht fangen können”; also cf. GK 128: “*ʃabqa-* to lose”; N 379 mentions attestations in SH, SG, Muq (also *ʃabya-*), LV, and gives for the reconstruction **ʃabka-* the meanings ‘to lose, to be lost (esp. of animals).’

³³⁶ N 378.

³³⁷ GK 209.

³³⁸ FL 587, 615.

³³⁹ R 161. The meaning of *o-* is discussed in the present study as well, p. 46.

³⁴⁰ Janhunen, 2024: 64.

³⁴¹ SH, Muq, LV (N 532); GK 295.

³⁴² H 16, 20-21; GK 55-60.

³⁴³ GC 331.

³⁴⁴ SH, HY, Muq (N 484)

³⁴⁵ Muq (*ibid.*).

³⁴⁶ GK 246.

- 73) 𐰇𐰣 <tau.us.> *t^hauus-* ‘to advance’³⁴⁷; MM *dabsi-* ‘to pass’³⁴⁸ < PM **tapsi-* ‘id.’ < PSM **taps-* ‘id.’
- 74) 令金 ~ 𐰇金 <t.em. ~ d.em.> *t^hem-* ~ *tem-* ‘to confer’; MM *temdek* ~ *temtek* ‘clear, proof’³⁴⁹, UM *temdek* ‘token, sign’³⁵⁰ < PM **t^hem-* ‘to mark’ < PSM **t^hem-* ‘to mark’
- 75) 令𐰇 ~ 𐰇𐰇 <t.ge. ~ d.ge.> *t^heke-* ~ *teke-* ‘to die’; MM *de’e-re*³⁵¹ ~ *de:-re*³⁵² ~ *dehe-re*³⁵³, UM *dege-re* ‘above, on top, upper’³⁵⁴ *dek-de-* ‘to rise, to lift oneself up’³⁵⁵ < PM **tehe* ‘above, up’ < PSM **tehe* ‘id.’ (zero-conversion from noun to verb in Khitanic lineage?)
- 76) 𐰇 <û.> *u-* ‘to give’; MM *ök-*³⁵⁶ ~ *ög-*³⁵⁷ ‘id.’ < PM **øk-* < PSM **øk-* ‘id.’
- 77) 𐰇𐰇𐰇 <x.ui.ir3.> *xuiir-* ‘to reach’; MM *gür-*³⁵⁸ ~ *kür-*³⁵⁹ ‘to reach, to arrive’ < PM **k^hyr-* ‘id.’ < PSM **k^hyr-* ‘id.’
- 78) 𐰇𐰇 <y.au.> *jau-* ‘to go’; MM *yabu-*³⁶⁰ ‘id.’ < PM **japu-* ‘id.’ < PSM **japu-* ‘id.’
- 79) 𐰇𐰇𐰇𐰇 <y.eu.ur.ge.> *jeuurke-* ‘to turn, to revolve’
- 80) 𐰇𐰇 <y.ie> *je* ‘existent, there is’

g) Titles

- 81) 𐰇𐰇𐰇𐰇𐰇𐰇 <cau.ji hur2.u2> *ʃ^hauʃi quru* ‘campaign commander’³⁶¹ → MM *ča’ut quri* ‘official title’³⁶²
- 82) 𐰇𐰇𐰇𐰇 <ci.eng.un> *ʃ^herjun* ‘changwen, an official title of unclear interpretation’ ← Ch. 敝稳 ‘id.’ LMC **t^ʃh^hiaŋ’-ʒun’* EM **t^ʃh^haŋ’-un’* MSM *chǎngwǎn*

³⁴⁷ R 141, 143

³⁴⁸ *Ibid.*

³⁴⁹ H 148. In the original “klar, (Beweis)”.

³⁵⁰ GK 279.

³⁵¹ SH, HY (N 314).

³⁵² Muq (*ibid.*).

³⁵³ Muq (*ibid.*).

³⁵⁴ GK 80.

³⁵⁵ H 35. In the original “sich erheben”.

³⁵⁶ SH, HY, IV (N 472).

³⁵⁷ Muq, LV (*ibid.*).

³⁵⁸ SH, HY (N 436).

³⁵⁹ HY, MUQ (*ibid.*).

³⁶⁰ SH, HY, Muq (N 543).

³⁶¹ This Khitan word translates Ch. 都統 *dūtōng* ‘campaign commander’ (K 93-94). This word was discussed in Vovin (2021). Rykin (2023: 304-305) discussed other related Khitan and Middle Mongol words. These words – containing verb stem *ʃau-* ‘to fight a war, to wage war, to do battle’ (WJ 69-70; S 243) – are probably a loanwords from Khitan into Middle Mongol (Rykin, 2023: 305; S 331-332). I owe my gratitude to prof. Rykin for pointing out his own 2023’s article to me. For a thorough discussion of the morphology of this word family and full bibliography on the topic, please to the mentioned article.

³⁶² H 26. In the original “Beamtentitle [...] (so nennt sich Temujin sich selbst gegenüber Onghān)”.

- 83) 王 九 兩 <di.g.in> *tikin* ‘tégín’ ← OT *tégin* ‘prince’³⁶³
- 84) 佗 九 才 𠂔 <du g.ia.im> *tu kjaim* ‘chief supervisor’ ← Ch. 都監 ‘id.’³⁶⁴ LMC **tuǎ-kja:m* EM **tu-kjam* MSM *dūjiàn*
- 85) 九 水 亥 𠂔 <g.ung dz₂.iu₂> *kuŋfu* ‘princess’ ← Ch. 公主 ‘id.’³⁶⁵ LTNWC **koŋ-tsu* LMC **kəwŋ-tsyǎ* EM **kuŋ-tsy* MSM *gōngzhǔ*
- 86) 主 王 <xong di> *xoŋti* ‘emperor’ ← Ch. 皇帝 ‘id.’³⁶⁶ LTNWC **hwaŋ-tiei* LMC **xhwaŋ-tiaj* EM **xwaŋ-ti* MSM *huángdì*
- 87) 𠂔 𠂔 <il.bir> *ilpir* ‘tribal judge’ ← OT *ēl* ‘a political unit organized and ruled by an independent ruler’³⁶⁷ + *bāg* ‘the head of a clan, or tribe, a subordinate chief’³⁶⁸
- 88) 𠂔 九 𠂔 <ir₃.g.en> *irken* ‘tribal chieftain’ ← OT *irkin* ‘a title borne by tribal chiefs, inferior to *xağan* but superior to *beg*’³⁶⁹;
- 89) 𠂔 𠂔 欠 <ja.ir₃.ho> *ƒairoq* ‘prime minister’³⁷⁰
- 90) 𠂔 𠂔 <jau tau> *ƒaut^hau* ‘bandit suppression commissioner’ ← Ch. 招討 *zhāotǎo* ‘id.’ EM *tṣew-t^haw* LMC *tṣiaw-t^haw* NWMC *tṣau-/*.
- 91) 𠂔 𠂔 𠂔 <l.im.ha> *limqa* ‘academician’ ← OT *élmğa*: ~ *é:l imğa*:³⁷¹ ‘secretary’;
- 92) 𠂔 𠂔 九 水 <l.ing g.ung> *liŋkuŋ* ‘lord’ ← Ch. 令公 *lìnggōng* ‘id.’ EM *liŋ-kun* LMC *liaŋj-kəwŋ* NWMC *lieŋ(T, HS leŋ)-koŋ* (K 16).
- 93) 𠂔 <ong> *oŋ* ‘prince’ ← Ch. 王 *wáng* ‘king, prince’ EM *waŋ* LMC *yaŋ* NWMC *yaŋ* (O, TD wang LTCA *yaŋ* S-T wang)
- 94) 𠂔 𠂔 伏 <pu.is.ñ> *puisjñ* ‘lady’ ← Ch. 夫人 *fūrén* ‘id.’ EM *fu-rin* LMC *fjyǎ/fuǎ-rin* NWMC *fu(C, TD, T phu etc. S-T pu etc., see SC 169 for further details)-nžin* (K, O, TD, DA *zhin* K, TD *zhin*)³⁷².

³⁶³ “tégín (or ? tégi:n) [...] In the Türkü period it meant prince in the limited specific sense of ‘a son, or a grandson, of a ruling *xağan*’; after that period it was used in a much less restricted sense as a title of honour of diminishing importance, but did not survive the Mongolian invasion.” GC (483). I am not certain about the exact rank height of the Khitan title, however it is evidently a loanword from Old Turkic or Old Uyghur. Due to my uncertainty in the translation I retain the Old Turkic form according to Clauson (*op. cit.*) in italics, i.e. *tégin*.

³⁶⁴ WJ 159

³⁶⁵ K 112.

³⁶⁶ K 95.

³⁶⁷ GC 121. Clauson has *é:l*. Alternative romanization *ēl* was pointed out to me by prof. Khabtagaeva.

³⁶⁸ GC 322. Clauson has *be:g*. Alternative romanization *bāg* was pointed out to me by prof. Khabtagaeva.

³⁶⁹ GC 225.

³⁷⁰ K 52.

³⁷¹ GC 158.

³⁷² 𠂔 𠂔 伏 <pu.is.ñ> *puisjñ* ‘lady’ is a Chinese loanword from 夫人 *fūrén* ‘lady’ EM *fu-rin* LMC *fjyǎ/fuǎ-rin* (cf. K 104, WJ 52). This word gives us important clues about Khitan phonology. Khitan had no /f/ and replaced it with /p/, and has no /ʒ/ (the actual phonetic value of ‘r’ in *pinyin*, EM, and LMC reconstructions, that is a retroflex fricative) so that it replaces it with /s/. The absence of the labiodental fricative /f/ is a common phenomenon in Mongolic and

- 95) 分 又 力 <pu m.a> *p^hu ma* ‘imperial son in law’ ← Ch. 駙馬
- 96) 分 又 火 <pu sh.iu₂> Khitan transcription of 副署 *fùshù* ‘deputy administrator’ EM [fu`]-šy`
LMC fjiw`/fuw`-šhið`/šfiyð`.³⁷³
- 97) 𐰚 *qa* ‘khagan’, cf. Thab. **qayan* OT *qayan* MM *qa’an* Ju. *qa’an* Ma. *han* OK *kan* ‘id.’
- 98) 又 力 夫 <sh.a.ir₄> *fair* ‘court attendant’
- 99) 全 各 火 <s.eng.un> *sejun* ‘field marshal’ ← 詳穩 *xiángwěn* EM sjaŋ’-un` LMC shiaŋ-
ʔun`³⁷⁴
- 100) 又 考 又 𐰚 Kh. <sh.iau.u shi> *faufiu* ‘junior preceptor’ ← 少師 *shàoshī* ‘id.’ EM
šew`-šř LMC šiaw`-šř NWMC šau-ši
- 101) 𐰚 全 𐰚 <shi s.iang> *fi sjaŋ* ‘military governor’ ← Ch. 使相 *shǐxiàng* ‘governor’
EM šř’-sjaŋ` LMC šř’-siaŋ` (cf. WJ 81), or 史相 *shǐxiàng* ‘historian(?)’ EM šř’-sjaŋ` LMC
šř’-siaŋ` (cf. W 269).³⁷⁵
- 102) 𐰚 𐰚 𐰚 𐰚 <shi ci.eu.ung> *fiŋfeun* ← Ch. 侍中 *shìzhōng* ‘chamberlain’ EM šř’-tšun
LMC šhi`-triwŋ (cf. WJ 82; W 267)
- 103) 全 𐰚 𐰚 𐰚 <s.iang g.ung> *sjaŋkun* ‘chancellor’ ← Ch. 相公 *xiànggōng* EM sjaŋ’-
kun LMC siaŋ`-kəwŋ CSZ siaŋ-kon (cf. WJ 156)
- 104) 全 𐰚 𐰚 𐰚 <s.iang g.ün> *sjaŋgyn* ‘general’ ← Ch. 將軍 *jiàngjūn* ‘id.’ EM tsjaŋ’-kyn
LMC tsiaŋ’-kyn NWMC tsiaŋ(SZC tsið)-kyn(NT kyun LTCA kun);
- 105) 𐰚 𐰚 <tai shi> *taifu* ‘grand preceptor’ ← Ch. 太師 *tàishī* ‘id.’ EM t^haj-šř LMC t^haj-
šř NWMC thai/thei-ši (O, TD shi TD shi/she LTCA ši S-T shi/she)
- 106) 𐰚 𐰚 <tai ui> *t^hai ui* ← Ch. 太尉 *tàiwèi* ‘grand commandant’ EM t^haj’-uj` LMC
t^haj’-ʔyj` (WJ 85)
- 107) 𐰚 𐰚 𐰚 <tai z.i₂> *taitsu* ‘crown prince’ ← Ch. 太子 *tàizǐ* ‘id.’ EM t^haj’-tsz` LMC
t^haj’-tsz` NWMC thai/thei-tsi
- 108) 令 欠 又 𐰚 <t.qo sh.i> *thoq fi* ← Ch. 節度使 *jiédùshǐ* ‘id.’³⁷⁶

Turkic languages, both ancient and modern. Generally, loanwords that enter in these languages substitute original f’s with p’s.

³⁷³ The square brackets are from P.

³⁷⁴ The Khitan title *sejun* corresponds to the Chinese title 詳穩 *xiangwen*. Since the semantic content of the constituent characters does not yield a coherent meaning as a title, the Chinese form represents a phonetic transcription of the Khitan term rather than the reverse, contrary to the usual pattern of borrowing.

³⁷⁵ It is probably an abbreviation of 統軍使相 *tǒngjūn shǐxiàng* ‘military governor’ EM t^hung’-kyn šř’-sjaŋ` LMC t<sup>h</sup>əwŋ’-kyn šř’-siaŋ`, attested in Xiao Dilu 10-13/16 (see WJ 81).

³⁷⁶ 節度使 *jiédùshǐ* EM *-*taw’* ~ *tə’* - LMC *-*thak-* is ‘regional governor’ (or K 18, 63, 74: ‘military commissioner’, or WJ 90: ‘governor-general’). 令 欠 又 𐰚 <t.qo sh.i> *thoq fi* reflects Late Middle Chinese pronunciation.

- 109) 𠂔 𠂔 <u₃.e> *ue* ‘counsel’ ← OT *öge* ‘a high Turkish title, roughly equivalent to ‘Counsellor’³⁷⁷
- 110) 𠂔 𠂔 𠂔 𠂔 <z.ie du shī> *tje tu fuu* ‘regional governor’ ← Ch. 節度使 *jiédùshǐ* ‘id.’³⁷⁸

h) Tribal Organization

- 111) 伏 𠂔 𠂔 ~ 伏 𠂔 𠂔 <ñ.o₂.ur₂ ~ ñ.o₃.ur₂> *juur* ‘tribe’
- 112) 𠂔 𠂔 𠂔 ~ 𠂔 𠂔 𠂔 <sh.ir₃.e ~ sh.ir₃.ge> *fīre* ~ *fīrge* ‘sub-tribe’
- 113) 𠂔 𠂔 <m.ir₃> *mir*³⁷⁹ ‘clan’;
- 114) 𠂔 𠂔 𠂔 <ci.as.a> *ʃ^hasa* ‘clan chief’
- 115) 𠂔 𠂔 𠂔 𠂔 <n.ad.ab.ad> *natapat* ‘nabo, travelling camp’

i) Others

- 116) 𠂔 𠂔 𠂔 <ci.i.is.> *ʃ^his* ‘blood, relatives’; MM *čisu(n)* ‘blood’ < PM **ʃ^hi-s-un* ‘id.’ < PSM **ʃ^hi-s* ‘id.’
- 117) 𠂔 <abad> *apat* ‘body, self’³⁸⁰
- 118) 𠂔 𠂔 <b.as> *pas* ‘also, again’ cf. MM *basa* ‘id.’ ← OT *bas-a* [press-CVB] ‘pressing, crushing’³⁸¹
- 119) 𠂔 𠂔 <eu.ul> *eul* ‘cloud’; Tab. **gülen* (cf. Vovin, 2007a: 198), MM *e’ülen* ‘id.’ < PSM **ehyl*;
- 120) 𠂔 𠂔 <neu.e> *newe* ‘earth’
- 121) 𠂔 *em* ‘place’;
- 122) 𠂔 𠂔 <x.ci> *xefi* ‘border region’, cf. Ma. *hečen(i)* ‘city, city wall’ (lw. from Khitan

³⁷⁷ GC 101.

³⁷⁸ 節度使 *jiédùshǐ* EM *-*taw’* ~ *to’* - LMC *-*thak-* is ‘regional governor’ (or K 18, 63, 74: ‘military commissioner’, or WJ 90: ‘governor-general’). 𠂔 𠂔 𠂔 𠂔 <z.ie du shī> *tje tu fuu* reflects Liao Chinese pronunciation. Linking this note with the preceding one we can notice that the same Chinese word was loaned into Khitan in two different stages. The older form was probably loaned in Yaonian or early Liao times, while the younger form was loaned in middle Liao times. I provisionally translated them the same, although they might have developed different meanings. Further research is needed on this point.

³⁷⁹ CWJ 396.

³⁸⁰ Wu 2018, Appendix A graph n. 309.

³⁸¹ GC 370-371. In Old Turkic a converb in -*A* of verb ‘to press, to crush’. Loaned into Mongolic, it acquired conjunctive meaning ‘also, then, thereafter’. For further details, see *op. cit.*

to Jurchenic?)

- 123) 用 安 <cau.ur₂> *tʃ^hau-ur* ‘war’
- 124) 九 安 <g.ur₂> *kur* ‘state’ cf. MM *gür* ‘universal’ *gür ulus* ‘the whole empire’³⁸² Ma. guren ‘empire, state’;
- 125) 万 文 存 彖 <y.ie.ar₂.u> *jaru* ‘peace’; WM *irayu* ‘melodious sound, agreeable sound, harmony’³⁸³ <PSM **irahu* ‘harmony’
- 126) 乂 幺 (糸) <sh.ia₂(.ah)> *fa ~ faq* ‘good, goodness’ cf. MM *sayi(n)* ‘good’³⁸⁴.
- 127) 𠂔 𠂔 𠂔 𠂔 𠂔 <ú.dû.ó.o.ón>/<udu.ó.o.ón> *utuo-on* ‘peace’;
- 128) 令 丙 <t/d.iu.ir> *t^h/tiuir* ‘prosperity, virtue’;
- 129) 𠂔 𠂔 𠂔 𠂔 𠂔 <m.o>/<m.o₃.118> *mo/mo...* ‘great (M/F)’

³⁸² See H 52.

³⁸³ See FL 413.

³⁸⁴ See H 133.