

CHAPTER SEVEN

KHOTANESE AND TUMSHUQESE

Ronald E. Emmerick†

1 INTRODUCTION

1.1 Overview

1.1.1 Historical background

Khotanese and Tumshuqese, properly Gyāz̄dian (Rong and Duan 1996 [2000]), are Middle Iranian languages that were once spoken in what is now known as the Xinjiang (earlier Sinkiang) Autonomous Region of China. They are treated here together because they are more closely related to each other than to any other Iranian language. Both geographically and linguistically they are classified as East Iranian languages and are thus related more closely to other East Middle Iranian languages such as Sogdian than to Iranian languages spoken in western regions.

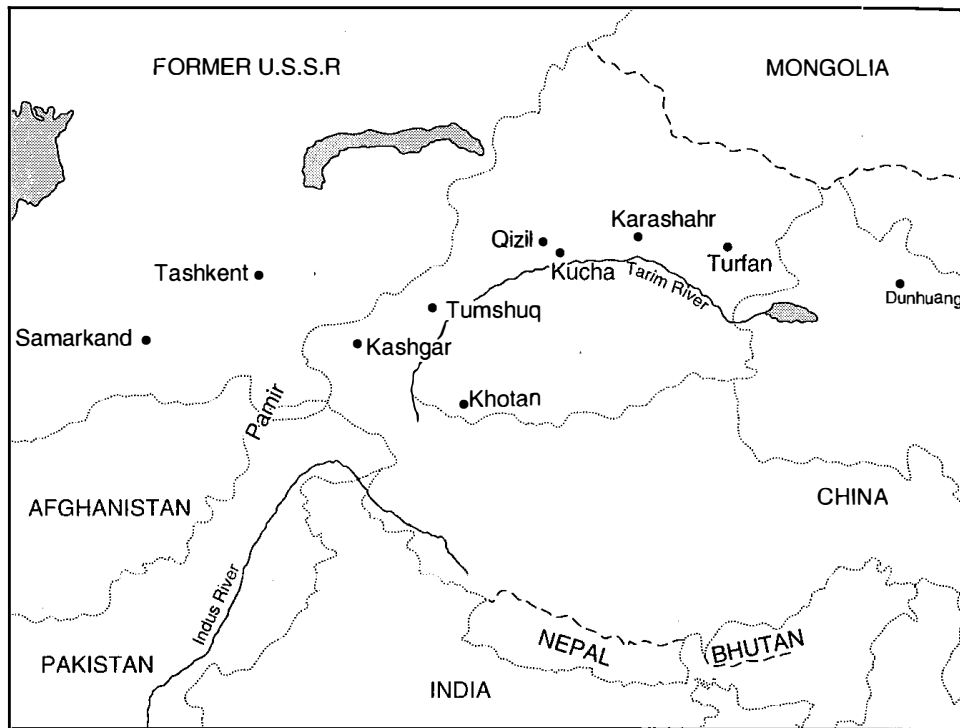
Although Khotanese and Tumshuqese are so closely related to each other that we can confidently posit a common parent language, such a language remains entirely hypothetical and is likely to be the language of a nomadic tribe that moved about Central Asia before settling in oases around the Tarim basin some time during the second half of the first millennium BCE.

After speakers of the Tumshuqese-Khotanese parent language settled on the northern side of the Taklamakan desert they appear to have had little contact with their fellow tribesmen who settled along the southern rim of the desert. The language spoken in the north developed in the course of time into what we now term Tumshuqese after the locality where the most of the extant texts were found whereas the language spoken in the south developed into what we call Khotanese since it was spoken in the ancient kingdom of Khotan.

Little is known of the history of the Tumshuqese speakers in the north and even their language is not well known since few texts have survived.

The situation is rather better in the case of Khotan, concerning which Chinese sources provide extensive information over a long period. In addition, there survive a very considerable number of documents in Khotanese. Since many of them are translations from known languages it has been possible to decipher them with confidence.

We do not know exactly when speakers of Khotanese first settled in the area, but it could hardly have been before the founding of Khotan, which is likely to have been in the third century BCE. There are traces of the presence of Khotanese speakers that date long before the earliest datable documents in Khotanese. Of particular importance is a document written in an Indian language, North-West Prakrit, that is thought to date from the third century CE. It is dated in a regnal year 'of the Great King of Khotan, King of kings' and betrays clear evidence of the Khotanese language.



MAP 7.1 KHOTAN AND TUMSHUQ

Long before the seventh century Buddhism was well established in Khotan, which by then was a leading centre of Mahayana Buddhism. Almost all the extant texts in Khotanese are coloured by Buddhism. Many of them are translations of Buddhist texts while some of them appear to be original compositions concerning Buddhist lore and doctrine.

1.1.2 Textual material

1.1.2a Khotanese

Most important for the secure decipherment of the language are the numerous works translated from Buddhist Sanskrit *sūtra* literature and a large medical text, the *Siddhasāra*, translated from Tibetan with account being taken of its Sanskrit source. There are also many secular documents dated in the regnal years of Khotanese kings. Relatively little original Khotanese literature has survived, but we have among other items a charming version of the *Rāmāyaṇa*, some lyrical verses, a substantial fragment of a metrical composition containing a love story, the description of a journey through Gilgit and Chilās to Kashmir, and some literary epistles.

The bulk of the extant documents all appear to date from the period between the seventh and the tenth century CE, but some fragments have been dated on palaeographical grounds to the fifth and sixth centuries CE (for details, see Emmerick 1992a).

1.1.2b Tumshuqese

Far less material in Tumshuqese has come to light than in Khotanese so that it remains difficult to decipher it and many details of grammar remain unknown or uncertain. The oldest text is the so-called Karmavācanā text, which is also the most important text since it is the only one for which we have bilingual evidence. It was translated from Tocharian (Schmidt 1988). In addition there are fourteen published items (see Skjærvø 1987: 77), including legal documents, fragments of Buddhist literary works, sales documents of commodities in a Buddhist monastic milieu, and several unpublished fragments in various collections.

None of the Tumshuqese documents can be precisely dated, but there are grounds for assigning the majority of them to the late seventh or the eighth century CE (for details, see Emmerick 1992a).

1.2 Writing systems

In Khotanese, besides a few numerals in Tibetan script (Maggi 1995), the extant material is written in varieties of Central Asian Brāhmī. The varieties range from highly formal to cursive. Only the formal varieties have been the object of detailed study. They were classified as: (1) Early Turkestan Brāhmī; (2) Early South Turkestan Brāhmī; (3) South Turkestan Brāhmī; and (4) Late Turkestan Brāhmī (see Sander 1986; Skjærvø 2002: lxxi–lxxii).

TABLE 7.1: THE EARLY SOUTH TURKESTAN BRĀHMĪ SCRIPT OF KHOTAN
(FROM LEUMANN 1934)

1 A	2 ¹ Ā	3 ² Ā	4 I	5 ¹ Ī	6 ² Ī	73 khā	74 ¹ lysā	75 rvā	76 mā	77/78 tā-ndi	
7 U	8 Ū	9 R	10 E	11 O	12 AU	79 ṣṭā	80 hwā	81 jā	82 jyā	83 jā	84 jā
13 ka	14 kha	15 ga	16 gga	17 gha	18 ṅga	85 ttra	86 ² lysā	87 ñi	88 hi	89 ¹ ysi	90 li
19 ca	20 ¹ cha	21 ² cha	22 jā	23 ¹ ña	24 ² ña	91 jsi	92 ṣpri	93 ḍu	94 ṣku	95 dū	96 ru
25 ṭa	26 ṭha	27 ṭhha	28 ḍa	29 ṇḍa	30 ṇa	97 nu	98 pu	99 rru	100 ¹ rrū	101 ² rrū	102 rū
31 ṭa	32 ṭta	33 ṭha	34 ḍa	35 ḍha	36 ṇa	103 bū	104 hū	105 ysmū	106 gu	107 ṣṣu	108 ṣū
37 pa	38 pha	39 ba	40 ¹ bha	41 ² bha	42 ma	109 ¹ ru	110 ² ttu	111 ¹ pyū	112 ¹ pyū	113 grū	114 brū
43 ya	44 ra	45 la	46 va	47 100	48 200	115 ¹ stū	116 ² ttū	117 rvī	118 kye	119 klai	120 tcej
49 ṣa	50 ṣā	51 ṣa	52 ha	53 300	54 400	121 ysno	122 khyau	123 lo	124 ḍām	125 bim	126 ṣṣim
55 1	56 2	57 3	58 10	59 20	60 30	127 rtha	128 dda	129 nna	130 kkra	131 ṣḍe	132 tva
61 4	62 5	63 6	64 40	65 50	66 60	133 yyo	134 ḍye	135 tṭye	136 ² pyu	137 gya	138 jvā
67 7	68 8	69 9	70 70	71 80	72 90	139 ryau	140 crrā	141 rddhā	142 rṣta	143 drai	144 m

The Tumshuqese documents are written in formal (Karmavācanā and Tum. VIII–IX) and cursive varieties of North Turkestan Brāhmī that are similar to those used by Tocharians. The Tumshuqese may have adopted their writing system from the Tocharians adding nine signs not used for Tocharian. The precise interpretation of a number of these signs is still to be determined. The absence of long vowels other than *ā* is noticeable. In comparison, the Khotanese alphabet and that used in the Tumshuqese Karmavācanā text, with signs found in other texts added, are as follows:

TABLE 7.2: COMPARATIVE ARRANGEMENTS OF KHOTANESE AND TUMSHUQESE ALPHABETS

Khot.	a ā ä	i ī	u ū	r	e ai ei o au
Tumsh.	a ā ä	i	u	r	e ai o au
Khot.	k k ^h	g g ^h	ñ		
Tumsh.	k	g	ñ		
Khot.	c c ^h	j j ^h	ñ		
Tumsh.	c c ^h	j	ñ		
Khot.	ṭ ṭ ^h	ḍ ḍ ^h	ṇ		
Tumsh.			ṇ		
Khot.		t t ^h	d d ^h	n	
Tumsh.	ts	t t ^h	d d ^h	n	
Khot.		p p ^h	b b ^h	m	ṃ
Tumsh.		p	b	m	ṃ
Khot.	y	r l	v	ś ś s	h
Tumsh.	y	r r l	v	ś ś s ž	h
Tumsh.	<u>k</u> γ	<u>d</u> dz	w	ž	xš

There are certain differences in the use of several features. Thus, the Khotanese writing system, while largely identical with Sanskrit, includes digraphs for sounds not represented in the Brāhmī script, e.g. *ys* for [z], and diacritics added to an akṣara for the following: (1) *ä* [ə] by two superscript dots, approximately [e] in stressed syllables (Emmerick and Pulleyblank 1993: 45–46); (2) *ei* [aə] by a superscript sign resembling a St. Andrew's cross (Emmerick 1998); (3) nasalisation by one superscript dot, transcribed by *m* with underdot or a hook below the vowel, e.g. *ṃ* or *ṃ*; (4) aspiration by two dots, transcribed by a colon (Late Khotanese); (5) breathed syllable by a hook below vowel, transcribed by a hook below the vowel or by an apostrophe at the end of the syllable.

1.3 Orthography

Khotanese texts are characterised by very considerable spelling variation that not seldom impedes interpretation. Thus, the texts vary in date and reflect different linguistic stages of the language. They belong to different genres and reflect different registers. Beside archaising formal speech we find colloquial language; besides texts carefully written by learned monks and official documents, we find personal letters, casual notes and unskilled school exercises. There appear to have been different orthographic conventions, possibly associated with different monasteries. Moreover, the texts were in many cases copied by scribes whose speech differed from the language of the text they were copying and they allowed their speech to influence their work.

The Tumshuqese Karmavācanā text is earlier than the other Tumshuqese documents probably by several centuries, and was written before the introduction of the nine special signs. In view of our limited knowledge of the language it is not safe to draw any conclusions from apparent variations in spelling.

2 PHONOLOGY

2.1 Inventory and distribution

2.1.1a Khotanese

See especially Emmerick 1981a, 1981b, 1989, 1992b, 1998, Emmerick and Maggi 1991, Emmerick and Pulleyblank 1993, Kumamoto 1995.

2.1.1a.1 Vowels

The vowel system of the older language appears to have had 11 phonemes. In the later language the distinction of quantity was replaced by one of quality with a consequent reduction to the 6 phonemes *i u e o ə a*. Also, the diphthongs *ai*, *au*, and *aə* of the older language were monophthongised.

TABLE 7.3: VOWELS—KHOTANESE

	Front	Central	Back
High	<i>ī, i</i>		<i>u, ū</i>
Mid	<i>ē, e</i>	<i>ə</i>	<i>o, ō</i>
Low	<i>a</i>	<i>ā</i>	

2.1.1a.2 Consonants

The consonant system appears to have distinguished 41 or 42 phonemes.

TABLE 7.4: CONSONANTS—KHOTANESE

	Labial	Dental	Retroflex	Palatal	Velar	Glottal
Plosives	<i>p^h</i> <i>p</i> <i>b</i>	<i>t^h</i> <i>t</i> <i>d</i>	<i>tʰ</i> <i>ʈ</i> <i>ɖ</i>		<i>k^h</i> <i>k</i> <i>g</i>	
Affricates		<i>ts^h</i> <i>ts</i> <i>dz</i>	<i>tʂ^h</i>	<i>tʃ^h</i> <i>tʃ</i> <i>dʒ</i>		
Fricatives	<i>f</i> <i>v</i>	<i>s</i> <i>z</i>	<i>ʃ</i> <i>ʒ</i>		<i>x</i> <i>ɣ</i>	<i>h</i>
Nasals	<i>m</i>	<i>n</i>	<i>ɳ</i>	<i>ɲ</i>	<i>ŋ</i>	
Trill		<i>r</i>				
Approximants	<i>w</i>	<i>rr</i>	<i>ʀ</i>	<i>y</i>		
Lateral		<i>l</i>				

Of these, *f* and *x* occur only in Late Khotanese renderings of foreign words. The exact phonetic nature of the two *r*-sounds is unknown. They are distinguished in the script by signs that are conventionally transliterated as *r* and *rr*, although *rr* is not a graphic combination of two *rs* and does not represent a long consonant. In Khotanese the retroflex phonemes were not confined to loanwords as in the case of Tumshuqese but formed an integral part of the system. Both *r*-phonemes may have had retroflex allophones.

2.1.1b *Tumshuqese*

No attempt has so far been made to reconstruct the Tumshuqese phonological system as the material available is so scanty.

2.1.1b.1 Vowels

Although the script does not reflect length distinction except in the case of *ā* and *a*, it can be assumed that it was phonemic on systemic and historical-comparative grounds. The central vowel *ä* [ə] is commonly found in unstressed syllables originally containing *a*. Other vowels may have had an allophone [ə] in unstressed syllables. Two diphthongs, *ai* and *au*, are attested. It is probable that a set of nasalised vowels also existed.

2.1.1b.2 Consonants

The comparison with Khotanese suggests a similar system. This includes the assumption of two kinds of *r*. Differences may also reflect different stages of development. Thus Tumshuqese has the voiced fricatives *β*, *v*, and *δ*, and no evidence for the glottal stop, or for *f*, and *x*. The aspirated plosives found in Khotanese could theoretically be still fricatives in Tumshuqese.

2.1.2 *Syllable and clusters*

Only in the case of Khotanese do we have any means of determining the syllabic structure of the language. Analysis of Old Khotanese metrical texts (Emmerick 1968b) reveals that non-initial syllables may begin with any single consonant phoneme including the affricates whether or not they are followed by *y*. We have no evidence regarding consonant groups containing a sibilant plus a single consonant except for *ysm* [zm], which does not make position in iambic metre so that the word *aysmū* ['azmu:] must have been divided *a-ysmū*. The word *biśśa*- 'all' < Indo-Iranian **yiśśya*- could be treated in metrical texts as having its first syllable either heavy or light. Since long consonants otherwise make position, it appears to be the case that [lbiśśa] was in the process of being simplified to [lbiśa] at the time the texts were being composed.

2.2 Non-segmental features

Since the position of the stress is not recorded in the script, it can only be inferred on the basis of historical phonology. Khotanese accentuation has been treated by M. Maggi (1992, 1993). According to him, in polysyllables the Old Khotanese stress accent fell on the first heavy syllable from the end of the word but never on the word final syllable.

A word containing only light syllables was stressed on the initial syllable. There is insufficient evidence to say much regarding the stress in Tumshuqese.

3 MORPHOLOGY

3.1 Nominal morphology

Both Khotanese and Tumshuqese preserve the morphological distinction of masculine and feminine gender, and of singular and plural number. Neuter is still distinguished in Khotanese although it has largely been replaced by masculine and feminine, while the evidence for neuter in Tumshuqese is at present insufficient (in the nom. pl., Schmidt 1988: 312).

Old Khotanese and probably also Tumshuqese had a six-case system, reduced from the eight-case system of Indo-Iranian: nominative, accusative, locative, genitive-dative, instrumental-ablative, and vocative. The two compound cases result from morphological merger but retained the syntactic functions of their components. The accusative is identical to the nominative in the plural. The vocative is *-a* in the singular of the *a*-declension and *-ā* in the singular of the *ā*-declension; elsewhere it is identical with the nominative in the singular, but with the instrumental-ablative in the plural.

3.1.1a Nominal stem classes and declensions—Khotanese

The following summary is largely confined to Old Khotanese.

Nouns and adjectives are inflected according to vocalic (primary and secondary) and consonantal declensions.

The primary vocalic declensions are:

the *a*-declension which is masculine or neuter;
and the *ā*- and *i*-declensions which are feminine.

The secondary vocalic declensions attested are:

masculine or neuter *-aa*, *-ia*, *-ua*, *-āa*, *-īa*, *ūa*;
feminine *-aā*, *-iā*, *-uā*, *-āā*; and *-ai*, *-ii*, *-au*.

They arose as a result of the loss of intervocalic consonants, and the merger of the resulting short or long vowels with the vocalic endings, mostly of the *a*- and *ā*-declensions, rarely of the *i*-declension, while the *au*-declension arose from words in an original labial.

For the consonantal declensions the following subdivisions may be made:

the masculine and feminine *r*-declensions;
the masculine and neuter *n*-declensions;
and the *nd*-declension which has natural gender.

Of these, the masculine and feminine declensions have almost exclusively consonant stem endings only in the nominative (sing. *-e*, plural in *-ā*), but are based on a thematic stem in the other cases. Isolated forms show traces of other consonant declensions, e.g. the nom. sg. *ysar-e* 'old age' < **zar-āh* (OIr. *h*-stem **zar-ah*-).

It should be noted that there is considerable variation in orthography, and that most of the forms cited in the tables are attested in other spellings, especially when reflecting

different stages. Thus, the distinction between nom. sg. *-ā* and gen.-dat. sg. *-i* in the primary *a*-declension is observed only in a few Old Khotanese texts. Endings that have spread from the *n*-declension and from the pronominal declensions (Sims-Williams 1990) are on the whole not included. (See Emmerick 1968a: 249–349 and Sims-Williams 1990.)

3.1.1a.1 Vocalic declensions:

Examples for primary and secondary vocalic declensions:

masc. *-alfem.* *-ā*: *balysa-* ‘Buddha’, *uryāna-* ‘garden’ – *kanthā-* ‘city’, *dīvatā-* ‘goddess’, *hīnā-* ‘army’;
 masc. *-aalfem.* *-aā*: *āchaa-* ‘disease’, *ysamaśśandaa-* ‘world’, *balysūñavūysaa-* ‘bodhisattva’, *ggāṭṭhaa-* ‘householder’ – *baśdaā-* ‘sin’, *brītaā-* ‘love’;
 fem. *-i*: *mulysdi-* ‘compassion’, *balysūsti-* ‘enlightenment’, *bā’yi-* ‘ray’, *hālsti-* ‘spear’, *tcārami-* ‘sphere’.

TABLE 7.5: VOCALIC DECLENSIONS—KHOTANESE

Singular	<i>-a</i> masc.	<i>-ā</i> fem.	<i>-aa</i> masc.	<i>-aā</i> fem.	<i>-i</i> fem.
NOM	<i>balys-ā</i>	<i>kanth-a</i>	<i>āch-ei</i>	<i>baśd-ā</i>	<i>mulysd-ā</i>
ACC	<i>balys-u</i>	<i>kanth-o</i>	<i>āch-au</i>	<i>baśd-o</i>	<i>mulśd-u</i>
G–D	<i>balys-i</i>	<i>kīnth-e</i>	<i>āch-ai</i>	<i>baśd-(i)ye</i>	<i>mulśd-e</i>
I–A	<i>balys-āna</i>	<i>kīnth-e jsa</i>	<i>āch-aina</i>	<i>baśd-(i)ye</i>	<i>mulśd-e jsa</i>
LOC	<i>uryāñ-a</i>	<i>kīnth-a</i>	<i>ysamaśśand-i ya</i>	<i>brīt-ya</i>	<i>balysūst-a</i>
VOC	<i>balys-a</i>	<i>dīvat-ā</i>	<i>balysūñavūys-ā</i>		
Plural	<i>-a</i> masc.	<i>-ā</i> fem.	<i>-aa</i> masc.	<i>-aā</i> fem.	<i>-i</i> fem.
N–ACC	<i>balys-a</i>	<i>kanth-e</i>	<i>āch-ā</i>	<i>baśd-e</i>	<i>hālšt-ā</i>
G–D	<i>balys-ānu</i>	<i>kanth-ānu</i>	<i>āch-ānu</i>	<i>baśd-ānu</i>	<i>hālšt-ānu</i>
I–A	<i>balys-yau</i>	<i>hīn-yau jsa</i>	<i>āch-yau</i>		<i>bā’y-yau jsa</i>
LOC	<i>uryāñ-uvo’</i>	<i>kanth-uvo’</i>	<i>ggāṭṭh-uvo’</i>		<i>tcārīm-uvo’</i>
VOC	<i>balys-yau</i>				

In *a*- and *aa*-stems, neuter differs only in the nom.-acc. pl., where they have *-e* instead of *-a*, and *-e* instead of *-ā* respectively, e.g. *kīra-* ‘act’ has *kīr-e*, and *āstaa-* ‘bone’ has *āst-e*. The same endings are found in Tumshuqese and may reflect a similar distinction (Schmidt 1988: 312).

3.1.1a.2 Declensions, *āa*- and *āā*-stems

Examples for *āa*- and *āā*-stems:

dāa- ‘fire’, *pāa-* ‘foot’; *nīāa-* ‘river’, *biśāa-* ‘tongue’, *hvīa-* ‘sweat’; *dyūa-* ‘demon’, *busūa-* ‘fuel’, *syūa-* ‘orphan’; masc. *raysā-a-*, fem. *-ā-* ‘empty’; masc. *paḍā-a-*, fem. *-ā-* ‘first’; *palāā-* ‘banner’.

Monosyllabic and polysyllabic *āa*-stems are declined differently. No such distinction is apparent in the few attested cases of the *īa*- and *ūa*-declensions. Some words have irregular declension. The forms of the *āā*-declension tend to merge with either with the *āā*- or the *au*-declension.

TABLE 7.6: DECLENSIONS OF *āa*- AND *āā*-STEMS—KHOTANESE

Singular	<i>āa</i> - stem monosyll.	<i>āa</i> -stem polysyll.	<i>āa</i> -stem. masc.	<i>āā</i> -stem. fem.
NOM	<i>dai</i>	<i>nit-ā</i>	<i>paḍ-ā; rrays-ā</i>	<i>rrays-ā</i>
ACC	<i>dau</i>	<i>nit-ā</i>	<i>paḍ-ā</i>	<i>paḍ-o; rays-au</i>
G-D	<i>dai</i>	<i>nāit-ā-yi</i>		
I-A	<i>daina</i>	<i>biš-ā-na</i>		<i>paḍ-ā-ye</i>
LOC	<i>dā-āa</i>	<i>nit-ā-ya</i>		
Plural	<i>āa</i> - stem monosyll.	<i>āa</i> - stem polysyll.	<i>āa</i> - stem. masc	<i>āā</i> - stem fem.
N-ACC	<i>p-ā</i>	<i>nāit-ā</i>	<i>rrays-ā</i>	<i>pal-e</i>
G-D	<i>p-ānu</i>	<i>biš-ānu</i>		<i>pal-yau</i>
I-A	<i>p-āyau</i>			
LOC	<i>p-vo'</i>	<i>nāit-ā-vo'</i>		

3.1.1a.3 Consonantal declensions

Examples for consonantal declensions:

nd-stems: *rre*, *rrund*- 'king', *hve'*, *hva'nd*- 'man';

n-stems: masc. *naḍe*, *naḍaun*- '(heroic) man', *šve*, *švān*- 'dog' – ntr. *ššāma*, *šāman*- 'face', *tcei'man*- 'eye', LateKh. *tsaman*-;

r-stems: masc. *pāte*, *pātar*- 'father', *brāte*, *brātar*- 'brother' – fem. *māta*, *mātar*- 'mother', *duta*, *dutar*- 'daughter'.

TABLE 7.7: CONSONANTAL DECLENSIONS—KHOTANESE

Singular	Endings	<i>nd</i> -stem	<i>n</i> -stem	<i>r</i> -stem masc.	<i>r</i> -stem fem.
NOM	-Ø	<i>rre</i>	<i>naḍe</i>	<i>pāte</i>	<i>māta</i>
ACC	- <i>u</i>	<i>rrund-u</i>		<i>pātar-u</i>	<i>mātar-u</i>
G-D	- <i>i</i>	<i>rrund-i</i>	<i>naḍaun-ā</i>	<i>pīr-ā</i>	<i>mer-ā</i>
I-A	- <i>ina</i>	<i>rrund-ina</i>	<i>naḍaun-āna</i>	<i>pyar-ina</i>	<i>mer-i jsa</i>
LOC	- <i>ia</i> , -(<i>i</i>) <i>na</i>		<i>ššamañ-a</i>		
VOC	-Ø	<i>rre</i>	<i>naḍe</i>		
Plural	Endings	<i>nd</i> - stem	<i>n</i> - stem	<i>r</i> -stem masc.	<i>r</i> -stem fem.
N-ACC	- <i>ā</i>	<i>rrund-ā</i>	<i>švān-ā</i>	<i>brātar-ā</i>	<i>dutar-ā, duñr-ā</i>
G-D	- <i>ānu</i>	<i>rrund-ānu</i>	<i>švān-ānu</i>		<i>duñr-ānu</i>
I-A	- <i>yau</i>	<i>rrund-yau</i>		<i>brātar-yau</i>	<i>dvatar-yau</i>
LOC	- <i>uvo'</i>	<i>hvañd-uvo'</i>	<i>tcamañ-ūā</i>		
VOC	- <i>yau</i>	<i>rrund-yau</i>	<i>naḍaun-yau</i>	<i>brātar-yau</i>	

3.1.2a Adjectives—Khotanese

Adjectives follow the same declensional patterns as nouns but also have some mostly optional endings adopted from the pronominal declension, and most adjectives take pronominal endings where otherwise palatalisation would be required.

The comparative suffix is *-tara-* and the superlative suffix *-tama-*, inherited from Indo-Iranian, e.g. *bata*- 'small', *battara-*, *battama-*, and the old pair *hastara-*, *hastama-* 'better,

best' to the positive *śśāra-* 'good'. Only the comparative seems to have been fully productive by the time of our texts.

3.1.1/2b Declension of nouns and adjectives—Tumshuqese

Tumshuqese seems to have developed basically the same declensional patterns as Khotanese. The most important difference is the gen.-dat. sg. ending *-ā* of the *a*-declension vs. Khot. *-i* (both from OIr. **-ahya*). Consonantal declensions similar to those in Khotanese are attested by such forms as nom. sg. *brāde* 'brother', cf. Kh. *brāte*, beside nom. pl. *brāre*, cf. Kh. *brātari*, nom. sg. *re* 'king' cf. Kh. *rre*, beside gen.-dat. sg. *ride*, cf. Kh. *rrundi*, and nom. sg. *hvaže* 'man', cf. Kh. *hve*', beside nom. pl. *hvažandi*, cf. Kh. *hva'ndi* (for the latter, see Skjærvø 1987: 84).

3.1.3 Pronouns and deixis

3.1.3.1a Personal and demonstrative pronouns—Khotanese

Some originally 1p and 2p forms of the personal pronouns are used as polite forms for the singular.

The demonstratives distinguish three degrees of deixis (see Sims-Williams 1994), all with the same set of endings:

- neutral *ṣ-*, *tt-*;
- near *ṣā-t-*, *ttu-t-u* (acc.), *ttā-t-* (reduplicated);
- remote *ṣ-ār-*, *tt-ār-*,

The neutral deictic demonstrative also serves as personal pronoun. Emphatic forms of the neutral pronouns are marked by the deictic particle *-ī*: *ṣ-ī*, *ṣa-i*, *tv-ī*, *tt-ī* for *ṣ-ā*, *ṣ-a*, *tt-u*, *tt-ā*.

Occasionally double reduplications are found with the near deictic pronouns, e.g. *ṣā-ṣa*, *ṣā-ṣā*.

Pronouns are used as correlatives of the relative pronoun. Usually the interrogative-relative pronoun distinguishes animate *kye*, *ce* and inanimate-neuter *cu* in the nom.-acc. singular, but it does not distinguish number. In the following table contracted and some alternate forms are omitted.

TABLE 7.8: PRONOUNS—KHOTANESE

Singular	1	2	3 masc.	3 fem.	'who'	'what'
NOM	<i>aysu</i>	<i>thu</i>	<i>ṣ-ā</i>	<i>ṣ-a</i>	<i>kye</i> , <i>ce</i>	<i>cu</i>
ACC	<i>ma</i> , <i>muho</i>	<i>uhu</i>	<i>tt-u</i>	<i>tt-o</i>	<i>kye</i> , <i>ce</i>	<i>cu</i>
G-D	<i>mamā</i>	<i>tvī</i>	<i>tt-ye</i>		<i>kye</i> , <i>ce</i>	
I-A	<i>muho jsa</i>	<i>tvī jsa</i> , <i>uho jsa</i>	<i>tt-āna</i>	<i>tt-āñe</i>		<i>tcam-āna</i>
LOC			<i>tt-āñā</i>	<i>tt-āñā</i>		<i>tcam-āñā</i>
POSS	<i>mamānaa-</i>	<i>tvānaa-</i>	<i>tt-ye</i>			
Obl. encl.	<i>mīi</i> , <i>-ṃ</i>	<i>tīi</i> , <i>-e</i>	<i>-ī</i> , <i>-yā</i>			
I-A			<i>-n jsa</i> (<i>-ṃ jsa</i> , <i>-jsa</i>)*			

(Continued overleaf)

TABLE 7.8: Continued

Plural	1	2	3 masc.	3 fem.	'who'	'what'
NOM	<i>buhu, muhu</i>	<i>uhu</i>	<i>tt-ī</i>	<i>tt-e</i>	(same as singular)	
ACC	<i>maha</i>	<i>uhu</i>	<i>tt-ā</i>	<i>t-te</i>		
G-D	<i>māvu,</i> <i>mā(nu)</i>	<i>umāvu,</i> <i>umā(nu)</i>	<i>tt-ānu</i>			
I-A	<i>mih-yau</i>	<i>um-yau jsa</i>	<i>tt-yau</i>			
LOC			<i>tt-uvō'</i>			
VOC		<i>um-yau</i>				
POSS	<i>mājāa-</i> , <i>mānia-</i>	<i>umājāa-</i> , <i>umānia-</i>	<i>tt-ānu</i>			
Obl. encl.	<i>nā, -m</i>	<i>-ū</i>	<i>nā, -n, -m</i>			

*Ex.: *ttātā-n jsa = ttātā jsa (ttātā-Ø jsa)* 'they from it' (Suv 0.5), *vyātaraṇe-n jsa = vyātaraṇe jsa (vyātaraṇe-Ø jsa)* 'the predictions from it' (Suv 0.8). [Skjærvø]

3.1.3.1b Personal and demonstrative pronouns—Tumshuqese

Few pronouns are certainly attested in Tumshuqese. Their forms mostly reflect earlier stages of development from Old Iranian in comparison with Khotanese: 1s nom. *asu, azu*, encl. obl. *me*, 2s nom. *to*, gen.-dat. *tivya*, 1p *mvo*.

3.1.3.2 Reflexive and reciprocal pronouns

The reflexive possessive adjective is *h̄via-* 'one's own' for all three persons. It is attested also in Tumshuqese *havya, h̄vyā* (Emmerick 1985a); the pronoun is *uysānā-* 'self'. The reciprocal pronoun is *śśūjāta-* 'one another', lit. 'one the second'. Its equivalent in Tumshuqese may be *śodi, śode*.

3.1.3.3 Indefinite and interrogative pronouns and adverbials

Khotanese has only one indefinite pronoun *ye* 'one', which is enclitic and invariable, e.g. *ne ju ye* 'no one' where it follows the negation and the indefinite particle *ju*. It has not yet been established for Tumshuqese.

Generalised indefiniteness 'ever' may be expressed by the simple repetition of an interrogative-relative, e.g. *kāma-* 'which' in *kām-āñā kām-āñā kšīr-a* 'in whichever land'.

Insertion of the neutral pronoun is found in a few fixed phrases, e.g. *kye ś-ā kye* 'whoever' (nom. sg.), *ce tt-ā ce* (nom. pl.); *cu ś-ā cu* 'whatever' (nom. or acc. sg.). Most commonly it is indicated by particles such as *ju, buro, hanu* or *halci*, e.g. *kye hanā, ce -ju, -buro, -halci, -halci ju, -ju halci*, all 'whoever'; *cu -buro, -halci, -buro halci* all 'whatever'; *ku -buro, -halci* 'wherever'.

Alternate indefiniteness may similarly be expressed by the repetition of interrogative-relatives such as *kye - kye* 'one - some' or 'some - others':

kye dāñ-a pūt-tā kye vā ggar-na pat-īndā
'one falls into a fire, some fall from a mountain'.

The interrogative-relatives form pairs with correlatives and may themselves function as adverbs. Those of location and direction may be distinguished by deixis: near speaker, *mara(ta)* 'here'; near addressee, *ttara* 'there'; and away from speaker, *vara(ta)* 'there'. The main pairs are the following.

TABLE 7.9: ADVERBIAL DEMONSTRATIVES—KHOTANESE

<i>kāma-</i> , <i>cu</i>	‘which’	<i>ṣ-</i> ; <i>tta</i>	‘that’; ‘thus’
<i>crāma-</i>	‘of what kind’	<i>ttrāma-</i> , <i>ttandrāma-</i>	‘of that kind’
<i>canda-</i>	‘how much’	<i>ttanda-</i> , <i>ttandia-</i>	‘(just) so much’
<i>cāndāka-</i>	‘how much, little’	<i>ttāndāka-</i>	‘(so) little’
<i>cerä</i>	‘how much’	<i>tterä</i>	‘so much’
<i>cīyā</i>	‘when’	<i>ttīyā</i>	‘then’
<i>cālsto</i>	‘whither’	<i>ttolsto</i>	‘thither’
<i>ku</i>	‘where’	<i>mara</i>	‘here’
		<i>ttara</i>	‘there’
		<i>vara</i>	‘there’ (remote)

3.1.4a Adpositions—Khotanese

Khotanese has by far more postpositions than prepositions. Some adpositions occur in both positions, but there are no circumpositions. There is considerable variation with regard to case rection which is essentially determined by the semantics of the adposition and the context (see section 4.4.1 Use of cases). Most take the gen.-dat., some only or also the accusative (direction, extension, etc.), a few the instr.-abl.

3.1.4a.1 Postpositions

Postpositions found in Old Khotanese include: *āstanna* ‘etc.’, *udīssā* ‘for the sake of’, *kāḍana* ‘on account of’, *pracaina* ‘by reason of’, *iñā* ‘before’, *nimalśa* ‘behind’, *n(u)va* ‘behind’, *pīrmo* ‘at the head of’, *brum̄bāte* ‘in front of’, *vara (ta)*, *varālsto* ‘towards’, *vaṣṭa* ‘throughout’, *vaska* ‘for’, *vātā*, *vīrā* ‘in, at, on’. The last pair of interchangeable postpositions occurs in numerous idiomatic phrases, such as *hamu vātā*, *hamu vīrā* ‘always’, with nom.-acc. sg. neut. of *hama-* ‘all’. Also used as prepositions are: *baña* ‘beside’, *bendä* ‘upon’, *patāna* ‘before’.

3.1.4a.2 Prepositions

Prepositions include: *patä* ‘to(wards), in the presence of’, *odi* ‘up to, until’, *naysdä* ‘near’, *myāño* ‘in the middle of’, *dī* ‘under’, *anau* ‘without’, *vina*, *vānau* ‘without, apart from’.

3.1.4b Adpositions—Tumshuqese

In Tumshuqese there is little evidence for adpositions. The postposition *tsi* is used like Khotanese *jsa* (< OIr. **hačā*) as a marker of the instr.-abl. case. The relationship of *au* ‘up to’ (< OIr. **awa*) to Khot. *odä* is not clear (Emmerick 1985a: 20).

3.1.5 Adverbs

There are three productive ways of forming adverbs from other parts of speech: (1) by using the acc. sg. nt. of an adjective, e.g. *śśār-u* well” < *śśāra-* ‘good’, including relative adjectives, e.g. *ttand-u* ‘just a little’; (2) by means of suffixes such as *-ālsto* added to adjectives, adverbs, pronouns, adpositions, and locative nouns, e.g. *bīśś-ālsto* ‘home-wards’ < *bisā-* ‘house’ (Degener 1989a: 105–112); (3) by means of the language suffix *-au*

added to an adjective, e.g. *hvatan-au* ‘in(to) Khotanese’ < *hvatana-* ‘Khotanese’ (Degener 1989a: 172–173).

Like adjectives, adverbs may be *intensified* by preposing an adverb such as *atä* or *käde* ‘very’, *tvare* or *bihīyu* ‘extremely’ or more rarely by repetition, e.g. *mulšu mulšu* ‘at very short intervals’, *ta ta* ‘thus’.

In Tumshuqese there is little evidence for adverbs, but some adverbs found in Khotanese are attested, e.g. *mara* ‘here’ as in Khotanese, and *kari* ‘at all’, Khot. *karä*.

3.1.6a Numerals—Khotanese

3.1.6a.1 Cardinal numbers

The cardinal numbers in Old Khotanese are as follows (cited in the nom.-acc.):

TABLE 7.10: CARDINAL NUMBERS—KHOTANESE

1–9	11–19	1–9 +	10–90	100 +	
<i>śśau</i>	<i>śśīndasu</i>	<i>śśīvare-</i>	<i>dasau</i>	<i>satä</i>	‘hundred’
<i>d(u)va</i>	<i>d(u)vāsu</i>	<i>dvāvare-</i>	<i>bistä</i>	<i>ysāru</i>	‘thousand’
<i>drvai(a)</i>	<i>drvaisu</i>	<i>drvaivare-</i>	<i>därsi</i>	<i>byūrru</i>	‘ten thousand’
<i>tcahora</i>	<i>tcahulasu</i>	<i>tcahaure-</i>	<i>tcaholsä</i>	<i>kūla-</i>	‘ten million’
<i>pañjsa</i>	<i>pañjsūsu</i>	<i>puspare-</i>	<i>pañjsāsä</i>	<i>nayuta-</i>	10 ¹¹
<i>kṣāta</i> , <i>kṣei</i>	<i>kṣasu</i>	<i>kṣei</i> ‘vare-	<i>kṣaṣṭi</i>		
<i>hoda</i>	<i>haudūsu</i>	<i>hopare-</i>	<i>hodātä</i>		
<i>haṣṭa</i>	<i>haṣṭūsu</i>	<i>haṣpare-</i>	<i>haṣṭātä</i>		
<i>no, nau</i>	<i>nausu</i>	<i>novare-</i>	<i>notä</i>		

Numbers between the decads above twenty are compounds of the unit + **parah* ‘beyond’ + decade, e.g. *śśīvare-bistä* ‘21’, *puspare-bästi* ‘25’, *hopare-därsä* ‘37’. Counters of higher numbers precede, e.g. *dvī satī* ‘two hundred’, *haṣṭä ysāru* ‘eight thousand’, *tcahorehaṣṭātä ysāru* ‘eighty-four thousand’.

Numbers are inflected, except *byūrru* ‘ten thousand’. The number ‘one’ distinguishes masculine and feminine; both ‘one’ and ‘two’ have some special forms with neuter nouns.

3.1.6a.2 Ordinal numbers

Ordinal numbers, except for the first five, are regularly marked by the suffix *-ama-*, with the final *-u* of teens > *-ama-*, thus ‘first’ through ‘ninth’: *paḍauysa-*, *śāta-*, *dä(d)a-*, *tsūrāma-*, *pūha-*; *kṣei*‘ma-, *hodama-*, *haṣṭama-*, *nauma-*.

3.1.6a.3 ‘Both’ and indefinite adjectives

Khotanese *hūduva* ‘both’, etymologically originally ‘both two’, is declined like *duva* ‘two’. Indefinite adjectives include *phar-u*, *pharāka-* ‘many’, *biśśa-* ‘all’, *harbiśśa-* ‘every, all’, *hama-* ‘all’, *pana-* ‘every’, *handara-* ‘another’.

3.1.6b Numerals—Tumshuqese

Tumshuqese numbers are comparable to those in Khotanese: *šo*, *dva*, *dre*, *tsahari*, *paṛṛtsi*, *xši*, **hoda* (ordinal *hodama-*), *hašti*, *dase*; only a few decads are attested: *bista* ‘20’, *patsasu* ‘50’, and *xšišta* ‘60’. However, there is a striking difference from Khotanese with regard to the formation of the compound numerals in that the **parah* type is used for the numbers below but not above twenty (Maggi 1991); thus Tumsh. *ho-parsa-* ‘17’ vs. Khot. *haudūsu*, Tumsh. *bistyō patsyō* ‘25’ vs. Khot. *puspare-bāstā* showing inversion of digit and decad. Attested ordinals are: *tsārma-* ‘fourth’, *xšima-* ‘sixth’, *hodama-* ‘seventh’, *haštama-* ‘eighth’, *dasma-* ‘tenth’.

3.2 Verb morphology

3.2.1 Stem formation—Khotanese

3.2.1.1 Present and past stems

Verbs have two stems, present and past. They derive from the Old Iranian present stems and the past participle in **-ta*, respectively, but the original relationship is often no longer transparent: present/past stems *yan-/yāda-* ‘make, do’ (<Indo-Iranian **kṛnaŷ-*, **kṛtā-*). Some verbs have suppletive stems, e.g. *sarb-/sata-* ‘rise’, and *hīs-/āta-* ‘come’, *ah-/vatā-* ‘be’.

Many verbs distinguish intransitive and transitive stems, but have the same past participle which is then inflected according to transitivity: present *panam-/panem-* ‘rise’/‘raise’, past intr. 2s perf. *panat-ī* ‘you arose’ vs. trans. 3s perf. *panat-āndā* ‘they raised’ (same past participle *panata-*).

The two present stems relate to one another in various ways:

- (1) no formal distinction, transitivity only indicated by endings: *bar-/bar-* (act./mid.) ‘ride’/‘carry’;
- (2) length: *hvañ-/lvāñ-* ‘be spoken’/‘speak’; *hanaśś-/hanāśś-* ‘go astray’/‘destroy’; *hamāh-/hamīh-* ‘change’ (intr.)/‘change’ (trans.);
- (3) intransitive *-s* (‘inchoative’ present stem of Old Iranian) vs. otherwise marked transitive stem: *haspās-/haspīs-* ‘strive’/‘urge’;
- (4) palatalisation of transitive stem: *pasūjs-/pasūj-* ‘burn’ (intr.)/‘light (a lamp)’ (<**apa-sauča-* and **apa-saučaya-*);
- (5) obscured: *hatcy-/hatcañ-* ‘be broken’/‘break’ (trans.) (<**fra-ščadya-* and **fra-ščandaya-*);
- (6) causative marker *-āñ*: *bam-/bam-āñ-* ‘vomit’/‘make vomit’; *ysai-/ysy-āñ-* ‘be born’/‘cause to be born’.

3.2.1.2 Directional particles

The particles *vā* and *hā* are commonly associated with verbs of motion and occasionally with other verbs. The particle *vā* expresses motion towards, *hā* motion away from the speaker:

[*vā*] *usahy-a ku-ṛṇ bis-a balys-a*
‘deign (come) [here] where my house (is), Buddha’ (Z 2.58);

ku [hā] tsut-e hām-āte
‘when he has gone [away]’.

The directional particle *ttā* is used in Middle and Late Khotanese to express motion towards the addressee, giving a system of triple deixis similar to the directional demonstratives:

to speaker, *vā*; to addressee, *ttā*; away from speaker, *hā*.

3.2.2 Nominal forms

3.2.2.1 Present participles

There are two:

- (1) Most common is that formed with the suffix masc. *-anda-*, fem. *-amkyā*, *-amcā* (historically, thematicised **-ant-*, fem. **-anta-čī-*) found with both active and middle stems: masc. *hūs-anda-* ‘sleeping’, masc. *hvar-anda-* ‘eating’; fem. *bārūñ-amcā-* ‘shining’. The feminine form was often used also for the masculine in the later language.
- (2) The participle in *-āna-* remains confined to the middle stems: *śś-āna-* ‘lying (down)’, *hām-āna-* ‘becoming’. The verbs *āh-* ‘to sit’ and *śś-* ‘lie’ have reinforced forms *āṇa-* ~ *āṇ-amda-*, *śś-āna-* ~ *śś-ān-amda-*.

Both types of present participle may optionally be extended by a secondary *-a-*: *hūs-anda-* ~ *hūs-and-aa-* ‘sleeping’, *āṇa-* ~ *āṇ-aa-* ‘sitting’.

In Tumshuqese, only the present participle in *-anda-* is attested: *dāy-anda-* ‘seeing’, *ras-andā* ‘knowing’.

3.2.2.2 Past participles

Past participles are based on the past stem, masc. *-ta-*, fem. *-tā-* (see section 3.2.1 Stem formation): *mār-* > *muḍa-* ‘die’; *huṣ-* > *huṣta-* ‘become dry’. There was however a tendency to add *-ta-* directly to the unmodified present stem: *murr-* > *murr-da-* ‘crush’, *paysān-* > *paysān-da-* ‘recognise’, and in some cases *-āta-* or *-āta*: *huṣṣ-* > *huṣṣ-āta-*, *huṣṣ-āta-* ‘grow’. Occasionally there are extended forms: pres. *mār-* ‘die’ > *muḍa-* > *muḍa-a-*.

Tumshuqese shows many striking agreements with Khotanese: *āta-* ‘come’ (< **āgata-*), *vasuta-* ‘pure’ (< **awa-suxta-*), *hvata-* ‘spoken’.

3.2.2.3 Infinitives

Khotanese has two productive types of infinitive based on the present and past stems respectively: (1) present stem + *-ā* or *-i*, and (2) past stem + *-e*, whose palatalising effect is increasingly lost in the later language. Some verbs have both types: *hvāñ-* ‘speak’ > present infinitive *hvāñ-i* and > past infinitive *hvūt-e*, *hvīy-e*, but there appears to be no functional difference. Thus, both *hvāñ-i* and *hvīy-e* are used with *hamjsaṣ-* ‘be about to’ (Z 2.64 5.7). In a few instances the infinitive is substantivised and declined in the oblique cases as an *a-* stem (see section 3.2.7.3 Necessity construction).

Tumshuqese

In Tumshuqese the predominant type of infinitive is marked by *-ana-* added to the present stem (once found in Khotanese). The loc. sg. of such infinitives with the post-

positon *ā* as a whole came to be treated as a feminine noun (Emmerick 1985a: 14), e.g. instr.-abl. sg. *tsatānāy-ā tsi* ‘from killing’.

3.2.2.4 Gerundives and gerunds

The gerundive or participle of necessity is formed (1) by the suffix *-āñā-* (new formation) added to the present stem: *yan-āñā-* ‘be done’, *hvāñ-āñā-* ‘be spoken’; or (2) by *-ya-* suffixed to the lengthened verbal root. The latter is unproductive and often stands beside the new formation, e.g. *yan-āñā-* ‘be done’ beside *tcera-* (< **čārya-* from **kar-*); *hvāñ-āñā-* ‘be spoken’ beside *hvañā-* (< **hwanya-* from **hwan-*). The *ya-*gerundive may optionally be extended by secondary *-a-*, e.g. *tcera-* besides *tcera-a-* (< **čārya-ka-*), an extension found only once with *-āñā-*.

That Tumshuqese had a corresponding *āñā-*gerund is evidenced by *pāt vāñya*, probably < **pati-tav-āñā-* (in the Karmavācanā, Emmerick 1985a: 20), while the *ya-*gerund may be reflected in *ñyesyo* (Konow 1935: 27), but the context is obscure.

3.2.3 Person marking and ‘to be’

Person is marked by the forms of the copula and verbal endings. Forms based on the present stem distinguish active and middle voice; forms based on the past stem distinguish intransitive and transitive inflection, and distinguish masculine and feminine gender in some persons. Also, 3s neuter *-u* is often found in idiomatic expressions: *ttai* (< *tta + -ī*) *hāmāt-u* ‘thus it occurred to him’, *tta dist-u* ‘it appeared thus’, *tta-mā pyūšt-u* ‘thus I have heard’ (cf. Sanskrit *evaṃ mayā śrutam*).

Personal endings are distinguished in the four moods: indicative, subjunctive, optative, and imperative; a few instances of the injunctive are found in Old Khotanese. Tumshuqese has an imperfect form marked by an augment as in Old Iranian, which is not attested in Khotanese.

The verb ‘be’ is suppletive, its past stem *vāta-* deriving from Old Iranian **būta-*. The singular of the indicative present has enclitic forms.

The following is an overview of the person marking in Khotanese, combining the attested personal endings and ‘be, become’; for periphrastic verb forms see section 3.2.6.2 (note that raised *i* indicates palatalisation of the preceding syllable; “*ā~i*” = “*ā* or *i*”).

The archaic optative forms in *v-* of the copula (originally aorist optative) occur in potential and irreal conditional sentences (Skjærvø 1981; see section 3.2.6.2 for pluperfect and section 5.3.2 for conditional clauses).

In Tumshuqese only few non-indicative forms are attested, which correspond closely to their Khotanese counterparts.

TABLE 7.11: PRESENT AND PAST PERSON MARKING—KHOTANESE

Active. Present						
	1s	2s	3s	1p	2p	3p
IND	-ī mā	-i	-itā~i	-āmā	-(i)ta	-īndā~i
SBJ	-ī-ñi	-e	-ātā	-ā-ma(ne)	-ā-ta	-ā-ru~o
OPT	-ā, - ⁱ o-, ⁱ u, -ī-ne		-ī-yā, - ⁱ a, -ā		-ī-ru	-ī-ru~o
INJ	-u	-a	-(ā)ta			
IMP			-(ā)tu		-(ā)ta	-ā-ndu

(Continued overleaf)

TABLE 7.11: Continued

Middle. Present						
	1s	2s	3s	1p	2p	3p
IND	-e	-a	-(i)te	-ā-mane	-īru	-āre
SBJ	-ā(-ne)	-ā	-ā-te	-ā-mane	-ā-ta	-ā-ru~o, -ā-nde
OPT	-ī-ne		-ī-ya			-ī-ru~o
INJ			-(ā)ta			
IMP		-u-	-ūtō			
Past Indicative						
	1s	2s	3s	1p	2p	3p
INTR	-t-ā mā	-t-ī	-t-ā-θ (m) -t-a-θ (f)	-t-a mā	-t-a sta (m) -t-e sta (f)	-t-a-θ (m) -t-e-θ (f)
TRNS	-t-ai mā (m) -t-ā mā (f)	-t-ai	-t-e-θ (m) -t-ā tā (f) -t-u-θ (nt)	-t-ānd-ā mī	-t-ānd-ī sta	-t-ānd-ī

TABLE 7.12: COPULA AND 'BE, BECOME'—KHOTANESE

<i>ah-</i> 'be'. Present						
	1s	2s	3s	1p	2p	3p
IND	īmā, -mā	ī, -e	astī, -stā	mā	sta	īndā
SBJ		ā-ye	ā-ya	ā-maṃ		ā-ro, ā-mdu
OPT			ī-yā, ī-tā, ī			
IMP					ā-ndu	
<i>vāt-</i> 'be, become'. Past						
	1s	2s	3s	1p	2p	3p
IND	vāt-ā mā	vāt-ī	m. vāt-ā f. vāt-a	vāt-a mā	m. vāt-a sta f. vāt-e sta	m. vāt-a f. vāt-e
SBJ			vāt-ā-ya			
OPT	v-y-o		v-ī-ya, (v)ya			v-ī-ro

3.2.4 Conjugation classes

Four main conjugation classes can be distinguished based on the endings of the 3 pres. indicative. Of these types C and D are rare (Emmerick 1968a: 177). The table contains attested forms of *hvāñ-* 'speak', *yan-* 'make, do', *puva'd-* 'fear', *dai-* 'see', *hām-* 'become, occur', and *ysai-* 'be born'.

TABLE 7.13: CONJUGATION CLASSES—KHOTANESE

Active	A	B	C	D
	'speak'	'make, do'	'fear'	'see'
1s	<i>hvāñ-īmā</i>	<i>yan-īmā</i>	<i>puvai'-mā</i>	<i>dai-mā</i>
2s	<i>hvāñ-i</i>	<i>yañ-i</i>		<i>dai</i>
3s	<i>hvāñ-ātā</i>	<i>yīn-di</i>	<i>pvai't-tā</i>	<i>dai-yā</i>
1p	<i>hvāñ-āmā</i>	<i>yan-āmā</i>		<i>dāy-āmā</i>
2p	<i>hvāñ-ita</i>	<i>yan-da</i>	<i>puva't-ta</i>	<i>dai-ya</i>
3p	<i>hvāñ-īndi</i>	<i>yan-īndi</i>	<i>puvai'-ndi</i>	<i>dai-ndā</i>

Continued overleaf

However, there was a tendency for the transitive to predominate (see Sims-Williams 1997 on the origin of the perfect).

3.2.6.2 Periphrastic perfect and pluperfect

The periphrastic past forms are based on the past participle and forms of 'be'.

In the periphrastic indicative perfect in the 3s and 3p only forms with the negative are found:

ne hvat-e štä
'he did not speak'.

The perfect subjunctive and optative add the respective forms of the copula.

The pluperfect adds the past forms of 'be', of which the optative is extremely rare (Skjærvø 1981). The following table illustrates the pattern, citing some of the rare non-indicative forms.

TABLE 7.14: PERIPHRASTIC PERFECT AND PLUPERFECT—KHOTANESE

Perfect	Pluperfect				
IND <i>yäḍ-e sta</i>	'you (pl.) have done'	<i>yäḍ-e vät-ä</i>	'he had done'		
SBJ <i>yäḍ-e äye</i>	'you may have done'	<i>autt-ä vät-äya</i>	'it would have lasted'		
OPT <i>yäḍ-e iyä</i>	'he may, might have done'	<i>ysät-ä vya</i>	'he would/might have been born'		

Note that functionally there is no discernible difference between the non-periphrastic simple past and the periphrastic perfect. Essentially, then, the perfect has two forms:

parst-e mā 'I (have) ordered';
parst-e mā imā 'I (have) ordered'.

There is insufficient evidence to establish the perfect system in Tumshuqese.

TABLE 7.15: OVERVIEW OF TENSES AND MOODS—KHOTANESE

Present	indicative	subjunctive	optative	imperative	(injunctive)
Perfect, simple	indicative				
Perfect, periphr.	indicative	subjunctive	optative		
Pluperfect	indicative	subjunctive	optative		

3.2.7 Modal and aspectual constructions

3.2.7.1 Potential-completive construction and passive

The auxiliaries *yan-* 'make, do' and *häm-* 'become' when used with past participles have the following functions: *yan-* + past participle expresses active ability or completed action, *häm-* + past participle expresses passive ability or completed action or simple passive in the present. The past passive is expressed by 'to be'.

3.2.7.1a Ability

(a) Intransitive

ṣā vyāgr-a ne panat-a hām-āte

‘the tigress [cannot get up]’ (Suv 18.99).

(b) Transitive active

Present

ye ttuśśā-ttet-u [ne yuḍ-u yīn-dā nājsaṣṭ-u]

‘[one cannot demonstrate] (the doctrine of) emptiness’;

ku [ne] ne [yuḍ-u yan-de] samu

‘if [he] simply [cannot do] them’ (i.e., miraculous deeds) (Z 12.132), note that in the expression *riddhā yan-* ‘perform miraculous deeds’ *yan-* is middle.

(c) Transitive passive

ūc-a biśś-a [khaṣṭ-a hām-āte]

‘the water [can] all [be drunk (up)]’ (Z 2.120).

3.2.7.1b Completed action

(a) Intransitive

Present

cīyā ṣṣaman-a [āt-a hām-āre]

‘when the monks [have come]’ (Z 24.273).

(b) Transitive active

Past

cī aysur-a [purr-d-u yād-ānda]

‘when [you-p had defeated] the asuras’;

cī gyast-ā balys-ā ttut-u tta tta [hvat-u yād-e]

‘when the Lord Buddha [had said] this thus’ (Suv 6.3.72).

(b) Transitive passive

Past

cīyā ṣātā tta tta [hvat-ā hāmāt-ā]

‘when this [had been said] thus’ (Suv 10.67).

3.2.7.1c Passive

Present(-future)

īmu mamā māst-ā rakṣ-a [yād-a hām-āte]

‘today by me great protection [will be made = given]’ (Suv 6.3.62), translating Sanskrit *adya mama mahat y ārakṣā kṛtā bhaviṣyati*.

Past

ce buro . . . hūñe jsa [bvata īndā]

‘as many . . . army-by [destroyed are]’ = ‘as many (lands) have been destroyed by a (foreign) army’ (6.1.24), translating Sanskrit *ye kecid . . . para-cakreṇa vā upahatā bhaviṣyanti*;

[*kälsta-i vät-a*] *ššärye härä bāt-a*

['planted-by-him was] of-good thing root' = 'by him had been planted the root of a good thing' (Suv 2.2).

3.2.7.3 Infinitive-based constructions

See Emmerick 1968a: 218–220 and Degener 1987: 284–293.

The infinitive depends on verbs predicating inception or completion, such as *hamjšaš-* 'be about to', *ākšuv-* 'begin', *byeh-* 'succeed', *parī-* 'order', or ability: *hot-* 'be able':

nästā kye bišš-o bašda-u haut-ta västarna [*hvīy-ā*]

'there is no one who could-INJ [tell] the whole evil in detail' (Z 24.437);

svī ākšuv-āmā [*padīnd-e*]

'tomorrow we will begin [to make] (it)' (Z 23.43);

uysnor-a kye . . . dāt-u byeh-īndā [*pyūšt-e*]

'beings who get [to hear] the Law' (Sgh § 34.14).

3.2.7.4 Gerundives, gerunds, and necessity construction

See Emmerick 1968a: 171–176, 214–218 and Degener 1989a: 54–71, 218–266, 299–304.

The gerundive or participle of necessity, formed by the suffix *-āñ-* or by *-ya-* (see section 3.2.2 Nominal forms) expresses necessity.

Negation of both types of gerundives is by *ne*, which in the 3s may be followed by the enclitic copula, or less commonly by the privative prefix *a-*.

The neuter singular of the gerundive is used as a gerund, constructed with the gen.-dat. of the experiencing subject:

ka [*mamā*] *nary-o . . . [št-āñ-u häm-äte]*

'even if [I should have to stand = remain] in hell' (Z 2.215).

3.2.8 Diathesis

Khotanese inherited both causative and medio-passive stems (see section 3.2.1 Stem formation).

The passive can be expressed by the medio-passive endings with transitive verbs.

The middle can also have a reflexive function (Canevascini 1991). Thus, *jsan-* 'kill' is normally active as in *handar-u jsīn-dā* 'he kills another', but it is middle in *uysān-o jsan-de* 'he kills himself'.

The auxiliary verb *yan-* 'make, do' may be conjugated either in the active or in the middle, but each phrase has its particular diathesis. Thus in the phrase *kīr-e yan-* 'do (good) acts' *yan-* is always active whereas in the phrase *kädägän-e yan-* 'do evil acts' *yan-* 'do evil acts' it is always middle.

The passive can also be expressed by the potential-completive construction of *häm-* (see section 3.2.7.1c).

4 SYNTAX AND USE OF FORMS

See Canevascini 1991; Degener 1993; Emmerick 1965, 1987a; Emmerick and Skjærvø 1982: 32, 97; Herzenberg 1965: 117–137; Heston 1976; Skjærvø 1981: 461–463.

4.1 Coordination

4.1.1 Coordinating conjunctions and clitics

Coordinate conjunctions in Khotanese are: non-enclitic *u* ‘and’ and *o* ‘or’; enclitic *r(r)o* ‘and’, *vā* ‘or’, *hāḍe* ‘but’. Of these, Tumshuqese appears to have *o* ‘or’ and *ro* ‘and’. Extended forms are *o vā* ‘or on the other hand’, and alternative *o . . . o* ‘either . . . or’.

4.1.2 Enclitic particles and words

Khotanese has a common deictic particle *-ī* (see section 3.1.3a/b.1 Demonstratives), and a rare emphatic particle *-ū* (Canevascini and Emmerick in Emmerick and Skjærvø 1997: 25–28). Enclitic words include indefinite *ju*, *buro*, *hānu*, *halci*, and emphatic *gāvu*, *tāvu* after negation in Old Khotanese. In Late Khotanese the present participles of *jsā-* ‘go’, *āh-* ‘sit’, and *ṣṭ-* ‘stand’ have various functions which remain to be studied in detail.

4.2 Noun phrase structure

Khotanese and Tumshuqese are languages where dependent items precede the head. Thus the structure of the simple noun phrase as well as that of the simple genitival noun phrase are (see also 4.3.3 Enclitic pronouns): ADJECTIVE – NOUN and NP₂ – NP₁.

4.2.1 Concord and agreement

4.2.1.1 Adjectives

Adjectives agree in case, number, and gender with the nouns they qualify. For example,

āṣṣeī ṛ-ā häten-ai śśīy-ā ham-ā hamau
‘blue, red, white (is) the same goblet’ (Z 4.33).

Here the four adjectives agree with the nom. sg. masc. of *hamau* ‘goblet’.

In later stages of the language the concord is often confused, being obscured by the reduction of the endings:

bu’ys-ye bāḍ-na
‘for a long time’ (JS 7r2, 20r2).

Here the ending *-ye* of the adjective is formally instr.-abl. sg. fem., and the ending *-na* of the noun is instr.-abl. sg. masc.

4.2.1.2 Group inflection

In the later language the final syllable *-na* of the instr.-abl. sg. masc. of an adjective is sometimes dropped as in *mirāhīnai hārna* ‘with a pearl necklace’ for **mirāhīnaina hārna*.

This phenomenon reflects the shift towards group inflection, and may have spread from the numbers, where already in Old Khotanese the members of complex numbers are either all inflected, or only the last one.

4.2.1.3 Demonstrative adjectives

Demonstrative adjectives similarly agree with their head noun:

balys-ä [ttü] hvana-u naljsond-e

‘the Buddha concluded [this] speech.’ (Z 22.334), accusative;

[ttät-äye] hvat-ye hvan-ai

‘[this] speech having been spoken’, genitive (absolute construction).

4.2.2 Dependent nouns

Dependent nouns usually precede the head noun directly. The possessive function of the gen.-dat. may be emphasised by the adjective *häv-ia-*, *häv-ia-* ‘belonging to’ which agrees in case, number, and gender with the head noun:

balys-ä (gen.) [häv-y-e] ird-i lit.

‘the Buddha’s [own] miraculous powers’ = ‘the Buddha’s miraculous powers’
(Z 14.91),

instead of **balys-ä-GEN ird-i*;

šakrr-ä [häv-ī] bārai

‘Śakra’s [own] steed’ = ‘Śakra’s steed’ (*Jātakastava* 6v3, ed. Dresden).

This usage is rarely attested in Old Khotanese but becomes more prominent later. Titles etc. precede names, e.g. *gyast-ä balys-ä* ‘the Lord Buddha’.

4.2.3 Extended noun phrase

The order of the extended noun phrase has not been fully determined but appears to be as follows:

Demonstrative – *handara* (‘other’) – Number – Adjective – Noun,

where the number may itself be preceded by indefinite adjectives such as *phar-u*, *pharāka-* ‘many’, *bišša-*, *harbišša-* ‘all’.

4.3 Clause structure and word order

See Degener 1993: 46–51.

4.3.1 Nominal sentence

Nominal sentences, which consist of a subject and a nominal predicate, omit the copula in the present and past if both positive and indicative:

rre udayan-ä sīr-ä *thu-nä päte*
 ‘King Udayana (was) joyful’ (Z 23.123); ‘you (are) our father’ (Z 23.114).

4.3.2 Order of constituents

In view of the fact that there is relatively little prose literature available that is not translated from another language, it is difficult to determine in detail the principles governing Khotanese word order.

Khotanese and Tumshuqese are SOV (subject-object-verb) languages: Khot.

balyš-ä dāt-u hvat-e
 ‘the Buddha spoke = preached the Law’ (Z 13.109).

An indirect object precedes a direct object:

tt-ānu cakrvaratt-ānu rrund-inu-GEN-DAT haur-u-ACC haur-ä
 ‘he would give a gift (*haur-u*) to the cakravartin kings’ (Sgh § 88.3).

4.3.3 Enclitic pronouns

The enclitic pronouns in their genitive and dative functions as possessor, experiencer, or agent are attached to the first unit of the clause. This may be the following:

(1) Adverbial:

tta-mä pyūšt-u
 ‘thus-by-me was heard’ = ‘thus I have heard’.

(2) Conjunction:

<i>tta cu-te sait-tä</i> ‘well, how-to-you does it seem?’ (Sgh § 91.1);	<i>cv-ī mäst-a hastam-a kīr-e</i> ‘as-for-his great, excellent deeds’ (Z 23.47).
---	--

(3) Relative-interrogative:

<i>kye-nä rro grat-u hvāñ-äte</i> ‘and who-to-us will preach instruction?’ (Z 24.516);	<i>ku-m bis-a</i> ‘where-my-to-us (is)’ (Z 2.58).
--	---

(4) Subject itself:

thu-nä päte
 ‘you (are) our father’ (Z 23.114).

It is always attached to the negation:

nai (< ne + -ī) ne mara ram-äte
 ‘it pleases him (-ī) not at all (*ne . . . ne*) here’ (Z 22.172);

ne-n ne mara ram-äte

‘it pleases them (-n) not at all here’ (Z 22.172; 22.211);

cu nai (< ne + -ī) bei’ khās-a yan-āmā

‘why don’t we put poison in his (-ī) food?’ (Z 2.26).

The last example shows that by this rule the enclitic pronoun may be separated from its referent, lit. ‘why not-his poison in food we do’.

4.3.4 Topicalisation

It is probable that, as in most languages, focus could be given to a word by deviation from the standard word order, but further research is required to determine the details. Moreover, in texts which are mostly translations, topicalisation may follow the original. For example, in the following sentence the word order closely corresponds to Sanskrit (Sgh § 62.2, cited by Degener 1989: 49):

<i>namasāt-aimā . . . aysu</i>	<i>ttā . . .</i>	<i>balys-a</i> (Khot.)
‘worshipped . . . I	the	Buddhas’
<i>vanditās . . . me</i>	<i>te</i>	<i>tathāgatā</i> (Sanskrit)
‘worshipped . . . by me	the	Buddhas’

A common form of topicalisation is the placing of a dependent noun in initial position, marked by the conjunction *cu* ‘as’, with or without an anaphoric replacement:

cu kuṃṃs-a št-e, tt-ye ysv-e

‘as far as (*cu*) sesame (*kuṃṃsa*) is concerned (*št-e*), its (*tt-ye*) taste (*ysv-e*)’ (Si § 3.18), from non-topicalised ‘the taste of sesame’;

cv-ī māst-a hastam-a kīr-e, biśś-ā balys-ā āṇi nijsaṣt-e

‘as for (*cv-*) his great, excellent deeds, all (of them) the Buddha displayed (while) sitting’ (Z 23.47).

4.3.5 Questions

4.3.5.1 Yes-no questions have the same word order as statements, their interrogative character being indicated by intonation:

(1) *dahak-a ysq a jīšk-ā*

‘has a boy been born or a girl?’ (Nanda 41).

(2) With reaffirmative tag, *ā ne* ‘or not’, later *o ne*:

dv-a ttaiṣy-a caiga-kṣīr-a tsvāṃd-a, ā ne

‘did the two monks go to China or not?’ (P 5538b.43 KT 3.122).

4.3.5.2 Interrogatives are as a rule in initial position:

(1) *cūḍe brem-ā*

‘why are you (sg.) weeping?’ (Z 24.235);

kve-nā rro grat-u hvāñ-äte

‘and who will preach instruction to us?’
(Z 24.516).

- (2) Optionally preceded by a discourse initiator, such as: *tta* ‘thus, so’:

tta cu-te sait-tä
‘well, how does it seem to you?’ (Sgh § 91.1).

4.4 Semantics and use of nominal forms

4.4.1 Use of cases

On the whole the syntax of the cases conforms with that of Avestan and Indo-Iranian. Particular features are the following.

4.1.1.1 Genitive-dative

- (1) As object and experiencer with verbs of fearing:

[ššūjī-ye] puvaī’-ndi
‘they fear [one another]’ (Z 11.10);

and as experiencer with such as verbs as ‘occur to, seem to someone, realise’.

- (2) With the participle of necessity:

ka [mamä] nar-yo . . . šāñ-u häm-äte
‘if it were [for me] to stay (*šāñ-u*) in hell’ = ‘even if I should have to remain in hell’
(Z 2.215);

kšāta’ pārāmat-e [hvānd-ä] . . . car-āñ-e
‘the six perfections must be practised [by a man]’ (Z 11.17).

- (3) As agent in future passive constructions:

īmu [mamä] māst-ä rakṣ-a yād-a häm-äte
‘today [by me] great protection will be given’ (Suv 6.3.62).

- (4) In past passive participle constructions:

[bišš-ānu gyast-ānu balys-ānu] āysdagād-ä
‘watched over [by all the Lord Buddhas]’ (Suv 6.1.4).

- (5) In a genitive absolute construction:

[ttät-äye hvat-ye hvan-ai]
[this spoken speech]-GEN’ = ‘this speech having been spoken’ (Sgh § 43.1).

4.4.1.2 Locative

The use of the locative is shown in the following.

- (1) For the source of motion:

kho ju ye viys-u thañj-äte [khārj-a]
‘just as one pulls a lotus out [of the mud]’ (Z 5.90).

- (2) With the adjective *bisaa-* ‘residing, located (in)’:

[*jaṃbvīy-a*] *bis-ā satv-a*
 ‘beings (living) [in Jambudvīpa]’ (ApS § 6);

[*tcimñ-a*] *bis-e arv-e*
 ‘in the eye located (medicinal plants =) medicine (that one puts) in the eye’ =
 ‘eye-medicine’ (Si 26.31).

- (3) In Late Khotanese, with the present participle middle *āna-* ‘sitting, dwelling’ to express motion away from the noun, instead of a simple ablative noun:

[*hvaṃny-a kṣīr-ā*] *qn-ā ṣacūvāṣṭā*
 ‘[in Khotanese country] dwelling to Ṣacū’ = ‘from the Khotanese country to Ṣacū’
 (StH 36).

4.5 Semantics and use of verb forms

4.5.1 Possession

Possession is indicated by the genitive-dative with the existential verb, e.g. here with enclitics, *aštā-tā* ‘you have’, lit. ‘to you is’, *ništā-mā* ‘I don’t have’.

4.5.2 Tense and aspect

The basic distinction of tense is present and past. In turn, past tense distinguishes between perfect (simple and periphrastic) and pluperfect.

4.5.2.1 Future

The future is normally expressed by means of the present or the subjunctive.

4.5.2.2 Accomplishment of past action

The accomplishment of an action in the past is expressed by the potential-completive *yan-*, *hām-* construction (see section 3.2.7.1 Potential construction).

4.5.2.3 Immediacy

Immediacy is frequently expressed in Late Khotanese by adding the present participle middle *ṣṭāna-* of *ṣṭ-* ‘stand’, often together with *vaṃñā* ‘now’:

ttrāst-ai ra thu paḍā . . . u [ttrāy-i ṣṭāna] vaṃñā ṣṭāna is a participle by then, no ending ‘you formerly rescued . . . and [you (sg.) are rescuing] now’ (Avdh 12v1–2) (comparable to Buddhist Sogdian *əštən* and Yaghnobi *-išt*).

4.5.3 Use of modal forms

See Degener 1993: 51–55.

On the whole, one can distinguish between what may be termed ‘major modal’ (indicative and imperative) and ‘minor modal’ (subjunctive, optative, and Old Khot. 3s

injunctive), forms. In their usage the moods are not always clearly distinguished, the inherited system being in the process of disintegration, and there is the tendency to use only the indicative.

In general, the indicative is used for statements; the imperative for commands; the subjunctive for potential action or state, including softened commands and wishes; the optative for irreal action or state, including wishes; the injunctive for potential as well as past action or state.

Examples of the use of the moods are the following (for hypothetical statements see section 5.3.2 Conditional clauses below; for ability and necessity, see sections 3.2.7.1 Potential, and section 3.2.7.4 Gerundival constructions):

(1) Statements:

(a) Indicative:

balys-ä tt-ü hvana-u [naljsond-e]
‘the Buddha [concluded] this speech.’ (Z 22.334).

(b) Injunctive, past function:

samu ne rre pātcu [haraysd-a]
‘then no sooner [had] the king [stretched out].’ (Z 5.88).

(c) Commands, imperative:

ma ju [puva’] badr-a [ākūt-a] ggamdy-o tsāṣṭ-o
‘[fear] not, Bhadra! [Strike] the gong calmly.’ (Z 2.102).

prām-a [škīm-āṃdu]
‘[let them build] arches.’ (Z 5.96).

(2) Wishes:

(a) Subjunctive:

ka va tt-ä [pars-āro] dukh-yau jsa
‘if only [they may escape] from woes!’ (Z 5.112).

(b) Optative:

ka nā [parrīj-īyā] dukh-yau jsa
‘if (only) [he may rescue] them from woes!’ (Z 22.292).

(c) Indicative:

ma vā [pars-īmā] puṣṣo
‘nor [may I escape] wholly’ (Z 7.4).

5 COMPLEX SENTENCES

Subordinate conjunctions in Khotanese are: *ka* ‘if’, *kāmu* ‘as long as’, *ku* ‘where’, *kho* ‘how, as’, *cīyā* ‘when’, *cu* ‘when, if, because, since’. Of these, *ka* and *cu* are found in Tumshuqese.

5.1 Quotative clitic

The particle *se* is a discourse marker introducing direct speech after verbs of speaking or thinking or similar locutions, corresponding to the colon in the English translations:

tta hvat-e [se] cu nai (ne + -ī) bei khās-a yan-āmā
 ‘he spoke thus [.] “Why don’t we put poison in his food?” ’ (Z 2.26).

5.2 Relative clauses

Relative clauses are introduced by relative pronouns or relative adverbs, with or without a preceding demonstrative or demonstrative noun phrase. The case of the pronoun is determined by its function within the relative clause. Potential or generalised action or state is in the subjunctive or injunctive.

5.2.1 Indicative, factual

ništā kye yuḍ-u yīn-dā pamūt-u . . . ṣṣahān-e
 ‘there is not = no one **who** can measure-POT the virtues’ (Z 24.652).

5.2.2 Relative pronoun in genitive-dative

samu kho tte ci māta mīḍe
 ‘just as **that one whose** mother dies’ (Z 23.24).

5.2.3 Injunctive, potential

nāštā kye biśś-o baśda-u haut-ta västarna hvīy-ä
 ‘there is no one **who** could tell the whole evil in detail’ (Z 24.437).

5.2.4 Clauses with head noun

kṣīr-ä ku ne rre nāštā o ṣ-a bis-a ku hvāšt-ä mīḍe
 ‘**the land where** there is no king, or **the house where** the master dies’ (Z 23.23);

ṣ-a ṣṣav-a . . . ku nā sat-a štā hambad-a māst-ä
 ‘**the night . . . when** the full moon has not risen’ (Z 23.22).

5.3 Adverbial clauses

5.3.1 Temporal and local clauses

Temporal and local clauses are introduced by *cī*, *cīyā*, or *ku*, locational clauses by *ku*:

5.3.1.1 Temporal

cī gyast-ä balys-ä ttut-u tta tta hvat-u yād-e
when the Lord Buddha had said-POT this’ (Suv 6.3.72);

cīyā ṣṣaman-a āt-a häm-āre
 ‘when the monks have come-POT’ (Z 24.273).

5.3.1.2 Local

Local clause, subjunctive dependent on possible condition:

ka . . . nai (ne + -ī) bv-āte (ku mara āt-ā häm-āte)
 ‘if he should not realise it: **where** he has come here’ (Z 2.51).

5.3.2 Conditional clauses

Conditional clauses are introduced by *ka* or *ko*. Potential action or state is in the subjunctive, irreal in the optative:

(1) Subjunctive, potential:

ka . . . nai (ne + -ī) bv-āte (ku mara āt-ā häm-āte)
 ‘if he should not realise (where he has come here)’ (Z 2.51).

(2) Optative in protasis and apodosis, irreal:

ko satv-ā ttatvatu v-īya (nirvān-ye gāvu ni hīs-a)
 ‘if indeed a being really existed (*v-īya*), (one would never come (*hīs-a*) to Nirvāṇa)’
 (Z 6.58).

5.3.3 Consecutive and comparative clauses

Consecutive and comparative clauses are preceded by demonstrative adverbs and introduced by *kho* and a correlate relative pronoun or relative adverb:

jaṃbvīv-i trām-ā västāt-ā ku ne marata balys-ā ni vei štā
 ‘Jambudvīpa had become **such as when** no Buddha has been here’ (Z 23.22);

pan-ye tterā kāṣc-a uysnor-ā samu kho tte ci māt-a mīḍe
 ‘the anxiety of every living being (was) **as great as that of one whose** mother dies’
 (Z 23.24);

kho ju ye viys-u thaṃj-āte khārj-a
 ‘just **as** one pulls a lotus out of the mud’ (Z 5.90).

5.4 Nominalised clauses

5.4.1 Infinitival constructions

In infinitival constructions (see section 3.2.7.3), the complement may either remain with the infinitive, or be placed before the head verb

(1) Position before the infinitive:

parst-e (tt-ā dvās-u baṃṃhy-a pāhašt-e)
 ‘he ordered (to fell those twelve trees)’ (Sgh § 211.2).

- (2) Position before the head verb:

uysnor-a kye . . . (dāt-u) byeh-īndä (pyūšt-e)

'beings who (the Law) get (to hear)' = 'beings who succeed in hearing the Law' (Sgh § 34.14).

5.4.2 Participial-adjectival clauses

In addition to the infinitival and gerundival constructions (see sections 3.2.7.2–3), and the genitive absolute (see 3.1.3a/b.1 Demonstrative adjectives), Khotanese makes frequent use of participial-adjectival clauses. They are prominently, but not only, locational:

mari ā'gy-e dīvat-e,
'here **residing** deities' (Z 23.25);

hvaṇm-ya kṣī r-ä qn-ä
'**dwelling** in Khotanese country' (StH 36);

ttāj-vā [īs-ā] devatt-a lit.
'in the rivers **dwelling** deities' (ApS V § 25).

They tend to evolve into locational enclitics:

hvaṇm-ya kṣī r-ä qn-ä śacūvāštā
'from the Khotanese country to Śacū' (StH 36), lit. '**dwelling** in'.

6 LEXIS AND SOCIOLINGUISTIC ASPECTS

6.1 Word formation

6.1.1 Derivation

There is a large number of productive suffixes, but few prefixes (for productive suffixes, see Degener 1989a). The following are examples of productive affixes that derive adjectives and nouns:

6.1.1.1 Suffixation

- (1) Adjectives from nouns: (a) *-īñā-*, from nouns denoting living beings: *dahīñā* 'belonging to a man' < *daha* 'man'; *kaviñā* 'belonging to a fish' < *kavā* 'fish'; *-īnaa-* (fem. *-īṃgyā-*), (b) from nouns not denoting living beings (with one exception): *ggūštīnaa-* 'flesh' < *ggūštā* 'flesh'; *spātainaa-* 'flower' < *spātaa* 'flower'; (c) *-aunda-*: *puñāunda-* 'meritorious' < *puñā* 'merit'; *tcei'maunda-* 'having (seeing) eyes' < *tcei'man* 'eye'; (d) *-jsa-*: *pāta'jsa-* 'mighty' < *pāta* 'might'; *rrīmajsa-* 'dirty' < *rrīman* 'dirt'. (2) Nouns from adjectives: *-ia-*: *kṛtañia-* 'gratitude' < *kṛtaña* 'grateful'; *škālśia-* 'pride' < *škālśa* 'proud'.
- (3) Nouns from nouns: (a) *-oñā-*: *arahandoñā-* 'arhatship' < *arahanda-* 'arhat'; *bvākauñā-* 'the state of being a knower' < *bvāka-* 'knower'; (b) *-osti-*: *dahosti-* 'virility' < *daha* 'man'; *hayūnausti-* 'friendship' < *hayūna-* 'friend'.

6.1.1.2 Prefixation

- (1) Adjectives from adjectives: (a) privative *a-* 'un-', *ahvata-* 'unspoken' < *hvata-* 'spoken'; (b) *bi-* 'less', *bijūndaa-* 'lifeless' < *jūndaa-* 'living'; (c) *hu-* 'well': *hubasta-* 'well bound' < *basta-* 'bound'.

- (2) Adjectives from nouns: *a-*: *aggaṃjsa-* ‘flawless’ < *ggaṃjsā-* ‘flaw’; *duṣ-*: *duṣpāta-* ‘powerless’ < *pāta-* ‘power’.
- (3) Nouns from nouns: ‘non-’: *akā’matā-* ‘non-thought’ < *kā’matā-* ‘thought’; *ggu-* ‘un-’: *gguhamāṅgatāti-* ‘unevenness’ < *hamāṅgatāti-* ‘evenness’.

6.1.2 Composition

Khotanese compounds consist almost exclusively of two members (see Degener 1987).

- (1) Substantive as prior member:
- (a) + substantive: a. *bahuvrīhi*: *dāta-āhāra-* ‘having the Law as food’ (+ *āhāra-* ‘food’); b. determinative: *kamala-rrāha-* ‘headache’ (+ *rrāha-* ‘ache’); c. dvandva: *mārā-pātara* ‘parents’ (+ *pātar-*) ‘father’.
- (b) + adjective: *cā’ya-nārmāta-* ‘produced by magic’ (+ *nārmāta-* ‘produced’).
- (c) + verbal stem. This type usually has secondary *-a-* (see section 3.1.1a Nominal stem classes): *dāta-hvāṅāa-* ‘Law preacher’ (+ *hvāṅāa-* ‘preacher’ < *hvāṅ-* ‘to preach’).
- (2) Adjective (adverb, pronoun) as prior member:
- +substantive, a. *bahuvrīhi*: *āṣei’ṅa-ṽrraḥoṅa-* ‘having dark blue garments’ (+ *ṽrraḥoṅa-* ‘garment’), *ṣiṣṭa-biśā* ‘tongue-tied’ (+ *biśāa-* ‘tongue’); b. *karmadhāraya*: *hvatāna-kṣīra-* ‘Khotan(ese country)’ (+ *kṣīra-* ‘country’).
- + adjective: *hamṭsa-ysāta-* ‘born together’ (+ *ysāta-* ‘born’).
- (3) Numbers as prior element:
- + substantive, a. mostly *bahuvrīhi*: *drrai-pāṣkala-* ‘of three classes’ (+ *pāṣkala-* ‘class’), *śi-vāa-* ‘biped’ (+ *pāa-* ‘foot’); b. not *bahuvrīhi*, e.g. *drai-padia-* ‘threefold’ (+ *padia-* ‘kind’).
- + number, two instances only: *hūduva* ‘both’ (+ *duva* ‘two’); *śśūjāta-* ‘one another’ (< *śāta-* ‘second’).

6.1.3a Loanwords—Khotanese

See Bailey 1946, 1947, 1961: 4; Degener, 1989b, 1990; Emmerick 1985b, 1989: 228–229.

6.1.3a.1 Iranian

The oldest loanwords in Khotanese are Zoroastrian technical terms that have been adapted to a different religious environment. The best known are *urmaysde* ‘sun’ < **ahura-mazdāh* (nom. sg.), cf. Avestan *ahurō mazdā*, Old Persian *auramazdā*, and *śśandrāmatā-*, which is the Khotanese equivalent of the name of the Avestan female Holy Immortal *spəntā- ārmaiti-* but is used to designate the Buddhist goddess of fortune, Sanskrit Śrī. To this layer of borrowing may also belong the much disputed word *phārra-* ‘splendour’, the Khotanese counterpart of Old Persian *farnah-* (Emmerick in Emmerick and Skjærvø 1997: 103–104).

6.1.3a.2 Indian

The majority of the Indian loanwords in Khotanese are learned borrowings that are adopted unchanged but are inflected as Khotanese, sometimes with Khotanese suffixes.

Often it is not possible to determine whether their source is Prakrit or Sanskrit, but many of the frequent words betray by their phonological features the influence of the Northwestern or Gāndhārī Prakrit. They are extremely common in a Buddhist milieu, e.g. *ṣṣamana-*, ‘monk’, *ṣṣāvaa-* ‘hearer, disciple’, *saṃtsāra-* ‘cycle of existence’, cf. Gāndhārī *ṣamaṇa-*, *ṣavaka-*, *satsara-*.

According to the degree of assimilation there are ‘loan synonyms’, ‘loan blends’, and ‘loan homonyms’ (Degener 1989b). Thus, a word of Iranian origin may add the meaning of a similar Indian word, e.g. *sam-*, whose meaning ‘to agree’ has been ascribed to the influence of Buddhist Sanskrit and Pāli *sam-*. A loanword may be blended, e.g. Indian *pāramitā-* ‘perfection’ > *pārāmatā-*, here with the common Khotanese abstract suffix *-āmatā-*. A loanword becomes homonymous with a native word, e.g. Indian *ātama-* in the sense of ‘Buddhist tradition’ (< Sanskrit *āgama-*) became homonymous with Khotanese *āmatama-* ‘wish, desire’ (<**ākāma-*).

Borrowings from other languages are rare. (1) *Tocharian*. The only instance seems to be Old Khot. *puka-* ‘cubit’ from Toch. A *poke* ‘arm’. (2) *Chinese*. Apart from proper names and titles borrowings, few administrative terms are attested; e.g. *kiṇa* ‘16 ounces’ from Chinese *chīn (jin)*, *kṣau* ‘voucher, receipt’ from Chinese *ch’ao (chao)*. (3) *Tibetan*. Loans are rare and confined to Late Khotanese, e.g. *ṣkyaisa* ‘official gift, present’ from Tibetan *ṣkyes*. (4) *Turkish*. Except for a number of Turkish proper names and titles in Late Khotanese no loans have so far been found.

6.1.3b Loanwords—Tumshuqese

The short Buddhist Karmavācanā text shows that Tumshuqese likewise borrowed its Buddhist terminology in large measure from Gāndhārī Prakrit, e.g. *uvāsaa-* ‘layman’ (Khot. *uvāsaa-*) and *retena-* ‘jewel’ (Khot. *ratana-*). However in Tumshuqese there is much stronger influence from Tocharian than in Khotanese. The influence from Chinese is minimal, *cāṃṣyā*, from Chinese *ch’ang shih (chang shi)* designating the holder of an administrative office, a term also attested in Khotanese, Middle Persian, and Uighur (Bailey 1961: 118).

6.2 Sociolinguistic aspects

Polite Phraseology. The Khotanese verb *parī-* *parsta-* ‘order’ is used honorifically with the infinitive like Sogdian *frm’y-* and New Persian *farmāy-*: *kū ṣṣta past-ai mūd-ai* ‘Where did you deign to stay?’ In the imperative it may be rendered ‘please’: *laka mara pary-a mūṃd-ai* ‘Please stay here a little’.

The loanword *usahy-* ‘endure’ is used as an honorific instead of a verb of motion: *vā usahy-a ku-ṃ bis-a balys-a* ‘Deign (to come) to where my house (is), Buddha’ (Z 2.58).

It is customary in letters to refer to oneself as *ṣāsa- bīsa-* ‘humble servant’. The phrase *drūn-ā pvais-ū* ‘I ask after the health’ of persons known to the writer of a letter is sometimes abbreviated to simply *pvais-ū* ‘I ask after’.

7 DIALECTS AND LANGUAGE DEVELOPMENT

Although some fragments appear to contain rare forms, it has not so far been proved that the extant material in Khotanese and Tumshuqese reflects traces of dialect differentiation. Khotanese and Tumshuqese themselves, although closely related, must be

considered independent languages rather than dialects. They were spoken in widely separated communities that were politically independent of each other, and in view of their divergent historical development the level of mutual intelligibility must have been extremely low.

7.1a Khotanese

See Bailey 1963: vii–viii; Canevascini 1993: xvii; Emmerick 1987b; Skjærvø 1999: 294–301.

It has always been clear that Khotanese shows a striking phonological development that Bailey compares with the development of Latin to Italian and French. It has however not always been realised that the phonologically late forms are also attested very early. The texts reflect accurately the observation made by the Chinese pilgrim Hsüan-tsang (Xuan-zang) in the seventh century that the learned form of the name of Khotan was *hvatana-*, the Old Khotanese form, while at the same time the popular form was *hvaṃna-*, the Late Khotanese form. Kumamoto (1996: 90) suggests that the monastic tradition of writing in Old Khotanese did not survive the period of Tibetan sway in Khotan (ca. 790–840 CE).

Attempts have been made to distinguish between more than just Old and Late Khotanese, but unanimity prevails only with regard to the existence of two phonological systems, the details of which have gradually been established. Skjærvø has recently begun to argue in favour of three stages in the development of the language, which he terms Old, Middle, and Late Khotanese (see Skjærvø, 2002: lxx–lxxi, 2004: lxxiv–lxxv).

7.1b Tumshuqese

The scanty extant material provides no indication of the phonological development of the language. The earliest text, the Karmavācanā, has a different appearance largely due to the fact that it was written before the introduction of the nine new signs used in the later texts (cf. section 1.2, Writing systems).

7.2 Demise of the languages

We have no direct evidence concerning the demise of Tumshuqese and Khotanese, but it is probably significant that no Khotanese text can be dated to later than the tenth century, whereas the language was flourishing throughout the century. It can hardly be coincidental that Khotan fell to Moslem invasion early in the eleventh century.

8 SAMPLE KHOTANESE TEXT Z 23.22–25

<i>jaṃbvīv-i</i>	<i>trām-ä vāstāt-ä</i>	<i>ku</i>	<i>ne marata balys-ä ni vei štä</i>
Jambudvīpa	such became	where	not here Buddha not been is,
‘Jambudvīpa	had become such (as)	when	no Buddha has been here,’

<i>kho ju</i>	<i>ṣ-a ṣṣav-a stūr-yau haṃtsa</i>	<i>ku</i>	<i>nä sat-a štā haṃbaḍ-a māst-ä</i>
like indeed	the night stars with	where	not risen is full moon,
‘just like	the night with (its) stars	when	the full moon has not risen,’

o kšīr-ä ku ne rre nä-štä
or land where not king not-is
'or a land where there is no king,

o š-a bis-a ku hväšt-ä mīde
or the house where master dies.
or that house where the master dies.'

trām-u māñam-d-u a-näh-ä
such like protector-less
'Likewise, the whole world (was) then without a protector.'

ysamaššand-ei harbišš-ä ttīyā
world all then,

hamggargg-a harbišš-ä hayirūn-e
gatherings all pleasures
'All gatherings, pleasures,

khan-ä būsš-ä panašt-e
laughter jokes disappeared.
laughter, jokes disappeared.'

pan-ye tter-ä kāšc-a uysnor-ä
every's so-great anxiety of-living-being
'The anxiety of every living being (was)

samu kho tt-ye ci mäta mīde
just as of-him whose mother dies.
as great as that-of-one whose mother dies.'

jühän-ä stor-u uysnor-a
yearning greatly living-beings
'Beings (were) greatly yearning

balys-u väte kāšcän-a ysīr-u
Buddha for anxious fiercely
for the Buddha, fiercely anxious.'

paljsärgg-a harbišš-ä hva'nd-ä mari
tormented all men here
'Tormented (were) all men,

ä'gy-e dīvat-e yakš-a
residing deities Yakšas.
deities residing here, Yakšas.'

ACKNOWLEDGEMENTS

I would like to acknowledge here the generous assistance of Prods Oktor Skjærvø in editing this chapter by our sadly missed colleague Ronald E. Emmerick.

[The Editor]

BIBLIOGRAPHY AND REFERENCES

Abbreviated references to Khotanese texts are as recommended in Emmerick 1992a.

- Bailey, H. W. (1946) 'Gāndhārī', *BSOAS* 11.4: 764–797.
 — (1947) 'Recent work in "Tokharian"', *TPS* 1947: 139–145.
 — (1961) *Khotanese Texts* IV, Cambridge: The University Press.
 — (1963) *Khotanese Texts* V, Cambridge: The University Press.
 Burrow, T. (1937) *The Language of the Kharoṣṭhi Documents from Chinese Turkestan*, Cambridge: The University Press.
 Canevascini, G. (1991) 'Medio-reflexive verbs in Khotanese', in Emmerick, R. E. and Weber, D. (eds) *Corolla Iranica. Papers in Honour of Prof. Dr. David Neil MacKenzie on the Occasion of his 65th Birthday*, Frankfurt am Main and New York: P. Lang, pp. 23–26.
 — (1993) *The Khotanese Saṅghātasūtra. A Critical Edition*, Wiesbaden: Reichert.
 Degener, A. (1987) 'Khotanische Komposita', *MSS* 48: 27–69.
 — (1989a) *Khotanische Suffixe* (Alt- und Neu-Indische Studien 39), Stuttgart: Steiner Verlag Wiesbaden.
 — (1989b). 'Beispiele der Klassifikation indischen Lehngutes im Khotanischen', *SiII* 15: 41–49.

- (1990) 'Indisches Lehngut im Khotanischen', in Diem, W. and Falaturi, A. (eds) XXIV. *Deutscher Orientalistentag vom 26. bis 30. September 1988 in Köln. Ausgewählte Vorträge*, Stuttgart: Franz Steiner, pp. 381–390.
- (1993) 'Zur Syntax des Khotanischen', in Skalmowski, W. and van Tongerloo, A. (eds) *Medioiranica. Proceedings of the International Colloquium Organized by the Katholieke Universiteit Leuven from the 21st to the 23rd of May 1990*, Leuven: Peeters, pp. 45–56.
- Dresden, M. J. (1955) *The Jātakastava or "Praise of the Buddha's Former Births"*, (Transactions of the American Philosophical Society n.s. 45.2), Philadelphia: American Philosophical Society.
- Emmerick, R. E. (1965) 'Syntax of the cases in Khotanese', *BSOAS* 28.1: 24–33.
- (1968a) *Saka Grammatical Studies* (London Oriental Series 20), London, New York, etc.: Oxford University Press.
- (1968b) 'Khotanese metrics', *Asia Major*, n.s. 14.1: 1–20.
- (1979) 'The Historical Importance of the Khotanese Manuscripts', in Harmatta, J. (ed.) *Prolegomena to the Sources on the History of pre-Islamic Central Asia*, Budapest: Akadémiai Kiadó, pp. 167–717.
- (1981a) 'The vowel phonemes of Khotanese', in Brogyanyi, B. (ed.) *Festschrift for Oswald Szemerényi*, Amsterdam: J. Benjamin, pp. 239–250.
- (1981b) 'The consonant phonemes of Khotanese', *AcIr* 21: 185–209.
- (1985a) *The Tumshuqese Karmavācanā Text*, Mainz: Akademie der Wissenschaften und der Literatur; Stuttgart: F. Steiner Verlag Wiesbaden.
- (1985b) 'Tibetan loanwords in Khotanese and Khotanese loanwords in Tibetan', in Gnoli, G. and Lanciotti, L. (eds) *Orientalia Iosephi Tucci memoriae dicata* (Serie orientale Roma LVI, II 1), Roma: Istituto italiano per il Medio ed Estremo Oriente, pp. 301–317.
- (1987a) 'Auxiliaries in Khotanese', in Harris, M. and Ramat, P. (eds) *Historical Development of Auxiliaries* (Trends in Linguistics. Studies and Monographs 35), Berlin, New York: Mouton de Gruyter, pp. 271–290.
- (1987b) 'The transition from Old to Late Khotanese', in *Transition periods in Iranian history. Actes du symposium de Fribourg-en-Brisgau (22–24 Mai 1985)*, Leuven: Association pour l'avancement des études iraniennes; distr. E. Peeters, pp. 33–42.
- (1989) 'Khotanese and Tumshuqese', in *CLI*, pp. 204–229.
- (1990) 'Khotanese *ma* "not"', in Gnoli, G. and Panaino, A. (eds) *Proceedings of the first European Conference of Iranian Studies held in Turin, September 7th–11th, 1987 by the Societas Iranologica Europaea*, Part 1: *Old and Middle Iranian Studies*, Roma: Istituto Italiano per il Medio ed Estremo Oriente, pp. 95–113.
- (1992a) *A Guide to the Literature of Khotan (Studia philologica buddhica (Occasional Paper Series III))*, 2nd ed. revised and enlarged, Tokyo: The International Institute for Buddhist Studies.
- (1992b) 'The Dunhuang MS Ch 00120: Its importance for reconstructing the phonological system of Khotanese', in Cadonna, A. (ed.) *Turfan and Tunhuang: the Texts* (Orientalia venetiana IV), Florence: Leo S. Olschki Editore, pp. 145–170.
- (1998) 'Khotanese *ei*', in Sims-Williams, N. (ed.) *Proceedings of the Third European Conference of Iranian Studies held in Cambridge, 11th to 15th September 1995*. Part 1: *Old and Middle Iranian Studies*, Wiesbaden: L. Reichert, pp. 93–97.
- Emmerick, R. E. and Maggi, M. (1991) 'Thoughts on Khotanese *e* and *o*', in Emmerick, R. E. and Weber, D. (eds) *Corolla Iranica, Papers in honour of Prof. Dr. David Neil MacKenzie on the occasion of his 65th birthday on the eighth of April 1991*, Frankfurt am Main, New York: P. Lang, pp. 67–73.
- Emmerick, R. E. and Pulleyblank, E. G. (1993) *A Chinese Text in Central Asian*

- Brahmi Script. New Evidence for the Pronunciation of Late Middle Chinese and Khotanese* (Serie orientale Roma lxi), Roma: Istituto italiano per il Medio ed Estremo Oriente.
- Emmerick, R. E. and Skjærvø, P. O. (1982) *Studies in the Vocabulary of Khotanese I* (Veröffentlichungen der Iranischen Kommission 12), Wien: Verlag der Österreichischen Akademie der Wissenschaften.
- (1987) *Studies in the Vocabulary of Khotanese II* (Veröffentlichungen der iranischen Kommission 17), Wien: Verlag der Österreichischen Akademie der Wissenschaften.
- (1997) *Studies in the Vocabulary of Khotanese III* (Veröffentlichungen der iranischen Kommission 27), Wien: Verlag der Österreichischen Akademie der Wissenschaften.
- Gertsenberg (Herzenberg), L. G. (1965) *Khotano-sakskii iazyk*, Moskva: Nauka.
- Heston, W. L. (1976) *Selected Problems in Fifth to Tenth Century Iranian Syntax*, Ph.D. dissertation, University of Pennsylvania, Philadelphia (University Microfilms International, Ann Arbor & London).
- Hitch, D. (1988) 'Penalty clauses in Tumshuqese', *StIr* 17.2: 147–152.
- Hucker, C. O. (1985) *A Dictionary of Official Titles in Imperial China*, Stanford, Calif.: Stanford University Press.
- Konow, S. (1935). *Ein neuer Saka-Dialekt* (= *SbPAW* 20), Berlin: Preussische Akademie der Wissenschaften, pp. 772–823.
- Kumamoto, H. (1995) 'Did Late Khotanese have a three vowels system?', in Fragner, B. G., Fragner, C., Gnoli, G., Haag-Higuchi, R., Maggi, M. and Orsatti, P. (eds) *Proceedings of the Second European Conference of Iranian Studies held in Bamberg, 30th September to 4th October 1991, by the Societas Iranologica Europaea*, Roma, pp. 383–90.
- Leumann, E. (1933–1936) *Das nordarische (sakische) Lehrgedicht des Buddhismus*, Text und Übersetzung, aus dem Nachlaß hrsg. von M. Leumann (= *AKM* 20), Leipzig.
- Leumann, M. (1934) *Sakische Handschriftproben*, Zürich: Pivatdruck (Augustin in Glückstadt & Hamburg).
- Lüders, H. (1913) 'Die Šakas und die "nordarische" Sprache', *SBAW* 23, pp. 406–427 (repr. in *Philologica Indica. Ausgewählte kleine Schriften von Heinrich Lüders. Festgabe zum siebzigsten Geburtstage*, Göttingen: Vandenhoeck & Ruprecht, 1940, pp. 236–255).
- Maggi, M. (1991) 'Note tumšūqesi', in *Studia linguistica amico et magistro oblata. Scritti di amici e allievi dedicati alla memoria di Enzo Evengelisti*, Milano: UNICOPLI, pp. 219–228.
- (1992) *Studi sul sistema accentuale del cotanese*. Ph.D. diss., Istituto universitario orientale di Napoli.
- (1993) 'Sull'accento cotanese', *Atti del Sodalizio Glottologico Milanese* 31: 180–187.
- (1995) 'Late Khotanese numerals from 1 to 36 in Tibetan transcription', in Fragner, B. G., Fragner, C., Gnoli, G., Haag-Higuchi, R., Maggi, M., and Orsatti, P. (eds) *Proceedings of the Second European Conference of Iranian Studies held in Bamberg, 30th September to 4th October 1991, by the Societas Iranologica Europaea*, Roma: Istituto Italiano per il Medio ed Estremo Oriente, pp. 425–443.
- Maue, D. (1996) *Altürkische Handschriften. Teil 1: Dokumente in Brāhmī und tibetischer Schrift* (Verzeichnis der orientalischen Handschriften in Deutschland 13.9), Stuttgart: F. Steiner Verlag Wiessbaden.
- (1997) 'A tentative Ssemma of the varieties of Brāhmī script along the northern Silk Road', in Akiner, S. and Sims-Williams, N. (eds) *Languages and Scripts of Central Asia*, London: School of Oriental and African Studies, University of London, pp. 1–15.

- Rong and Duan (1996 [2000]) Rong Xinjiang and Duan Qing, 'Jushideyu [On Gyāzdi]', *Zhongya xuekan* [Central Asian Studies] 5: 9–21.
- Sander, Lore (1968) *Paläographisches zu den Sanskrithandschriften der Berliner Turfansammlung (Verzeichnis der orientalischen Handschriften in Deutschland Supplementband 8)*, Wiesbaden: F. Steiner.
- (1984) 'Zu dem Projekt "Paläographie khotan-sakischer Handschriften"', in Skalmowski, W. and van Tongerloo, A. (eds) *Middle Iranian Studies, Proceedings of the International Symposium Organized by the Katholieke Universiteit Leuven from the 17th to the 20th of May 1982*, Leuven: Peeters, pp. 159–186.
- (1986) 'Brāhmī scripts on the eastern Silk roads', *StII* 11/12: 159–192.
- Schmidt, K. T. (1988) 'Ein Beitrag des Tocharischen zur Entzifferung des Tumšusqakischen', *AoF* 15: 306–314.
- Sims-Williams, N. (1990) 'Chotano-Sogdica II: Aspects of the Development of Nominal Morphology in Khotanese and Sogdian', in Gnoli, G. and Panaino, A. (eds) *Proceedings of the First European Conference of Iranian Studies held in Turin, September 7th–11th 1987 by the Societas Iranologica Europaea. Part 1: Old and Middle Iranian Studies*, Roma: Istituto Italiano per il Medio ed Estremo Oriente, pp. 275–296.
- (1994) 'The triple system of deixis in Sogdian', *TPhS* 92.1: 41–53.
- (1996) 'The Sogdian manuscripts in Brāhmī script as evidence for Sogdian phonology', in Emmerick, R. E., Sundermann, W., Warnke, I. and Zieme, P. (eds) *Turfan, Khotan und Dunhuang. Vorträge der Tagung "Annemarie v. Gabain und die Turfanforschung", veranstaltet von der Berlin-Brandenburgischen Akademie der Wissenschaften in Berlin (9.–12.12.1994)*, Berlin: Akademie Verlag, pp. 307–315.
- (1997) 'The denominal suffix *-ant-* and the formation of the Khotanese transitive perfect', in Lubotsky, A. (ed.) *Sound Law and Analogy. Papers in Honor of Robert S. P. Beekes on the Occasion of his 60th Birthday*, Amsterdam, Atlanta: Rodopi, pp. 317–325.
- Skjærvø, P. O. (1981) 'The Old Khotanese fragment H 147 NS 115 and remarks on Old Khotanese *hamdārvāto*, *patīšu*, *vya* and *ya*', *BSOAS* 44.3: 453–467.
- (1987) 'On the Tumshuqese Karmavācanā text', *JRAS* 1987: 77–90.
- (1999) 'Khotan, an early center of Buddhism in Chinese Turkestan', in McRae, J. R. and Nattier, J. (eds) *Collection of Essays 1993: Buddhism Across Boundaries – Chinese Buddhism and the Western Regions*, Sanchung, Taipei: Fo Guang Shan Foundation, pp. 266–344.
- (2002) *Khotanese Manuscripts from Chinese Turkestan in The British Library. A Complete Catalogue with Texts and Translations*, with Contributions by Ursula Sims-Williams, The British Library (Corpus Inscriptionum Iranicarum II/V, Texts VI).
- (1999 [2002]) 'Recent Khotanese Ghostwords', *Bulletin of the Asia Institute* 13, pp. 151–55.
- (2004) *This Most Excellent Shine of Gold, King of Kings of Sutras. The Khotanese Suvarṇabhāsottamasūtra*, Sources of Oriental languages and literatures 60–61, Central Asian sources 5–6, [Cambridge, Mass.]: Harvard University, Dept. of Near Eastern Languages and Civilizations.
- (2006) "Iran iv. Iranian Languages and Scripts," in *EnIr* 13.3, pp. 344–77.
- (forthc.) 'Khotanese', in *EnIr*.
- 'The end of eighth-century Khotan in its texts', *Journal of Inner Asian Art and Archaeology* 3, 2008: 119–44.

The Khotanese texts published by Bailey, transcribed by R. E. Emmerick and H. Kumamoto, and the Tumshuqese texts, transliterated by D. Maue, are available at <http://titus.uni-frankfurt.de/indexe.htm>.