

# KHOTANESE METRICS

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## ABBREVIATIONS

- E Ernst and Manu Leumann, *Das nordarische (sakische) Lehrgedicht des Buddhismus*, Abhandlungen für die Kunde des Morgenlandes XX, Leipzig 1933-6, repr. Liechtenstein 1966.
- KBT H. W. Bailey, *Khotanese Buddhist texts*, London 1951.
- KT H. W. Bailey, *Khotanese texts*, vols i-v, Cambridge 1945-63.
- N E. Leumann, *Buddhistische Literatur, nordarisch und deutsch*, 1. Teil: *Nebensstücke*, Abhandlungen für die Kunde des Morgenlandes XV.2, Leipzig 1920, repr. Liechtenstein 1966.

Khotanese metrics<sup>1</sup> turned out to be a highly controversial subject. The two protagonists, at any rate for a time, held precisely opposite views on the nature of Khotanese metre. According to Ernst Leumann, supported by his son Manu Leumann subsequently, Khotanese metre was wholly quantitative, while according to S. Konow it was purely accentual in its nature. Leumann connected the Khotanese metrical system with Indo-European on account of a resemblance he found with the Greek hexameter, whereas Konow applied to Khotanese the principles that A. Meillet had set forth for the Avestan Gāthās. Konow, however, showed some hesitation, and both in early and later writings he inclined to a view that Khotanese metre was adapted from Indian. Since 1947 nothing has been written on the subject of Khotanese metrics apart from a short note by M. J. Dresden, who counted the number of syllables in a small selection of lines from a few Khotanese poems.

In attempting to evaluate for himself his father's view of the Khotanese metrical system, M. Leumann was convinced by his consideration of the line-endings.<sup>2</sup> Everyone knows that the most important part of a verse is its

<sup>1</sup> On this subject, see E. Leumann, *Zur nordarischen Sprache und Literatur*, Strassburg 1912, pp. 15-28; E pp. xxxii-xxxv (with bibliography p. xxii); S. Konow, *NTS*, vii, 1934, 7-16; xiv, 1946, 29-35; M. J. Dresden, "Note on Khotanese Poetry", pp. 42-50 in *Indological Studies in honor of W. Norman Brown*, New Haven 1962 (with bibliography p. 43, n. 9).

<sup>2</sup> The use of some terms in this article may be explained by reference to a typical MS. line of the Book of Zambasta such as 2.5:

ttrāmu biśśā satva haṃṅgu      kāde māste mulśde jsa kei'tā  
oṣku vātā ṣṣive haḍāya      kho ju māta bryandamu pūru . 5

The whole of this is a single line of the MS. and is here referred to as a "verse-line". In the MS. it is divided by spaces into four sections here called "pādas" and numbered a, b, c, d. The MS. pādas do not always correspond exactly to what must be the metrical pādas, in which case pāda in this article means the metrical pāda. Two pādas (a, b or c, d) constitute what I call a "verse"; that is, one line as I arrange it, or one half of one line in the MS. The metrical pattern characterizing the end of a pāda I call a "cadence".

end. It is by the imposition of some special characteristics upon the conclusion of a verse that it can be distinguished from a line of prose and that one verse can be separated from another. It may be that the end of the verse is marked by rhyme as is common in European poetry or by a strict quantitative pattern as for example in the classical Sanskrit *śloka* or by coincidence of word stress and metrical ictus as in the case of the Latin hexameter. The end of the verse is therefore a sensible place to begin, but it does not necessarily follow that what applies to the end of the verse will apply to the rest of it.

Let us then consider afresh the verse-endings in the same long poem as Leumann and Konow studied, the book which Ysambasta<sup>3</sup> ordered to be written. If we consider chapters 8 and 9 (=E 9 and 10), the number of syllables in the last word will be found to be as follows:

	1 syllable	2 syllables	3 syllables	total
Chapter 8	4	67	7	78
Chapter 9	0	31	25	56

Already a pattern begins to emerge. But what if we apply to these same final words a quantitative analysis on the same principles as apply to Latin, Greek and Sanskrit metre? Put in the simplest terms these principles amount to no more than the rule: a syllable is "long", or more appropriately "heavy" in Indian terminology, if it contains a long vowel and/or is closed by a consonant.<sup>4</sup> Khotanese examples of heavy syllables are then: *śā* "this", *dai* "fire", the first syllable of *hūni* "sleep" or *basta* "bound"; of light syllables: *nā* "not", *u* "and", the first syllable of *dasau* "ten" or *ḥṣāta* "six".

Now of the 67 instances of disyllables in chapter 8 *all* have the pattern ~, 62 showing ~ and 5 showing ~-. The seven trisyllables are *all* of the pattern ~~, and of the four monosyllabic endings, three are preceded by a short syllable.

In chapter 9, on the other hand, *all* 56 verse-lines have the pattern ~- for the last two syllables of each verse:

~	20	~	26
~-	3	--	5
---	2		

It is immediately clear that such a state of affairs can *only* be accounted for on the assumption that quantity rather than stress accent guided the poet in the choice of these final words. We can in fact tell in many cases where the accent lay because Khotanese is attested not only at the old stage to which the Book of Zambasta bears witness but also at much more recent stages. Since the Old Khotanese *pharu* "many", *samu* "only" and *vīrā* "in; towards" have become in Late Khotanese *pha*, *sa* and *vi* respectively, we can

<sup>3</sup> For the system used to refer to this poem see my remarks in *AM*, n.s. xii, 2, 1966, 149 and *BSOAS*, xxx, 1, 1967, 84.

<sup>4</sup> So for example W. S. Allen, *TPS*, 1966, 11 n.2.

see that the accent of a disyllable could lie on the first syllable whether that syllable was short or long. Since a final disyllable is prevalent in both types of metre we have examined, the distinction must lie in the syllabic quantity.

The evidence of the verse-endings is so overwhelmingly in favour of a quantitative system that to ignore it in favour of stress exclusively, as was done with hesitation by S. Konow, apparently followed more recently by M. J. Dresden, is to cause a major retrogression in the subject.

Khotanese metrical theory has so far been bedevilled by a curious belief that accent and quantity can have nothing to do with each other but are like light and darkness, cancelling each other out. In fact, progression from a purely quantitative system of metre to a purely accentual system is common and proceeds by way of a mixed system. I hope to show in what follows that the Old Khotanese metrical system as seen in the Book of Zambasta is at a stage of transition when the stress accent is beginning to replace quantity, but that quantity is fully superseded only in Late Khotanese poetry.

It is in this light that we should view the apparent "shortenings" (see E pp. xxxiii-xxxiv) of the following kind:

balysu vistāta	5.47d
tcerā aysmūna	6.44b
ysera uysnora	12.72d
byāta hamraṣṭu	11.39d
busta balysūstu	11.3d, 72b

The first syllable of the final word is in each case unaccented and therefore, although long quantitatively, is allowed to count short. The above verse-endings are thus scanned ~~, and are equivalent to endings of the regular kind such as:

balysa hvatāndā	13.4d
tcerā anārā	12.8od
yseru paśśāte	5.27d
byāta yanāña	12.21d
busta hāmāne	1.19od

Naturally the reverse procedure is also found: a short syllable if accented may stand in place of a long syllable. The final words of 22.140-2 are all of the pattern ~- with one apparent exception. The final words are 22.140 *karihā* | *vatciṣṭe*; 22.141 *balondi* | *ditāna*; 22.142 *aggamjisa* | *hāmāre*. The apparent exception is *ditāna*. This word is however, often spelled, *dātena* (2.4; 3.93; 22.164, 165, 166; 23.31, 100) and is once spelled *detena* at the end of a verse in the same metre (22.299d). That the word was accented on the second syllable is confirmed by its form in Late Khotanese: *dyena* (e.g. *ḥS* 15VI (65)). Similarly, *batāku* in 14.98d is confirmed by Late Khotanese *bāka* (*Si.* 2v2 *KT* 1.4) and *bātāva* "lightning" in 22.271b by Late Khotanese *byavi* (*Si.* 15or4 *KT* 1.96). The latter actually appears as

*bātāva* in 1.87b. It is likely that *pātaru varrittā* in 2.137a counts  $\sim\sim\sim$ , because in Late Khotanese *pātar-* has become *pyar-* (P 2026.37 *KT* 3.49; P 3510.2.6 *KBT* 48; H 147 *MBD* 23a 15 *KT* 5.66).<sup>5</sup>

It is clear that a thorough investigation of all the verse-endings is required. As a first step in this direction I have listed all the words ending verses in the metre ending  $\sim$ .<sup>6</sup>

### § 1 Monosyllables:

*tta* 12.96b, 133b; *ttū* 2.112d; *ttyau* 8.19b (rather end verse with *handarā*); *tvī* 3.21b; *dai* 8.14b; *bū*' 3.49;<sup>7</sup> *bei*' 3.76d;<sup>7</sup> *vā* 3.80b; 12.131b; *ṣṭa* 7.20d, 22d, 46d; *ṣṭe* 8.45d.

### § 2 Disyllables:

*aña* 2.111b; *aysu* 3.73b, 109d, 119b; 20.24d; N 106d (5×); *aysu* 17.27b; *aysmū* 3.68b; 12.92d; *aśśā* N 114b; *ui*' 3.135d; *uvā*' 3.16b, 66d; *uvi*' 21.21b; *umā* 15.115b; *uhu* 3.15d; *uho* 17.28b; 24.246b; *karā* 2.121b; 3.62d, 64b, 105d, 136b; 7.7d, 10b, 14d, 17b, 19b, 21b, 22b, 28d, 33d, 35d, 44b; 8.12d, 13b, 17d, 20d, 23d, 31b, 33b, 39d, 40b, 41b, 43d, 45b; 12.96d; 20.55d, 65d; 21.18b, 19b, 20d; 24.244d, 321d; N 107d (38×); *kari* 2.117b; 3.14b, 146d; 7.3d, 8b, 11b; 8.50d; 12.95d; 18.8b (9×); *kādā* 12.94b, 118d; 18.11b; 21.29b (4×); *kāḍe* 3.5d, 6d, 22d, 23b, 25b, 30b, d, 35b, 37d, 43d, 50d, 56d, 58d, 60d, 62b, 96b, 101b, 118d, 127b, 144d, 146b, 151b; 7.24d; 12.90d, 92b, 93b, 114d, 116d, 132b, 133d; 17.9b; 18.5b, 18b, 37b, 40b; 20.1d, 3b, 5d, 7b, 11d, 13d, 15b, 16d, 19b, 20b, 24b, 28d, 29b, 31b, 41b; 21.11b, 13b, 18d, 24b, 30b; 24.212b (56×); *\*kramā* 7.9b; *kṣanā* 3.29d; 8.26b; *kṣaṇi* 20.61b; *kṣāta*' 7.6b; *ggarā* 18.25b; *ggare* 17.3b, 4b; 20.4b; *ggaryau* 17.10b; *gguva*' 21.23b; *gguvā*' 8.35d; *gguvo*' 8.35b; 24.213b; *gratā* 12.125b; *gva'ta* 24.209b; *cāte* 3.44b; *chadā* 7.32b; *chā'tu* 3.12d; *chā'te* 7.20b; *jaḍa* 3.16d, 107d; 7.2b; 17.31b; 18.46b; 20.58d, 63d, 65b; 21.31b, 32d; 24.326d; N 115b (12×); *gyaḍa* 2.122d; 3.10d, 14d, 135b; *jaḍā* 7.18b; 8.37b; 20.64b; *gyaḍā* 3.74d; *jaḍī* 7.13b; *jaḍu* 21.14b; *jahe* 20.5b; *gyahe* 3.42b; 17.22b; *jāta* 24.322d, 325d; *jīta* 3.139d; 20.9d; *jātā* 24.318b, 320d; *jāte* 7.2d; 20.40d; 21.12b; *jsate* 18.28b, 30b, 31b; 32b, *jsei'ni* 20.47d; *jseiṇu* 3.46d; *jsei'ṇu* 20.46b; *ttanā* 3.49b, 89b; *ttanī* 20.37b; *ttarre* 20.64d; N 113d; *ttāte* 12.121b; *ttāna* 7.10d, 35b, 36b, 38b; 12.109d, 111b, 130d (7×);

<sup>5</sup> In accenting *spāte* "flowers" as *spāte* Dresden (*Brown volume* p. 48) seems to ignore the Late Khotanese development to *spye* (e.g. P 3513 72v2 *KT* 1.248). It is true that in the Book of Zambasta *spāte vicitra* always occurs (2.49; 3.124; 5.97; 20.2; 22.135) where we would expect to find  $\sim\sim\sim$ , but this ending may be based on *\*spātdke*; see below.

<sup>6</sup> This metre is found in Z 2.105-122; 3.1-151; 7.1-47; 8.12-50; 12.90-6, 109-125, 130-4; 15.111, 113-6, 123; 16.28-30, 52-6; 17.1-33; 18.3, 5-11, 14-22, 25, 27-34, 37-47; 20.1-72; 21.11-34; 24.209-214, 244-8, 318-329, and on N pp. 168-9.

<sup>7</sup> *bū*' and *bei*' no doubt count as  $\sim$  (*\*buvā*', *\*bātā*' - so already Leumann), cf. under § 2 *buvī*' and *bā'tu*, *bātu*'.

*ttuśśā* 8.31d; *tterā* 12.110b; *tcarā* 15.123b; *ttye* 12.120b; *tsute* 7.26d; 18.29b; *thato* 3.4d, 145d; 20.32b; *thatau* 2.110d, 113b, 115b; 3.3b, 19b, 27b, 121b; 20.22b; (8×); *daju* 20.23d; *date* 20.8d; *darra* 20.38d, 39d; *darre* 20.43d; *darrau* 3.26b; *dasau* 7.5d; *daha* 20.8b; *dahu* 20.20d; *dāte* 3.93d; 7.40d; 20.28b; *ditai* 3.13b; *dāsu* 17.1b; *dīse* 3.4b; *dāse* 18.41b(?); *dukha* 3.20b, 28b, 54b, 145b; 7.1d; 17.33b (6×); *dukhā* 20.17d, 21d, 69b; *dukhu* 18.3b, 15b; 20.10d; *dukhyau* 3.75b; *duva* 7.36d; 20.16b; *dya* 24.324d; *natā* 17.13b; *nītā* 2.109b; *nātu*' 3.59d; *nā'tu* 3.114d; *nātea* 20.35d; *nītea* 21.25b; *nuva* 12.124b; 20.72b; *paḍā* 20.25b; 24.246d; *pata* 2.118b; *patā* 20.63b; *panye* 3.115b; *parau* 20.18b; *pale* 3.87b; *paha* 20.36b; *paḥā* 3.37b, 48b, 89d; *pāta*' 18.6b; *pāto*' 3.5b; *pātyo*' 2.119b; *pāyā* 20.56b; *piye* 20.53b; *putā* 20.35b; *puña* 3.141d, 149d; 12.115b, 122b; *purra* 3.84d, 126d; *pua* 20.36d, 40b; *puṣṣu* 12.93d; *puṣṣo* 3.29b, 106d, 142b, 143d; 7.4d, 11d, 21d, 24b; 12.95b, 114b, 116b, 121d, 123b; 17.32b; 20.17b, 27b, 32d, 33d, 37d, 38b, 47b, 48d, 49b; 21.20b, 24.210b, 318d, 319d (27×); *pyaḍa* 17.19b; *pharu* 2.107d; 3.33d, 40d, 41d, 43b, 44d, 45d, 50b, 51b, 54d, 61b, 80d, 81b, d, 99b, 102d, 107b, 120d, 121d, 122d, 123d, 124d, 126b, 138b, d, 144b, 147d, 150d; 7.16d; 8.24d; 16.52b, 56b; 17.2b, 7b, 11b, 15b, 23b, 24b; 18.21b, 33b, 43b, 44b; 20.4d, 9b, 29d, 30d, 34d, 41d, 43b, 44d, 45d, 46d, 68d; 21.13d, 17d, 34b; 24.211b, 214d; N 108b (59×); *pharo* 8.25d; *phuva* 20.12d; *bani* 20.14d; *baña* 2.118d, 119d; 3.7d, 113d; 18.20b (5×) *bā'tu* 7.47b, d; *bātu*' N 109d; *bile* 20.54d; *biśśā* 3.18d, 46b; 7.8d; 17.12b; 20.2d; 24.323d (6×); *biśā* 8.36b; *bāśśā* 3.58b; 20.6b; *biśśā* 2.106d, 111d, 120d; 3.13d, 19d, 27d, 28d, 31d, 38b, 47d, 48d, 51d, 53b, 55d, 57d, 60b, 61d, 63d, 65b, d, 69d, 72d, 78d, 79d, 82d, 83d, 84b, 86b, d, 88d, 90d, 92d, 93b, 94b, d, 95b, d, 96d, 97b, 98d, 99d, 100b, 101d, 103b, 105b, 109b, 110d, 111d, 112d, 115d, 116b, 127d, 129b, d, 131d, 134d, 137d, 139b; 7.5b, 30b, 31d, 34d, 46b; 8.34b; 16.54b, 55b; 18.42b; 20.26b, 27d, 33b, 44b, 50b, 52b; 21.30d, 31d; 24.213d; N 114d; *bi[śśā]* 15.116b; *biśśā* N 110d (79×); *biśu* 2.115d; 3.6b, 15b; 24.214b (4×); *biśśu* 2.108b, 109d, 110b, 114d, 116d, 117d; 3.11b, 17b, 34b, 130b, 149b, 151d; 7.4b, 39b; 8.48d; 12.134b; 20.11b, 66d; 24.247d; N 112d, 113b, 115d (22×); *bāśśu* 24.209d; *biśśe* 3.25d, 26d, 52b, 140b; 20.71b; 24.245d (6×); *biśśo* 3.23d, 143b; *bāśśo* 3.36d; *biśyo* 3.71b; *biśyau* 3.79b; *bisa* 20.60b, 69d; *bise* 3.38d, 39b, 117d; 20.10b; *buva* 3.9d; *buvī*' 3.123b; *buśśā* 3.53d, 118b; *busā* 3.35d; *bussā* 3.91b; *buhu* 2.106b; *byanā* 20.70b; *briya* 3.70d; *briyā* 3.63b; *briyu* 20.22d; *brya* 21.27d; *bva* 3.12b; *mata* 3.108b; 7.32d; *\*mate* 7.9d; *mamā* 3.18b, 32d, 52d, 67b, 77b, 104d, 111b, 112b, 116d; 20.23b; *mājsā* 20.54b; *māṣṣyau* 17.26b; *muḍā* 20.62b; *mutā* N 111b; *mura* 7.42b; 20.31d; *muhu* 3.21d, 74b; *muho* 3.69b; *yana* 21.15b; *yanā* 3.67d; 20.18d; *yani* 3.75d; *yanu* N 108d; *yane* 24.247b; *yāḍe* 8.49d; *yāḍei* N 109b; *yuḍu* 3.110b; *ysārā* 20.55b; 21.14d; *ysāru* 21.15d; *ysurrā* 3.68d, 71d; *ysurri* 3.73d; *ysurru* 3.72b, 78b; *ratā*

20.71d; 21. 26d; **rraysā** 7.16b; 20.58b; **raysā** 7.40b; **vara** 3.39d, 66b; **varā** 3.47b, 113b; 8.13d; 12.119d; **vāta** 2.113d, 114b; 3.2d; 12.120d, 130b; 21.27b (6×); **vātā** 8.19d, 38d; 12.91b, 109b; 17.21b (5×); **vāti** N 110b, 112b; **vāte** 12.90b, 111d, 117b, 134d; 16.53b; 18.45b; 20.42d (7×); **vina** 7.34b; **vāya** 18.17b; **vāysa** 3.124b; **viysa** 3.8d; **vya** 21.19d; **vratu** 20.14b; **śśāna** 24.248d; **śśāra** 3.10b, 40b, 42d, 45b, 55b, 56b, 64d; 20.25d; 21.17b (9×); **śśārā** 3.98b; 7.41d; 12.117d; 18.27b; 21.33b (5×); **śśāru** 3.22b, 57b, 77d, 85b, 100d; 12.110d; 18.9b, 20.3d; 21.25d; 24.211d (10×); **śśāre** 2.105b; **śśava** 24.329d; **śśavo** 20.26d; 24.212d; **sañi** 7.6d; **samā** 8.30b; **samu** 2.108d, 121d; 3.11d, 17d, 20d, 24d, 33b, 34d, 36b, 41b, 70b, 85d, 90b, 91d, 97d, 102b, 103d, 106b, 125d, 128b, 130d, 131b, 136d; 7.12b, 15d, 18d, 27b, d, 28b, 31b, 33b, 38d, 39d; 8.12b, 15d, 17b, 18b, 28d, 29b, 32d, 33d, 34d, 39b, 42b, 46d, 47d; 12.94d, 113b, 132d; 17.14b, 18b; 18.47b; 20.6d, 7d, 12b, 39b, 51d, 53d, 67d, 68b, 70d; 21.28d, 32b; 24.245b, 248b (65×); **siye** 7.45d; **surai** 20.59b; **suha** 3.132b, 133d; 7.29d; 18.14b; 20.13b (5×); **suhā** 17.30b; 20.67b; **suhi** 20.66b; **suhyo** 3.128d; **suhyau** 7.25d; **skute** 21.26b; **skyātu** 3.3d; **spāte** 3.87d, 150b; 7.14b; 17.6b; **sya** 7.44d, 45b; **svara** 3.83b, 125b; **hana** 2.122b; **hanā** 7.23d; **hani** 7.23b; **hama** 7.12d; 8.18d; 21.16d, 29d; **hamā** 7.42d; 24.327d; **hamu** 18.19b; 20.15d, 19d, 21b, 30b, 57d (6×); **hava** 17.20b; **hasai** 16.28b; **hāmu** 24.208b, 244b; **hāra** 2.116b; 3.88b, 92b, 108d, 137b, 140d, 141b; 7.1b, 15b, 37d, 43d; 8.14d, 16d, 26d, 32b, 36d, 41d, 43b; 18.39b (19×); **hārā** 3.132d, 134b; 7.19d, 30d, 43b; 8.15b, 20b, 29d, 42d, 47b; 20.51b, 52d, 56d (13×); **hāri** 8.27b, 46b; **hāru** 3.133b; 8.24b, 25b, 37d, 40d (5×); **hāvi** 3.31b; **hurā** 20.45b; **huve** 2.112b; 7.37b; **hve** 20.62d; **hve** 3.76b, 147b, 148d; 7.26b, 41b; 12.115d; 24.210d (7×); **hvata** 3.142d; **hvatā** 8.22b, 30d; 21.28b; **hvatu** 8.49b; **hvate** 3.1d; 8.38b, 48b; 18.22b; **hvatai** 15. 114b; N 106b; **hvañu** 18.34b.

### §3 Trisyllables:

**a[ysura]** 16.29b; **aysuri** 2.105d; 16.30b; **asama** 8.23b; **asamā** 8.22d; **uysana** 20.57b; **carāmā** 3.24b; <sup>o</sup>**taraṇa** 12.118b; **ttāmāra** 7.17d; **ttāmārā** 7.13d; **tcaramu** 2.107b; **tcei'mañi** 18.16b; 21.22b; **pajsatā** 17.25b; **pajsama** 3.119d; **paṭhute** 8.44d; **panatā** 20.42b; **panate** 8.21b; **pa[māte]** 15.111b; **buḍaro** 18.38b; **bramanā** N 107b; **marañā** 18.10b; **yanimā** 3.120b; **ysuyañi** 3.59b; **rurusanā** 3.82b; **vasuta** 3.2b, 117b; **vasutu** 3.104b, 114b, 122b; **samāte** 12.123d; **hatāru** 3.1b; **hatāro** 20.1b; **handarā** 8.19b; 12.119b; **handaru** 12.112b; **hamdaru** 12.113d; **haphaḍā** 7.25b; **hamata** 8.16b; 20.34b; **hamatā** 3.7b; 7.7b, 29b; 8.21d, 50b; 12.112d (6×); **hambaḍu** 3.148b; **hāmāta** 3.32b; 7.3b; **hāmātu** 20.2b; **hāmāte** 2.120b; 8.44b; 12.122d, 124d, 125d, 131d; 17.8b; 20.48b (8×); **hivye** 3.9b; **hūdva** 3.8b.

### §4 Words of more than three syllables.

**āstaniya** 21.16b; **padamā[na]** 15.113b; **purvandiśvo** 24.328d.

If we examine the structure of the disyllables, which by far predominate, we find the following: vowels in the first syllable, *a*, *ā*, *i*, *u*, and *e* in *tterā*,<sup>8</sup> *ei* in *jsei'nu*,<sup>8</sup> followed by the following consonants or consonant groups:

kh	dukha	ysm	aysmū
khy	dukhyau	r	parau
j	daju	rr	purra
js	mājsā	ry	ggaryau
ḍ	kāḍe	l	pale
ṇ	kṣaṇi	v	nuva
t	gratā	ś	diśe
tc	nātca	śś	biśśā
ty	pātyo'	śy	biśyo
d	chadā	ṣṣ	puṣṣo
n	tāna	ṣṣy	māṣṣyau
ñ/ny	aña/panye	s	dasau
m	mamā	h	daha
y	briya	hy	suhyo
ys	aysu		

It is to be noted that *i* and *u* need not be written before *y* and *v*. Thus we find both *sya* and *siye*, both *hve*' and *huve*'.

*y* merely indicates palatalization of the preceding consonant and does not therefore "make position" in *khy*, *ty*, *ny*, *ry*, *śy*, *ṣṣy* and *hy*.

The occurrence of *tc* and *js* in this list is at first surprising but may go back to the time before Old Iranian \*č and \*j had developed into *tc* and *js* (pronounced *ts* and *dz*).

We can at once apply these findings to the endings of the spondee-type. An ending like *māstā pyore* (23.148b) can count as  $\bar{m}āstā$  just like *ggaljīndi pāyore* (23.158d), and we need not assume metrical shortening in the case of endings like *bū'na spātyau jsa* (22.231b) or *hajū puñāundā* (22.267b), where we merely have a syllable containing a short vowel followed by a syllable beginning with a palatalized consonant. Similarly, an ending like *balysā nājsaṣte* (23.149b), *balysi nijsaṣte* (1.39b), will count the same as *balysā vahīysde* (23.161d).

The real surprise in this list is of course *aysmū*, which occurs twice (3.68b and 12.92d) where an iamb is expected. Perhaps we have a late analogical development following the use of *aysmūna* as  $\bar{m}$  in spondaic-type endings. Or perhaps the nominative-accusative *aysmū* was accented *aysmū*. Unfortunately the word has no established etymology. Another possible explanation is that we have here an exceptional rhythm. The final

<sup>8</sup> Elsewhere we have commonly the spelling *ttārā* (1.33+) for *tterā*. In 10.31 we have *jsānu* for *jsei'nu*.

solution to this problem may come with the discovery of more verses in this metre.

It will have been noticed that both *uvä'* and *uī'* are found as spellings of the same word in iambic endings. We thus have no difficulty in accepting as ~~~ endings like *aysmuī jsīrja* (22.272d) or *aysmuī ārru* (22.274d).

It is well known that in Khotanese nasalization is weak and often unrecorded. It would seem that a nasalized syllable was optionally short or long in Khotanese. Hence we have *handārā*, *handaru*, *hamdaru* and *hambādu* apparently counting as ~ in iambic endings. Turning again to spondaic endings, we could then interpret on these lines rather than as shortening in unaccented syllables the scansion ~ of *hamggargga* (5.23b), *hamggarggä* (22.215b) like *haggarggä* (24.124d) or *hambirstä* (23.157d) like *habirste* (24.264b). Similarly, at the end of spondaic verses we find the following: *hamkhiysgyo* (24.241d), *hamggalju* (12.29d), *hamggalte* (4.47d), *hamggälsta* (5.27b), *hamgrisca* (24.479d), *handārā* (24.467b), *hamdārā* (24.168d), *hambādu hambūsdä* (10.32d), *hambruittä* (22.128d) and *hambrauštä* (5.28d).

Furthermore, since *tc*, pronounced *ts*, does not "make position" and *y* merely causes palatalization without making position, it is likely that *ts*, pronounced *tsy*, also did not make position. If then our treatment of nasalization is correct, we will not have to explain the first syllable of *samtsera* as shortened in unaccented position, but it will be regular either as a short or a long syllable by Khotanese metrics. At the end of verses with spondaic endings we have *samtsera* in 2.202b, 205d, 214d; 4.113b; 5.17d, 53b, 89b; 11.21b; 13.122b; 22.199d, 259b, 273b; 24.228d, 648b and *satsera* in 11.5b; 22.172d, 196d.

Study of the spondaic endings raises the interesting matter of the accentuation of the instrumental-ablative plural. The instr.-abl. pl. ends in *-yau*, sometimes spelled *-yo*, and it is commonly followed by the post-position *jsa*. There are two reasons for thinking that *-yau* or *-yo* is stressed when followed by *jsa*. Firstly, it is scarcely conceivable that in hundreds of endings of the type ~~~ the stress pattern should be violated only when we have an ending of the type *parsindä dukhyau jsa* (22.279d). Secondly, although a final *-o* (final *-au* is too rare to examine) is frequently counted short when unstressed, the instr.-abl. pl. ending, when followed by *jsa*, is *always* long even when spelled *-yo*. Examples of *-yo jsa* are: *paritā biṣyo jsa* (22.270d) ~~~; *gyastyo jsa västātā* (23.147d) ~~~; *Badṛ puṇyo jsa* (2.68b) ~~~. The contrast in accentuation between forms with *jsa* and forms without can be seen from 3.96:

suhautta kā'ña	hastamyau suhyau kāde
ramindā āṇa	buddha-dharmyau jsa biśśā

Here pādas b and d both end with ~~~. *suhyau* counts ~ (instead of ~ as in 7.25d!) because the first syllable is stressed, the second unstressed. But

*-yau jsa* counts ~. Similarly, *ggaryau* in the ending *ggaryau vataysde* (17.12a) ~~~ counts ~, but at the end of 17.10b it counts as ~.

This shift of stress is not effected by *jsa* in the instr.-abl. sg. fem. Thus, *pūse jsa* (23.147b), *mulśde jsa* (4.94d, 120d; 11.5d; 16.46b), *ṣṣadde jsa* (13.95b; 22.302b; 23.370b) and *hiñe jsa* (23.136d, 139d) all count ~. But *bvemate jsa* (6.43d), *bvemāte jsa* (2.181c; 9.15d; 23.31c; 24.264b) and *pāsāre jsa* (5.49d) are likely to have had a secondary accent on the final *-e*. Thus *bvemate jsa hamamgga* (6.43d) will scan ~~~. This accords with the development of *bvemate jsa* to *bvaimē jsa* (P 3513 69v3 *KT* 1.246) in Late Khotanese.

A further feature of the language that can be deduced from a study of the verse-endings will cause no surprise: a number of monosyllables count as short and are unaccented. This can be seen from the parallel verses:

kṣattra nā bendā	rataninā māsta pharu	(3.81a, b)
kṣatra trjsāre	rataninā māsta pharu	(3.126a, b).

Here *kṣattra nā bendā* and *kṣatra trjsāre* both count ~~~. Similar endings are the following: *gyasta u būta* (4.57d), *(rrū)vāsa u ṣṣundā* (4.58b), *(padī)-mākā ka dravyi* (4.60d), *vīri ne daindī* (4.51b), *daiyā ne dyāmā* (4.54b), *(gga)jindī kho pyaure* (2.19b), *Badra kho nātā* (2.130b).

Hitherto we have been concerned only with the verse-endings, but it will be readily apparent to anyone who has now become accustomed to ~~~ endings in Khotanese that both what I have called so far verses with spondaic endings and what I have called verses with iambic endings have a caesura in their middle preceded by a rhythm that is again predominantly ~~~. This can be readily demonstrated by citing phrases found in both types of metre and in both halves of the spondaic type:

(a) end of spondaic verse:

*āysanu vīrā* (5.44b)  
*harbiśśā satva* (11.72d)  
*busta balysūstu* (11.72b)  
*rraṣtu paysendā* (6.49b)  
*paritā dukhyau jsa* (2.68d; 24.173d, 444d)

(b) middle of spondaic verse:

*āysanu vīri* (2.94a)  
*harbiśśā satva* (11.76c)  
*busta balysūstu* (11.65a)  
*rraṣtu paysendā* (5.54c)  
*paritā dukhyau jsa* (5.9a)

(c) middle of iambic verse:

*āysana vīrā* (3.80c, 88a)  
*harbiśśā satva* (3.127a).

Before considering other, far less common types of cadences, I turn now to the important question of what precedes the cadence ~~~. It is on this

matter that I am obliged to differ fundamentally from Leumann. Because he had found a quantitative pattern governing the verse-endings he thought himself compelled to explain the entire verse as conforming to a strictly quantitative pattern. It was largely because he did not in fact succeed in finding such a pattern for the whole verse that Konow was prepared to renounce quantity in Khotanese metrics altogether. No doubt Konow was right to reject the elaborate system invented by Leumann with its pentads, hexads, and heptads with all their resolutions and varieties, for despite this attempt to cater for every contingency a vast number of emendations was necessary and even then some verses were said to be defective (e.g. 2.130c; 13.107d; 20.40b, 56b; 22.305a; 23.44b, d, 167a; 24.512c) or to include unnecessary words or syllables (e.g. 4.31a, 42c, 62a; 5.11b, 28b; 7.25b; 11.33a, 67d; 12.8a, 11c, 29a, 31c, 65a, 84d, 88a (omit *ka bodhisatvā!*), 96d; 13.6a, 8a, 9a, 13a, 44b, 55a, 75a, 76b, 123b, 125d, 130d; 22.110b, 131d, 206a, 217d, 218b, 302a; 23. 166b; 24.164a). Moreover, Leumann was not averse to inserting his own words to help out the metre (e.g. *ju* 2.99c, 137a; 5.78c; *u* 4.21d; *tta* 5.93a; *ne* 13.79c; *vā* 22.213a; *ṣṣai* 11.51b; *samu* 6.50b).

The cause of most of this difficulty, as can readily be seen, is the variety of length shown by the verses. Statistics based on the principle of obtaining the average number of syllables per verse by adding up the total and dividing by the number of verses cannot help. More useful would be a critical use of statistics along the following lines: what is the range of syllables left after removing  $\sim\sim\sim$  where this is clearly the cadence?

That the verses show great variety in length can be seen from Leumann's metrical tables (E p. xxxix). This variety is even greater when allowance is made for his resolutions (p. xxvii). A glance at almost any page of the poem will confirm this. Take the beginning of chapter 5 (=E 6). Verse-line 5 has:

Valmiki rāṣayī haṃbaste cvi lovi mānya pyuṣḍe	haṃtsa drūgyau haḍe samu haṃdara-ysaṃthva karma
Syllables: (a) 9	(b) 6 = 15
(c) 7 (> 8) <sup>9</sup>	(d) 9 (> 10) <sup>9</sup> = 16 (> 18)

whereas verse-line 9 has:

nātātā puṣṣo parstā dukhyau jsa ttānai ttārā balysā dukhyau jsa	nitātā biṣṣā klaiṣa jyāre pharu kūysde jsei'ṇu vāte hatāro
Syllables: (a) 10	(b) 9 (> 10) <sup>9</sup> = 20
(c) 9	(d) 11 = 20

We have just in these two verse-lines, a range for the pāda of 6 to 11 syllables and for the verse of 15 to 20 syllables. If we remove the  $\sim\sim\sim$  endings in 5c, d and 9, the number of syllables remaining is 3, 5 and 5, 5, 4, 6. This

<sup>9</sup> Allowing *mānya*, *ysaṃthva* and *jyāre* to count as trisyllables on the principle explained above.

variety is found even though I have chosen lines that fit without serious emendation into Leumann's system.

The following metrical patterns were found in the syllables remaining after the removal of the cadence  $\sim\sim\sim$  in a random collection:<sup>10</sup>

$\sim\sim\sim$	u pata (5.47d)
$\sim\sim\sim$	puña kuṣṣala (11.76b); biṣṣā kuṣṣala (11.70b)
$\sim\sim\sim$	aysu hanaṣṭ(aimā) <sup>11</sup> (2.133a); aṣṣa nu uys(maṣta) (5.34a); tterā ku rre (5.25c)
$\sim\sim$	aysu te (5.52b)
$\sim\sim$	mamā hona (11.71c, 72c, 73c); mara rūva (11.73d); aysu hastā (2.138a)
$\sim\sim$	ni haḍe pāte (2.137b)
$\sim\sim$	ṣṣāra ṣṣūko (5.25a)
$\sim\sim\sim$	cu haḍe vā marā (1.190a)
$\sim\sim$	kāḍai dukhi (2.127c); parrījāta (11.72d)
$\sim\sim$	ysurre jsa hā (2.127d); hajū huve' (2.133c)
$\sim\sim$	uysānye (2.135b)
$\sim$	ā(nanda) (22.315d); balys(ūstu) (22.336d)
$\sim$	gyastu (2.126b); tcamna (5.3d)
$\sim$	harbiṣṣā (11.71b)
$\sim\sim$	mulṣdu yanu (2.132c); ttey kāḍāna (5.4c); hāysa patā (5.39d)
$\sim\sim$	kye biṣṣā hana (2.135d)
$\sim\sim$	māra puṣṣo (11.71d); ṣṣai yā na-ro (5.27a)
$\sim\sim$	vaysña vā (2.135a), varī vā (5.26c), aṣka vā (2.131c); tṭiyā hā (5.32a), trāmu hā (2.131a), Badṭ hā (2.132a), balysā hā (2.136a); ysīraho (2.138d); ṣṣei mā tto (2.136c)
$\sim\sim\sim$	tṭiyā haṃgrautta (5.47c)
$\sim\sim$	māste (4.94d)
$\sim\sim$	ggei'ṣṣindā (11.72b); balysānu (5.6c, 7b; 11.75b); balysūstu (11.76d, 77b); rrimthindā (5.34d); ttai ṣṣānā (5.47a)
$\sim\sim$	kho pūrā pā(taru) (2.137a); andivārā (5.25d); uysgārnu mā (5.51c)
$\sim\sim$	ne ne dāru (11.73b)

These patterns could undoubtedly be added to without difficulty. All that should be said about them is that before a cadence of the type  $\sim\sim\sim$ , there may occur from one to six syllables, one or two of which are stressed if there are more than one. On the general grounds outlined above there is nothing improbable in a scheme requiring a fixed quantitative pattern only at the end of a pāda.<sup>12</sup>

<sup>10</sup> If  $\sim$  = a and  $\sim\sim$  = b, the order is alphabetical.

<sup>11</sup> From here on I use round brackets to indicate syllables preceding or following the metrical pattern being discussed.

<sup>12</sup> The article by J. Lotz on "Metric typology" (pp. 135-48 in *Style in Language*, ed. T. A. Sebeok, Cambridge Mass. 1960) unfortunately for our purpose expressly excludes the type which he calls "Indo-European verse". Nevertheless, it shows that there is nothing surprising in the metrical scheme proposed here for Khotanese.

Of such a type is the commonest metre in Indian literature, the *śloka*, which consists essentially of the pattern:

....|~|....|~|

It is true that the number of syllables, if not their quantity, is fixed, even before the cadences. This is not necessary, however, and variation in number is found in Pāli. That the number of syllables preceding the cadence varies in Khotanese poetry is beyond dispute. The question is merely whether they can be accommodated within a quantitative scheme. Such a scheme, in view of the great variety in the number of syllables preceding the cadence, would necessarily be of the sophisticated type of metre based on the number of mores like the classical Sanskrit Aryā or Gāthā. But as already the cadences themselves show the encroachment of an accentual system, a scheme based on mores can be regarded as highly unsatisfactory. By the time of Late Khotanese poetry all trace of the quantitative system has disappeared.

By far the commonest cadence in spondaic verse is ~~~. In the 56 verses in chapter 9 it occurs 48 times or 85.7%. The 470 extant verses of chapter 22 have this cadence 359 times or 76.3%. The most obvious alternative that we might expect would be --/~, and that is in fact what we find as the most commonly substituted cadence. Seven of the eight verses in chapter 9 that did not have ~~~ have instead ---: *ttrāmī klaiśa* (9.3b); *hīyā satva* (9.7b); (*hū*)*sandai hūni* (9.9d); (*nāma*-)*mātrā śṣunya* (9.14d); *nāstī jīṅga* (9.15b); *klaiśyo karma* (9.17b); (*samṇa*-)*mātre śkoṅgye* (9.20b).

It is striking that the second heavy syllable in this sequence is almost always the result of contraction. It is as if this alternative were not due to an inherited notion of the equivalence of one heavy syllable with two light syllables but to a secondary development at a late date within Khotanese. This I would judge to be the case, as there is no other indication of a notion of this equivalence in Khotanese metrics. Thus, the cadence *ṣṣāvā rraysgu* (2.77b)<sup>13</sup> will go back to \**ṣṣāvaka rraysgu* ~~~, and an ending like *klaiśyo karma* (9.17b) will be a late analogical development.

A further selection of examples, taken at random, of --- where the second heavy syllable is the result of contraction is the following: (*ysama*-)*śṣandai ttrāni* (2.3d); *bātā phāṣṣe* (2.50b); *rrīysai nāte* (2.57a); *pāti hva'ndu* (2.77d); *pracai māsta* (2.103a); *śṣandā seittā* (5.38d); (*paysa*)*nākū tsūkā* (5.70d); (*klai*)*śṣinau pūrnū* (5.89b); (*ava*)*śṣārṣṭā yāna* (9.6c); *dāti cakru* (11.65b); *kṣundai heḍā* (22.123d); *pīśai hvāṣṭā* (23.114d). This list can be extended indefinitely.

<sup>13</sup> Similarly, in the light of what follows, an ending like *ṣṣāvā hatāro* (13.14d) or *ttūśā asāra* (3.13c), which on the synchronic system will count ~~~ with -ā counting ~ because it is unstressed, would on a diachronic basis belong with cadences of the type ~~~ discussed below.

There still remains a small residue of verses with different cadences. I consider first only those verses classified as belonging to metre A by Leumann.

From its occurrence in A-endings it is likely that the word *hatāro* "once" was accented *hatāro*. Thus we find *hatāro yādānda* (23.94b) counting ~~~ and *hastara hatāru* (2.19c) can therefore only be counted as ~~~. The existence of a cadence of this pattern is confirmed by an example such as (*ttavaś*)*carāna parāha* (2.15b). If we disallow a secondary accent, here will belong also *drainu ratanānu* (12.24b), *kho ju himavaṃdu* (2.66a) and *buhu hateañāmā* (2.72b). It is possible that here too belong cadences like *kalpa ttuvāyindū* (1.187a), *kalpa ttuvāstāndū* (9.23a), *cakkrū pravartindū* (1.187c), *balysa kṣamevīmā* (1.189c). But if a secondary accent were allowed they could be classed as (~)~. Certainly we must in any case admit a cadence of the type ~~~ in the following examples: *hārna śkālśu yindū* (2.6c); *biśśu jita āro* (2.25d); *jsāte ggamcha pītā* (2.29a); *ttuṣṣe yana ṣṣīve* (2.30d).

It is possible that the cadence *klaiśyo karma* (9.17b), discussed above, should be regarded not as a secondary form of --- from an older ~~~ by analogy, but as a secondary form of ---: *hūna klaiśyo karma*. -yo will count as a short syllable because it is unaccented. Such a treatment of -yau, -yo can be seen in *dukhyo bitcampha* (1.50a), *biśyau dukhyo jsa* (22.259d), *biśyau dukhyau jsa* (22.284b), all ~~~. The instr.-abl. pl. is common in this position: *hamṭsa biśyau balysa* (2.58b); (*ula*)*tāñe ttārthyau hamṭsa* (2.61b); (*rrū*)*vāsa cā'yyo Badr* (2.65b); *tsute ttārthyo hamṭsa* (2.86c); (*brah*)*māni gyastyo hamṭsa* (22.255b).

Less commonly ~~~ is preceded by ~ instead of by ~. Some examples of ~~/~/~ are: (*tta*)*randari dukha tīndū* (2.17b); *sarbite ggaru vīri* (2.55a); *biśśā u bodhisatva* (2.94b). Here will belong *Rāhulu Nāgasenu* in 22.94c, which we will no longer have to regard with Leumann as irregular.

Finally, a rare sequence ~~~, differing in its second foot from the other cadences, is perhaps to be admitted for *hastamo armūvimā* in 11.70c and (*ttā*)*tāna namaskārāna* in 11.74c. *ttātāna* is, of course, scanned ~~~; cf. 2.19d: *ttātena ṣṣamanna* ~~~. Another example may be *hastamo byehāmane* in 22.336c. In view of the fact that all the other cadences in this metre end in ~~, I am inclined to regard these examples as ~~~ with a hypermetric syllable.

To sum up the discoveries made so far concerning the Khotanese metre type A,<sup>14</sup> we may say that a verse consists of two pādas each ending in one of the following cadences:

~~/~	1 <sup>15</sup>	~~/~/~	3b
~~/~	2	~~/~	4
~~/~/~	3a		

<sup>14</sup> Metre A occurs in Z 1; 2.1-104, 123-244; 4; 5; 6; 9; 10; 11; 13; 15.1-48, 85-96, 109-111, 124-133; 16.1-5, 7-11, 19-27, 50-1, 57-67; 22; 23; 24.493-4.

<sup>15</sup> Hereafter I use these reference numbers for the cadences concerned.

Each cadence is preceded by a number of syllables varying usually from one<sup>16</sup> to six.<sup>17</sup> Using *s* for syllable and numbers for the cadences, we may scan a passage such as Z 22.280-5<sup>18</sup> as follows:

280	3 s + 2	4 s + 1
	4 s + 1 (h.) <sup>19</sup>	2 s + 1
281	3 s + 3a	2 s + 3b
	5 s + 2	2 s + 1
282	5 s + 1	4 s + 2
	7 s <sup>17</sup> + 2 (h.) <sup>19</sup>	0 s <sup>16</sup> + 3a
283	5 s + 1	3 s + 2
	4 s + 1	4 s + 1
284	5 s + 3a	5 s + 1
	4 s + 1	3 s + 3b
285	4 s + 1	3 s + 1
	3 s + 1	3 s + 1

The first of the ten new folios<sup>20</sup> may be scanned thus:

2.139	4 s + 2	3 s + 2
	4 s + 1	4 s + 1
2.140	5 s + 2	4 s + 1
	4 s + 2	5 s + 1
2.141	4 s + 2	4 s + 1
	4 s + 2	5 s + 2
2.142	3 s + 1	2 s + 1
	4 s + 1	4 s + 1
2.143	4 s + 1	4 s + 1
	4 s + 1	5 s + 4
2.144	4 s + 1	4 s + 1
	3 s + 1	4 s + 1
2.145	5 s + 2	2 s + 3a
	2 s + 1	3 s + 1
2.146	3 s + 1	4 s + 4
	3 s + 4	3 s + 1
2.147	4 s + 2	3 s + 1
	3 s + 1	3 s + 2
2.148	3 s + 1	4 s + 1
	3 s + 4	5 s + 1

<sup>16</sup> 0 s apparently occurs with 3a also in 2.52b.

<sup>17</sup> 7 s occurs with 1 in 13.123a (Leumann omits *samāvastī!*).

<sup>18</sup> I have selected this chapter because of Leumann's remarks in E p. xxii.

<sup>19</sup> Containing a single hypermetric syllable after the cadence.

<sup>20</sup> See R. E. Emmerick, "The ten new folios of Khotanese", *AM*, n.s. xiii, 1-2, 1967, 1-47.

2.149	5 s + 1	4 s + 1 <sup>21</sup>
	4 s + 1	4 s + 2
2.150	3 s + 1	4 s + 1
	4 s + 2	3 s + 1

Metre B<sup>22</sup> is also characterized by the predominance of the cadence  $\sim\sim$  in both pādas, but it is distinguished by shorter verses. These shorter verses are brought about as a result of there being fewer syllables preceding the cadence. These vary from nought to four in number.

A further characteristic of metre B is the frequent occurrence of a cadence  $\sim\sim$  in the first pāda of a verse. Examples are:

<i>ṣātā hastamā</i>	12.7a
( <i>bodhi</i> ) <i>satva-samvāri</i> <sup>23</sup>	12.8a
( <i>hār</i> ) <i>ṣṭāyā rrūyāte</i>	12.49a
( <i>sa</i> ) <i>tvānu hastaru</i>	12.69c
( <i>saṃ</i> ) <i>tsārā harbiṣṣā</i>	14.7c
( <i>pa</i> ) <i>sastā loviya</i>	19.87a
<i>āṇā damāte</i>	19.88a
( <i>a</i> ) <i>ysū tceimañinu</i> <sup>24</sup>	19.93c
( <i>hamā</i> ) <i>yāre harbiṣṣā</i>	24.2a
<i>dātya irata</i>	24.51c

This cadence is too frequent in metre B for it to be regarded as  $\sim\sim$  with a hypermetric syllable. Moreover, it would appear that metre B may have all the cadences of metre A as well as those cadences plus an extra syllable. The additional cadences occurring in the first pāda of a verse in metre B are thus:

$\sim\sim\sim$	1+ > 7 <sup>25</sup>
$\sim\sim\sim\sim$	2+ > 8
$\sim\sim\sim\sim\sim$	3+ > 9
$\sim\sim\sim\sim\sim\sim$	4+ > 10

Examples of cadence 9, by far the commonest, have been given above.

Examples of cadence 7 are:

( <i>tā</i> ) <i>tāna samvārina</i>	12.23c
<i>kho ju ye hvandāye</i>	12.49c
<i>pharu ātimāte</i>	12.57a
( <i>su</i> ) <i>mīrāna ggarina</i>	14.28c

<sup>21</sup> *ṣṭāre* belongs in this pāda. The MS. often has one or more syllables carried over to another pāda for reasons of space. This was recognized by Leumann, whose edition is based on metrical considerations only and does not allow one to recover the MS. distribution. My new edition of the poem will follow the MS. exactly, as in my articles in *AM*, n.s. xii, 2, 1966, 148-178 and xiii, 1-2, 1967, 1-47.

<sup>22</sup> Metre B occurs in Z 12.1-89, 126-9; 14; 16.6, 12-18, 31-49; 19; 24.1-5, 42-53, 114-125, 162-208, 215-243, 249-281, 378-492, 495-521, 642-659.

<sup>23</sup> Hence it is not necessary to omit *satva* with Leumann.

<sup>24</sup> The first syllable of *tcei'man-* counts ~ as *tcei'māñi* is found in C-endings (18.16b; 21.22b).

<sup>25</sup> I reserve 5 and 6 for the additional cadences needed for metre C. See below.

<i>crrāmu māñandāna</i>	14.33a
( <i>ysama</i> ) <i>śśandīya harbiśśe</i>	24.52c
( <i>ysa</i> ) <i>rauñīna ysyemate</i>	24.165a
Examples of cadence 8 are:	
<i>aysmū iśśāte</i>	12.48c
( <i>ysama</i> ) <i>śśandei harbiśśā</i>	24.5c
Examples of cadence 10 are:	
<i>ysurre jsa naṣkaljāte</i>	12.67c
<i>ārragādā hāmāte</i>	12.74c+
<i>vrrata ttavaścaraṇa</i>	24.124a

An example of the scansion of a passage in metre B is the following for

Z 24.162-7:

24.162		1 <sup>26</sup>		1
		3 <sup>a</sup>	2 s +	2
24.163		10	2 s +	7
	2 s +	2	3 s +	1
24.164	1 s +	1	1 s +	3 <sup>a</sup>
	1 s +	2	2 s +	1
24.165	1 s +	7	1 s +	1 <sup>27</sup>
	1 s +	2	3 s +	1
24.166		1	3 s +	1
		7	2 s +	4
24.167	2 s +	1	3 s +	1
	1 s +	8	2 s +	1

We began this investigation with a consideration of the contrast between verses ending in a spondee and verses ending in an iamb. Verses ending in a spondee may be either in metre A or metre B as we have seen. Verses ending in an iamb, that is metre C, must now be considered. Whereas in the case of metre A, both pādas of a verse have the same types of cadence, and in metre B both pādas admit the same types of cadence but the first pāda admits additional cadences, in metre C the cadences admitted at the end of the second pāda of a verse are always of a different type from those admitted at the end of the first pāda. Metre C may be summarized thus:

Pāda a: 0-4 syllables + cadences 1, 2, 3, 4

Pāda b: 1-5 syllables + cadences 5 or 6

<sup>26</sup> From here on I omit 0 s.

<sup>27</sup> *marañāna* is here taken as *marañna* to count  $\sim$  as in 6.30d *paritā marañna*  $\sim$  (metre A). It is possible, of course, to regard (*ā*)*chaina marañāna* as 1 with a hypermetric syllable. There are more than 100 verses in metre B in this poem, and yet apart from *marañāna* here, the only exceptions to a clearly  $\sim$  ending are *vātāya* in 24.5d and *yañā thu* in 24.43d. Now *vātāya* occurs also in A-endings (13.79d, 95d) and has a variant spelling *vīya*, which occurs in the A-ending *ttatvatu vīya* in 6.58c. *vātāya* and *marañāna* are thus due to scribal archaizing tendencies in disregard of the metre. In 24.43d I take the cadence to be type 1 with a hypermetric syllable.

Examples of cadence 3 ( $\sim/\sim$ ) are:

<i>biśśā satva</i>	2.105a
<i>Rāhu butte</i>	2.105c
( <i>su</i> ) <i>hauttā auṣku</i>	3.28a
<i>ttātā amṅga</i>	3.31c
( <i>a</i> ) <i>ysāta māta</i>	3.24c

Examples of cadences 5 and 6 can be found *passim* as no other variety is admitted.<sup>28</sup>

Examples of cadence 5 ( $\sim/\sim$ )<sup>29</sup> are:

<i>bvāru śśāre</i>	2.105b
<i>balysu buhu</i>	2.106b
<i>vaṣṭa biśśā</i>	2.106d
<i>jīṅga kari</i>	3.14b
<i>dātu samu</i>	3.17d
<i>vīrā jāte</i>	7.2d

Examples of cadence 6 ( $\sim/\sim$ )<sup>29</sup> are:

<i>biṣṭu tcaramu</i>	2.107b
<i>khaṣṭa hāmāte</i>	2.120b
<i>ysaujse ysuyañi</i>	3.59b
( <i>mā</i> ) <i>ñānda ttāmārā</i>	7.13d
<i>balte uysana</i>	20.57b

The new folio No. 180<sup>20</sup> (=Z 3.1-12) could be scanned thus:

3.1	1 s +	3	4 s +	6
	1 s +	3	4 s +	5
3.2	1 s +	2	3 s +	6
	1 s +	3	4 s +	5
3.3	2 s +	1	2 s +	5
		1	3 s +	6
3.4	3 s +	2	2 s +	6
	3 s +	1	2 s +	5
3.5	3 s +	1	2 s +	5
	1 s +	3	4 s +	6
3.6		1	3 s +	5
		2	3 s +	5
3.7		2	4 s +	6
		1	3 s +	5
3.8	1 s +	2	4 s +	9 <sup>30</sup>
	1 s +	1	4 s +	5

<sup>28</sup> But see on 3.8b below.

<sup>29</sup> The second stress is normally placed on this syllable but not always. Thus we have *āñā hatāru*  $\sim$  in 2.1b, *harbiśśā diśe*  $\sim$  in 2.4b.

<sup>30</sup> *hūḍva* here is quite surprising. In all the attested C-verses the only comparable ending is *purvandīśvo* in 24.328d (E p. 353). It looks as if a very rare admission of cadences 7-10 may have been possible: *dasta hūḍva* 9; *purvandīśvo* 8.

3.9	1 s + 1	3 s + 6
	1 s + 3	4 s + 5
3.10	1	3 s + 5
	1 s + 3	4 s + 5
3.11	1	3 s + 5
	1 s + 3	4 s + 5
3.12	1	3 s + 5
	2	3 s + 5

The metrical system recovered in this way has certain distinct advantages. Principally, it fits the facts, accounting as it does for the evidence both for an accentual system and for a quantitative system, and it does this without the necessity of emendation of the received text.

I turn briefly now to Late Khotanese poetry.<sup>31</sup> In this connexion the *Mañjuśrinairātmyāvatārasūtra* is of fundamental importance. This sūtra, hereafter referred to as *Mañj.*, is a poem of 445 lines on the Buddhist doctrine of *nairātmya* "selflessness". It is preserved on a roll in the Bibliothèque Nationale, numbered P 4099. A preliminary transcription of the text was published by H. W. Bailey, *KBT*, pp. 113-35, the colophon having been published separately in *KT* 2.123-4. H. W. Bailey recognized at the time of publication (see *KBT*, p. viii) that lines 261-77 correspond to 41a 4-43b 4 of the Khotanese version of the *Vajracchedikā* (*KT*, 3.29). I have been able to identify many passages, small and large, that correspond to various parts of the Book of Zambasta, and these will be published in an appendix to my forthcoming work *The Book of Zambasta*. The whole of *Mañj.* will be published in a separate edition of the poem with text, translation, commentary and glossary.

Corresponding passages are as follows:

Z 5.15-18	= P 131-5	Z 5.89	= P 413-4
5.19	= 152-3	5.100-100b	= 414-6
5.21a	= 153	5.111a,b	= 418
5.52	= 154-5	8.29-33	= 251-4
5.53-62 <sup>32</sup>	= 177-188	9.8-13	= 255-261
5.63-66	= 196-200	9.14-28	= 390-406
5.67-68	= 201-203	10.10	= 53-54
5.69-70	= 214-216	10.33b	= 128
5.71-80	= 227-237	23.20	= 121-2
5.81-5	= 239-244	23.21	= 123-4
5.86-7	= 411-413		

<sup>31</sup> I do not include in this category the simple transposition of an Old Khotanese poem into Late Khotanese orthography such as we have for the *Suvarṇaprabhāsottamasūtra* (*KT* 1.242-9). In such a case the Old Khotanese metrical structure can still be recovered, as has been done with partial success by Leumann (N pp. 57-8).

<sup>32</sup> P 4099.188 confirms the negative which Leumann conjectured to be missing in 5.62 (= E 6.62).

Although our MS. of the *Mañj.* does not arrange the text as poetry, the whole text can be so arranged formally, and this was attempted in the *editio princeps*. Indications are occasionally given in the MS. that the work is a poem.

Comparison of those passages which are Late Khotanese versions of Old Khotanese verses from the Book of Zambasta with their Old Khotanese counterparts is instructive. Trisyllables are frequently reduced in the Late Khotanese version to disyllables (e.g. *tatve* for *tatvatu*, *saskrre* for *saṃskṛta*, *avarya* for *avarrāta* in 5.15 cited below) without any compensatory increase such as could easily have been effected in Khotanese by the use of some of its numerous particles. On the other hand, in the Late Khotanese version an unstressed word may be added without destroying the metre or it may be omitted. In places where the two versions show considerable variation, the number of stresses is preserved.

As an example of the Late Khotanese version may be cited P 4099.131-

5.83  
 cu vā pyūṣṭāda ne hāḍe      paramārtha ttatve rraṣṭa  
 saskrre na pyūṣṭa padaja      tta ṣ < ṣ > ai mara avarya tsīda:  
 trāma khu ja hvaṇ(d)ye bīda      habaḍa habu ysūna  
 khu tte ye āl < i > (va)na īda      samī ttada naṣau'me vīna  
 ttu māṇada lavye pyūṣṭe      pārāhva yade carya  
 batsāga byaha dūkhayau jsa      satsāra patca vā bīḍa:  
 sa khu hve habu be'tta      harbeṣa ācha jīya  
 trāmau nairātama-hvanaina      jāre beṣa karma ysatha

This renders the Old Khotanese (Z 5.15-18):

kye vā pyūṣṭāndā ne hāḍe      paramārthu ttatvatu rraṣṭu  
 saṃskṛta nā pyūṣṭa padaṃgya      ṣṣai ttā mara avarrāta tsīndā  
 trāmu māṇaṃdu kho hvaṇdā      haṃbūtā haṃbaḍā ysūna  
 cvī ye ālīva nitcana īndā      samvī ttaṃdu haṃārgya  
 kye hori pyūṣṭe padaṃgyo      o śśīli lovi jāni  
 mulśa buru dukhyau bitsāṃgya      pātcu dukha bera saṃtsera  
 samu kho haṃbūvu bei'ttā      harbiśśī āchai jīye  
 trāmu nairātma-hvanaina      uysnori ysamṭha jyāre

Now where in Old Khotanese we have type A metre, in the Late Khotanese version this is retained more or less, although a word of the pattern ~ may also be used occasionally to end a verse. Thus, beside Z 5.100-101b:

cu vara bīnāña vicitra      hamatu bīnāṇu yāḍāndā  
 mura bajeṣāre vicittru      banā puṣṭo harbiśśu ggūta  
 hana vajiṣṭāndā kārra pvyā're      u muta pātastu yāḍāndā

<sup>33</sup> In the following passages () indicate editor's suppletion, < > indicate editor's correction.

we have the Late Khotanese version (414-6):

bīnāña aškūstai ṣṭāna pā'hyāda ramanī hvara  
 mvara bijaṣṭāda brraiyuna baṃdanyā gūva paijsa <t> a:  
 hana dyāda kārra (pyūṣṭāda) pyāstāda avyāya satva

In the latter version two of the three verses end in ~: *hvara* "sweetly" ~ (=OKh. *hvarra*-) and *paijsata* "imprisoned" ~ ~ (=OKh. *paljsata*-).

On the other hand, in the case of metre C, an attempt has been made to avoid iambic endings as far as possible, but the number of stresses has been maintained. Most instructive is the Late Khotanese version (251-4):

ṣā' aysmva hiya chāya cu ā vā harrūñā rū  
 neṣṭa vara drravyana hira cā'ya-nermyena hamaga  
 rrrū āstanūva hira samu nāma-mātrā ṣṭāre  
 paṣṭāma hīstya neṣṭa ttuṣā drravyasta ne ida  
 ttrāma khu je prriya pharāka utca dai kṣāra vijsyāre  
 ysū kṣ <ū > ṣṭa hadara biysma hadarai ttuṣe vajsyāre  
 ne ja vara kṣārrū dai ne vā ysū kṣuṣṭa  
 ne biysma aysmyaja vivā kāṇa

corresponding to Old Khotanese Z 8.29-33:

aysmuī vāññā rūva chāya samu  
 drravyāna hārā nāṣṭā samu kho hūña hārā  
 ttatvatu bāṣṣā rūva hāvi aysmū samā  
 ṣṣei rro ṣā hāḍe samu nāma-mātr hvatā  
 nāṣṭā ju hārā hīskya ne paṣṭāmata karā  
 drravyāna hāra ttatvaru hārṣṭāyā ttuṣṣā  
 ttrāmu kho pharu priya tcalco ūce hāra  
 kyai dau ysū biysma kṣuṣṭu daiyā samu  
 ne ju vara dai kṣuṣṭā biysma byode karā  
 aysmuī vivāgā ttandā dātte samu

The Late Khotanese version has ~ to end only one of the eight verses. There is, significantly, no poem at all in Late Khotanese with regular iambic endings.

In conclusion, Old Khotanese poetry affords a glimpse of a metre based on quantity but already strongly affected by stress-patterning. By the time of Late Khotanese poetry quantity has been completely superseded by stress.