A framework for Gandhāran chronology based on relic inscriptions

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Introduction

Many Gandhāran relic containers have inscriptions attached to them or are otherwise associated with inscriptions belonging to the same relic deposit, and the majority of these inscriptions contain dating formulas.[1] My intent in the present article is to provide an overview of these, to discuss alternative means at our disposal for dating inscribed objects, and to arrange as many of the inscribed relic containers as possible in a single chronological sequence as a solid basis for further research on Gandhāran chronology. The article also provides an update to the corpus of Gandhāran relic inscriptions edited in Baums 2012 and since kept up to date as part of Baums & Glass 2002- a, adding six new inscribed relic containers and suggesting several improved readings.

Gandhāran relic inscriptions

Relic establishments played an especially prominent part in the spread of Buddhism to and within ancient Gandhāra (Fussman 1994; Falk 2005), with an emphasis on what the tradition calls *śārīraka* relics, that is bodily relics of the Buddha, called *dhātu*, *śarīra* or *dhātuśarīra* in the inscriptions themselves.[2] There are two other types of relic in the traditional classification (Strong 2004: 8-20). One of these consists of so-called *paribhoga* relics, i.e. items purportedly used by the Buddha during his final lifetime that came to be worshipped. Typical for Gandhāra are alms bowls of the Buddha in stone, often larger than life-size and sometimes inscribed. The others are *uddeśaka* relics, i.e. representational relics of the Buddha in a broad sense including images.[3] To these should be added dharma relics as a fourth type, that is a text or collection of texts representing the word and hence person of the Buddha. Apart from scriptural quotations in inscriptions (on which see below), probably the earliest example of a dharma relic we have is the Gāndhārī birch-bark manuscripts of the Senior collection, dated to *c.* AD 140 (Salomon 2003a). The inscription on the container that preserved them for us (CKI 245) closely follows the typical formula of relic inscriptions, providing a strong argument that already in antiquity they were considered a dharma-relic deposit.

The Gandhāran Buddhist imaginaire was well familiar with events surrounding the Buddha's death and the division of his relics into eight shares by the brahman Droṇa, as depicted in Gandhāran art (Jongeward 2012a), and as narrated at the end of the Pali *Mahāparinibbānasutta* (ed. Rhys Davids and Carpenter 1890-1911, II: 154-168) and its parallel versions in other languages. Moreover, Gandhāran Buddhists remained aware of the more proximate origin of their relic cult in the redistribution of relics under Aśoka, as evidenced in Gandhāran art by the depiction of Mauryan motifs such as lion-

[1] I thank Peter Stewart for inviting me to the workshop 'Problems of Chronology in Gandhāran Art' (University of Oxford, 23-34 March 2017) in which this article originated, and for seeing it to publication. Some of the material was previously presented at the 'Bīmarān Workshop' (Ancient India and Iran Trust, Cambridge, 11-12 September 2015) organized by Wannaporn Rienjang.

[2] For convenience, the present article gives technical terms in their Sanskrit form, and uses Gāndhārī only when directly quoting from an inscription or where a Sanskrit equivalent is unavailable or unclear.

[3] It is not clear that footprints of the Buddha – known from Gandhāra (for instance the inscribed set at Tirath, CKI 36), but also very prominent in Southeast Asian Buddhism – were considered *uddeśaka*, since usually they were taken to be actual marks left by the Buddha on a visit rather than artistic representations.

topped pillars (e.g. in the relief illustrated in Jongeward 2012a: 32 and the miniature *stūpa* in Jongeward 2012b: 76). Direct epigraphic evidence of this awareness is provided by the Indravarma casket in the Metropolitan Museum of Art (no. 8,[4] CKI 242), whose inscription specifically mentions that relics were taken from a *mauryakālīna* 'Maurya-period' *stūpa* and reestablished in a new *stūpa*.

The main physical types of Gandhāran stone relic containers have been categorized in Jongeward 2012b as small spherical, spherical, ovoid, cylindrical, and miniature *stūpas*. Occasionally, secular items were repurposed as reliquary containers, such as the two drinking cups that were combined to form the Indravarma silver reliquary (no. 25, CKI 564) and the incense container (*gandhakaraṇḍa*) that became the Kaniṣka casket (no. 45, CKI 145). All of these would open up, typically to reveal a smaller container made from crystal or precious metal containing the actual relic as well as donative objects. Relic inscriptions are found on the relic containers themselves, on metal scrolls inside the containers, on metal plates deposited next to the containers,[5] or on a slab of the relic chamber.

Regardless of which physical object of a deposit they are applied to, Gandhāran relic inscriptions all adhere to the same basic formula (cf. Salomon 2012b: 178-197): usually, a date, with or without era, is followed by the name of one or more donors, then an action verb or noun denoting the act of establishing the relics (almost always a derivative of *prati-ṣṭhā-*), then a term for the relic itself, often specified as a relic of the Buddha Śākyamuni. Optional elements include a place name (most of which we cannot localize where the find circumstances are unknown), a list of persons (almost always family) in honor (*pūjā*) of whom the establishment is made and an expression of the wish to reach nirvāṇa on behalf of the donor or, occasionally, all beings (*sarvasattva*). Some inscriptions highlight that the establishment occurred in a place where no relic establishment had been made before (*apratiṣṭhāpitapūrva pradeśa*), presumably because such an establishment was particularly meritorious.[6]

While staying within the parameters of this formula, relic inscriptions can vary greatly in size. The shortest known Gandhāran relic inscription, from Sanghol in the Panjab (no. 49, CKI 239), consists of only the two words *upasakasa ayabhadrasa* 'of the lay-follower Ayabhadra.' The longest relic inscriptions, on the other hand – the gold scroll of King Senavarma (no. 24, CKI 249) and the copper plates of Helaüta (no. 26, CKI 564) – come to no less than 14 and 29 long lines, respectively. They do so by adding extensive strings of canonical quotations and epithets of the Buddha to the basic formula, as well as, in the case of Senavarma, a historical introduction detailing the circumstances of the relic installation.[7] Individuals who had a formal role in the act of depositing relics also sometimes memorialized themselves by additions to the inscribed formula. One such role is the *navakarmika*, the monastic superintendent of construction, who is named both at the end of the Taxila copper plate (no. 12, CKI 46) and on the Manikyala relic-chamber slab (no. 37, CKI 149). The conclusion of the Senavarma inscription mentions the person who weighed (if Harry Falk's interpretation of *solite* as a mistake for *tolite* is correct) the gold of which the inscription is made.

[4] Here and in the following, I identify Gandhāran relic inscriptions by their running number in Baums 2012 in addition to their number in Baums & Glass 2002- a.

[5] A special case is the inscription of Helaüta (no. 26, CKI 564) on a set of bronze sheets that appears to imitate (or independently invent) the 'concertina' manuscript format (otherwise not known in early Gandhāra, cf. Baums 2014).

[6] As pointed out by Vincent Tournier in discussion during the workshop, this higher degree of merit would primarily have been available during the earlier phase of the expansion of Buddhism in Gandhāra. Once every major and minor town had a *stūpa* and a state of 'relic saturation' had been reached, all one could still do was add secondary *stūpas* and make minor dedications. This would explain why the liveliness of the Gandhāran relic cult appears to have abated in the third century AD (around the same time that Gāndhārī began to fall out of use as a literary language).

[7] The original Ekaüḍa Stūpa was hit by lightning. Senavarma, having succeeded his brother Varmasena, opened it up, excavated the rubble and opened the relic chamber. He took out the relic he found there next to an earlier relic inscription (*likhitaka*) which stated: 'Vasusena, son of Utarasena, king of Oḍi from the Ikṣvāku family, he establishes this Ekaüḍa.'

Comparison with image inscriptions

The donative inscriptions on Gandhāran images, by comparison, are much simpler than the relic-donation formula, but since images are one of the most prominent genres of Gandhāran art and four of the inscribed pieces do contain much-discussed dates, they warrant a brief discussion. Altogether, there are 34 inscriptions on Gandhāran images, 29 of them on pedestals, and five on halos. (The implications of the inscriptions on extant sculptures are further discussed in Juhyung Rhi's paper in the present volume.) The main formula types are: (1) name only (e.g. *ṣamanamitrasa*, CKI 76); (2) name and a word for 'donation' (e.g. *[hora]ṣadasa da[namukhe]*, CKI 54); (3) name, title and word for 'donation' (e.g. *budharakṣi[dasa] bhi[kṣusa] da[namu]kho*, CKI 77); (4) name, name of companion and word for 'donation' (e.g. *budhamitrasa [bu]dharakṣidasa sadayarisa daṇa[mukhe]*, CKI 113); (5) name, word for donation and place name (only example: *bu[dh]orumasa daṇamukh[e] khaṃḍa[vaṇatu]baga[mi]*, CKI 112); (6) name, word for donation and beneficiary (e.g. *[aṃ]bae savaseṭhabhariae daṇamukhe sa[rva](*sa)tvaṇa puyae spamiasa [ca a]ro[ga]dakṣiṇi(*ae)*, CKI 117); (7) label inscriptions (e.g. *kaśavo tathagato*, CKI 84); and (8) date inscriptions (e.g. *saṃ 1 1 1 100 20 20 20 20 4 proṭhavadasa masasa divasaṃmi paṃcami 4 1*, CKI 124). See Appendix 4 for texts and translations of the four dated image inscriptions.

Methods of dating

There are several ways, direct and indirect, in which inscriptions can be used to date the objects they are associated with.

(1) The inscription may contain an explicit date, and this date may or may not contain an explicit era.[8] To illustrate both the general date format and some possible complications, we may consider the inscription of the nun Utara (no. 35, CKI 226) whose date runs as follows:

*saṃbatsara satapaṃ⟨*ca⟩ïśa 1 100 20 20 10 4 1 1 1 mase pr⟨*o⟩ṭha [1]*

The year (*saṃvatsara*; sometimes the abbreviation *saṃ* or the synonym *varṣa* are used) is 157 of an unspecified era, the value being given both as number word and as number sign, as is common practice in Gandhāran relic inscriptions. The inscription provides direct evidence for the occasional practice of omitting hundreds in that the number word does not spell out 'one hundred', but the number sign does. The next element of the date is the month. Two different systems of month names were in use in ancient Gandhāra: the Macedonian and the Indian (see Appendix 2, and the discussion below of different varieties of the Macedonian calendar). Here the Indian month name Prauṣṭha is used. The day is in this inscription indicated simply by the number sign *1*. In other inscriptions it is spelled out and usually preceded by the word *divase* or the abbreviation *di* 'day'. Certain days were auspicious dates and more popular for relic deposits than others (see Appendix 3).

(2) Historical figures may be referred to, which can help us date inscriptions and their objects when those figures are known from other sources. In ancient Gandhāra – contrasting with contemporary mainland India – we have from at least the first century AD onwards a strong sense of history that manifested in a desire on the part of donors to record who they were, when they lived and who they

[8] It is interesting to note that so many of the relic inscriptions from Gandhāra are in fact dated. One might wonder why this is the case, and even why the inscriptions were prepared at all. In what might be called the daily life of a relic – when it is not paraded as part of a ceremony – it resides deep inside a *stūpa* where it cannot be seen and where nobody can read an inscription. I think it can be argued nonetheless that relic inscriptions were meant for posterity, since those that installed them were evidently quite aware of the possibility of a *stūpa* being reopened in the future. This is apparent from the coins that were sometimes deposited in the *stūpa* shaft for future repairs and renovations to the structure. Even stronger evidence is provided by the Senavarma inscription quoted in the previous footnote, in which we have a concrete case of posterity reading and engaging with a relic inscription.

were related to. Combining the evidence from individual inscriptions (and, secondarily, the coinage) it becomes possible to draw up comprehensive family trees for two major sponsors of the Gandhāran relic cult, the Apraca royal house in Bajaur and the Oḍi dynasty in Swat (see Falk 1998: 107 and von Hinüber 2003: 33, respectively, for summaries of the latest state of our knowledge). A very common point of chronological reference was the Indo-Scythian king Azes and his eponymous era, which remained in use long after his death.[9] Sometimes, references to the wider frame of South Asian history also occur, such as when the Wardak vase (no. 43, CKI 159) mentions the overlord of the donor as 'the great king, chief king of kings Huviṣka'.

(3) The ideas expressed in the inscription, and the formulas used to do so, can sometimes be correlated with what we know from the literary tradition. Gandhāran relic inscriptions contain several examples of fixed phrases and literal quotations from Buddhist texts, both mainstream and Mahāyāna. (Falk 2010 calls these 'signature phrases' with the implication that their users had a personal affinity for the expression chosen and meant to showcase their learnedness and acquaintance with Buddhist literature.) The dating of literary texts is, however, usually very approximate itself and can thus provide at best a general classification of inscriptions as 'early' or 'late'. The best-known example of a canonical quotation in a Gandhāran inscription is the Kurram casket (no. 39, CKI 153), reproducing the formula of dependent arising (*pratītyasamutpāda*). It has to be noted that since this is a canonical formula which remained mostly unchanging through time, its usefulness for dating the casket is limited.

Another well-known example is the aforementioned Senavarma inscription, which within the framework of the usual dedication formula has a very extensive list of literary quotations attached as epithets to the expression 'relics of the lord, the Buddha'. A thorough discussion of these is provided in von Hinüber 2003, but it is worth highlighting one particular pair of terms that relates to the relics themselves. A distinction is drawn in the inscription between two 'bodies' of the Buddha, his *paścimaśarīra* and his *antimaśarīra*, both of which words on their own mean 'final' or 'last body'. In context, however, the former appears to be a reference to the body of the Buddha in his last human life, whereas the *antimaśarīra* (described as a *vajrasaṃghana* or 'diamond mass'; cf. Radich 2011) means the totality of his relics after his death. This is thus an explicit statement that the relics continued to be regarded as a body of the Buddha, though distinct (*visaṃyukta*) from his human body.

A final example of a literary quotation occurs in the Kopśakasa relic reestablishment (no. 21b, CKI 266), as read anew in Baums 2012 when I realized that it adapted a quotation from the Prajñāpāramitā literature:

*to dhaduve ṇiṣehit[a aho ca] aparimaṇada du[khato] moi[d](*o) logo ce[va t](*e)ṇa pra[d̲i]moido*

'based on these relics I am liberated from the immeasurable suffering, and what is more, the world is liberated by him' (i.e. the Buddha, whose relics are being installed) or, more generally, 'through this' (i.e. this act of relic installation). The fact that the donor Kopśakasa emphasizes the liberation of the world over and above his own personal liberation can be considered a Mahāyāna notion.

(4) Palaeography is often looked to as a means of dating inscriptions, but the answers it provides are of an approximate and relative nature. The shape of certain Kharoṣṭhī letters that undergo a well-defined series of changes – most prominent among them the letter *s* – serve as indicators and help categorize inscriptions as 'early' (Indo-Greek), 'middle' or 'late' (Kushan), but can certainly not be used to assign them to any particular decade. The 'early' type of *s*, to stay with this example, has a head that is completely

[9] In his case the expressions *atīta*, *kālagata* or *abhyatīta* (see Strauch 2009: 209-213 for the Gāndhārī spelling *adhvadida*) are often attached to his name.

closed on its left, the 'middle' type is half open, and the 'late' type is not much more than a vertical squiggly line (cf. the discussion and illustrations in Glass 2000: 104–107), but the overall development is very gradual. We should also expect (and can observe in Gāndhārī manuscripts) that the writing of the same scribe varies from one task to another. Furthermore, writing for monumental purposes on a hard surface such as stone[10] can be expected to preserve a more formal, archaic character than contemporary manuscripts hands. The closest manuscript equivalent in terms of ductus to a carefully executed relic inscription would be something like the bold, precise hand of the scribe who produced the Anavataptagāthā (CKM 1) and other canonical manuscripts in the British Library collection. With all due caution, and focusing on the morphology of letters more than on impressionistic aspects of their shape (cf. the discussion of *bh* in Glass 2009), palaeography can be a useful weapon in the chronological armory.

(5) The language of Gandhāran inscriptions follows a general trajectory from Gāndhārī proper to a highly Sanskritized version of the language, and inscriptions can accordingly be placed in a tentative relative chronology (cf. Salomon 2001 and 2002 for descriptions of the process). Quite apart from this increasing Sanskritization, however, we can also observe the co-existence of several different approaches to orthography for writing Gāndhārī in the newly available body of manuscripts, ranging from a very precise phonetic spelling that employs numerous diacritics (and is thus reader-friendly) to a minimal orthography that leaves many phonetic distinctions, such as fricativization and nasalization, unmarked (making it easier to write than decipher). In principle, it should be possible to correlate the orthographic conventions we observe in the reliquaries with the systems distinguishable in the manuscripts and arrive at groupings representing scribal schools (or at least schools of orthographic thought). This has never been attempted, but should be no less informative than palaeographic analysis. It is complicated by the general problem of distinguishing temporal and regional variation.

(6) The materials, techniques, and style employed in the production of inscribed objects are the proper province of art history, but technical details of how text was inscribed can potentially also be put to chronological use under the assumption that they represent inventions made at particular points in time. Harry Falk in particular has pointed out that those in charge of the final execution of an inscription were not necessarily literate and able to write Kharoṣṭhī without help (e.g. Falk 1998: 87–88). A common division of labor would then be for a scribe to trace letters very slightly with a needle on the surface of the stone, and for a stonemason to carve them deeply following the scribe's outline.[11] This process was liable to produce errors such as missing or extraneous lines, which we can often still observe in the finished product: the reliquary of Utara (no. 10, CKI 254) provides several clear examples. Again, however, it is often difficult or impossible to separate regional from temporal variation.

(7) If organic material is associated with a relic deposit, this can in principle be radiocarbon-dated, though I am not aware of any such datings actually having been performed. One promising case that has been the focus of recent discussion is the Bīmarān reliquary (no. 52, CKI 50) and the organic remains inside its golden casket.[12] Another is the relic deposit of Ayadata (no. 22, CKI 401), which contained several samples of wood. But like all other means of dating, radiocarbon dating is not a silver bullet for solving chronological problems. It can only provide one or more date ranges, sometimes spanning many decades (cf. the report on birch-bark and palm-leaf manuscripts in Allon, Salomon, Jacobsen and

[10] Specialized epigraphic writing techniques (such as pointillé on metal) further distort the shape of letters.

[11] During the workshop, Robert Bracey remarked on a similar procedure in the design of coins, with one person putting dots in those places where letters should go, and another person actually adding them as a separate step.

[12] The Bīmarān relic deposit is particularly important for correlating the epigraphic record of Gandhāra (represented by its stone relic container) with the art-historical (represented by its gold casket with images of the Buddha and the gods Brahma and Indra).

Zoppi 2006), and is thus not necessarily more precise than palaeographic dating, let alone an explicit date given in an inscription.

A general problem that has to be kept in mind regardless of the specific evidence used for dating is that Gandhāran relic deposits are invariably multi-object finds, including at a minimum a container and the relic itself, but often a series of nesting containers within a relic chamber, encasing a relic together with any number of additional donative goods such as inscribed metal foils, jewelry, metal flowers, precious textiles and others. If any one of these objects can be dated, this does not necessarily mean that all of the others were produced at the same time.[13] The only relative certainty is that they were interred at the same time and that any inscription relates to this moment, though the cases of re-interment discussed above complicate even this assumption.

Six new relic inscriptions and one new reading

Five years ago, I published my edition and translation of the corpus of fifty-eight inscribed Gandhāran reliquaries then known (Baums 2012). Work on this edition had started in 2006 and proceeded in tandem with the compilation of an illustrated online corpus and catalog of the same reliquaries on the website Gandhari.org, where the complete set is retrievable by filtering for type 'relic establishment' in the Inscriptions section of the *Catalog of Gāndhārī Texts* (Baums & Glass 2002- a). Since the publication of the print edition, I have kept this online corpus and edition of the Gandhāran reliquary inscriptions up to date, improved several readings and provided complete lexicographic coverage for it in the *Dictionary of Gāndhārī* (Baums & Glass 2002- b).

The online corpus now contains altogether sixty-six items, eight more than the book. Two of these were consciously excluded from Baums 2012 as being possible forgeries: a golden version of the silver sheet of Mahazada (CKI 332, cf. Baums 2012: 245 n. 100) and the Haḍḍa gold sheet (CKI 455, cf. Baums 2012: 201). This possibility remains, but it still seemed advisable to include them in the online corpus, if only because each of them has attracted a certain amount of discussion in the secondary literature.

An inscribed reliquary in the form of a *stūpa* surrounded by four worshippers had been omitted by oversight from *Gandharan Buddhist Reliquaries* and Baums 2012. The short inscription (CKI 267) as reproduced by its editor (Sherrier 1984) on the authority of Harold Bailey and Gérard Fussman is *śivarakṣidakasa thube sapariane*. Of the two interpretations given, I prefer the one that takes the last word descriptively as Skt. *saparijanaḥ*, and thus translate 'Śivarakṣidaga's *stūpa* with attendants.'

In 2013, a number of reliquaries, two of them inscribed, reached the Museum Fünf Kontinente in Munich from the collection of the late Gritli von Mitterwallner. I had the opportunity to inspect them in the museum soon after their arrival. In the following year, the museum journal published photographs and a discussion of these reliquaries (Falk 2014–15).

During my inspection, it was immediately apparent that one of the two inscribed reliquaries (no. 34, CKI 225) had been published previously in Salomon 1995 and reedited in Baums 2012. The reading and translation I gave there, following in all essentials Salomon's edition and followed in turn by Falk, were *sa[ṃ]vatsara satapacaïśa〈*śa〉da 1 100 20 20 10 4 1 1 1 mase proṭha sastehi sa[ta]viśati iśa kṣ[u]nami pratiṭhavati khadadata utara[ci]tathopo mahavanami matapitina pujartha sarvasatvana puyartha utarapuya[rtha]* – 'In the one-hundred-and-fifty-seventh – 157th – year, in the month Prauṣṭhapada, after twenty-seven days, at this moment Khaṃdadata establishes the *stūpa* built by Utara in the Great Forest (Monastery), in order to honor mother and father, in order to honor all beings, in order to honor Utara.'

[13] A case in point is the Bīmarān casket.

Using the new photographs and following my personal inspection of the inscription, I am now able to offer one improvement on this interpretation. The word *utara[ci]tathopo* always presented a problem: the expression and somewhat awkward compound were without parallel in the Gāndhārī epigraphic corpus, and it remained unclear what exactly it meant for a *stūpa* to be built (literally, 'piled up') by one person (Utara), but established by another (Khaṃdadata). As it turns out, however, the fourth akṣara of this expression is not actually a *ci*, but rather a clear *dhi* with an attached footmark (see Figure 1). Accordingly, I now read two words *utaradhita* and *thopo*, and interpret the sentence in question as 'Khaṃdadata, daughter of Utara, establishes a *stūpa*.'

Figure 1. Detail of Khaṃdadata's relic inscription. (Photograph after Falk 2014–15.)

This can be compared with two other Gandhāran relic inscriptions in which the donor, in both cases a woman, identifies herself as the daughter of somebody else: *kumarasa viṣuvarmasa [a]teuria loṇa grahavadi[dhita]* – 'a (lady) of the women's quarters of prince Viṣuvarma, Loṇa, daughter of a householder' (no. 5, CKI 247), and *kamagulyaputravagamaregavihara[thu]ba ... khoḍadhida* 'at the stūpa of the Vagamarega-Son-of-Kamagulya Monastery ... the little daughter' (no. 44, CKI 509). Exactly as in the last-mentioned case (the second Wardak vase), Khaṃdadata's inscription thus recorded part of a joint parent-daughter donation, her mother's donation to the same monastery in the same year being recorded in no. 35, CKI 226. The special role of her mother Utara in the joint relic donation also explains why Khaṃdadata refers to her separately after she had arguably already been included in Khaṃdadata's collective expression of worship to her parents (*matapitina*). My complete new reading of Khaṃdadata's inscription (including some other minor improvements) is: *savatsara satapacaïśa〈*śa〉de 1 100 20 20 10 4 1 1 1 mase proṭha sastehi sataviśati iśa kṣunami pratiṭhavati khadadata utaradhita thopo mahavanami matapitina pujartha sarvasatvana puyartha utarapuya〈*rtha〉*.

The second inscribed reliquary in the Munich collection (CKI 240) is a miniature *stūpa*. This object was previously unknown, and my reading of the inscription (based on personal inspection and photographs) is: *priavaśabhayae pra[ṭh]iṭhavaṇe madapida puyaïta sarvasatva pu〈*yaïta〉* – 'The establishment of the wife of Priyavaṃśa. Mother and father are honored. All beings are honored.' This differs in a number of points from the reading given in Falk 2014–15: 150–157, among them my preference for the noun *pra[ṭh]iṭhavaṇe* over unclear *praḍiṭhavae*. The most substantial point of difference is, however, my reading of the name of the unnamed donor's husband as *priavaśa* rather than *priavaya*. This is supported by the occurrence of the same name Priyavaṃśa in another relic inscription (no. 28, CKI 331), there also spelled *priavaśa*, though we cannot be certain that reference is to the same person.

Also in the collection of von Mitterwallner was an inscribed copperplate (CKI 466). The plate had unfortunately been lost by the time the collection reached the museum, but Salomon 2014–15 was able to provide a reading based on photographs that von Mitterwallner and Robert Senior had sent him

years earlier. In the photographs, the plate is heavily oxidized and only partly legible, but does appear to give a date without explicit era. The first of four number signs is *100*, the last two are *4 4*. Because of the way the Kharoṣṭhī number system works, the second number sign can only have been either *10* or *20*, making the year of the date either 118 or 128.

A new inscribed miniature *stūpa* in the private collection of Aman ur Rahman (CKI 827; Falk 2007: 138–140) appears to state that it was dedicated in the year 11 of an otherwise unknown *mahakṣatrapa* 'great satrap' Namipala (likely a misspelling for Nagapala; see below for a discussion of the era).

Another miniature *stūpa*, this one in the private collection of Pankaj Tandon (CKI 828; Falk 2007: 141–142), poses a different chronological puzzle. The date reads *sa atitie rayasa ayasa atitasa katiasa mase di pra*. Here *sa* is probably for 'year' (*saṃvatsara*), since *di* is doubtless an abbreviation for *divasa*, 'day'. The number of the day is likewise given in abbreviated form as *pra* for *prathama*, and the specification of the month Kārttika presents no problem. How are we, however, to interpret the number of the year spelled *atitie*? Falk proposes reasonably that we have to do with a misspelling of **aśitie*, 'eightieth', and one may add that this misspelling could be due to the following, similar-sounding word *atitasa*. The complete dating formula can then be translated: 'In the eightieth year of King Azes who has passed on, on the first day of the month Kārttika.'

The last addendum to the corpus of Gandhāran reliquary inscriptions (CKI 975) is on a fourth miniature *stūpa* in the private collection of Isao Kurita and was read *saṃghilakasa iṃdrakae ya iyo śariramuhe* – 'this is the foremost relic of Saṃghilaga and Iṃdraga' – by its editor (Falk 2014–15: 143–144). It is mentioned here for the sake of completeness, but does not contribute chronological information to the present survey.

etaye purvaye, *iśa kṣunaṃmi* and related expressions

Inscription no. 12 (CKI 46) contains, following the specification of the date by year, month and day and preceding the name of the donor, the expression *etaye purvaye*:

> *[saṃva]tsaraye aṭhasatatimae 20 20 20 10 4 4 maharayasa mahaṃtasa mogasa pa[ne]masa masasa divase paṃcame 4 1* ***etaye purvaye*** *kṣaha[ra]ta[sa cukhsa]sa ca kṣatrapasa liako kusuluko nama tasa [pu]tro pati[ko] ... bhagavata Śakamuṇisa śariraṃ (*pra)tithaveti ...*

A variant of the same expression (using the adverb *etra* for the inflected pronoun) occurs in the same position in no. 37 (CKI 149):

> *saṃ 10 4 4 [kartiyasa maze divase 20]* ***e[tra] purvae*** *maharajasa kaṇeṣkasa guṣaṇavaśasaṃvardhaka lala daḍaṇayago veśpaśisa kṣatrapasa horamurt[o] ... ṇaṇabhagavabudhaz[a]va p[r]atistavayati ...*

In both cases, Konow 1929 (29, 150) translated it 'on this first (*tithi*)', and I followed him in Baums 2012 (212, 241) with 'on this first (lunar day)'.

These translations are, however, untenable since in a system of lunar months, the fifth and twentieth day of the month, respectively, does not coincide with the 'first lunar day',[14] and in any case the expected word for 'first' would be *prathama*, not *pūrva*. The solution is provided by later Sanskrit inscriptions that contain phrases such as *asyāṃ saṃvatsaramāsadivasapūrvāyām* (sc. *velāyām*) 'at this aforementioned (time) of year, month and day' after the date proper 'by way of introducing the body of the document' (Salomon 1998: 176), exactly as in our Gāndhārī inscriptions.

[14] In Indian chronology, a month is subdivided into 30 *tithi*, during each of which the angle between moon and sun changes by 12 degrees. A *tithi* is thus only slightly shorter than a solar day (*divasa*), 29.5 of which make up a synodic month.

Understood thus, *etaye purvaye* and *etra purvaye* are in fact only variants of several similar expressions that occur with great regularity in the same position of other relic inscriptions. One of them is *iśa divase* or *aja divase* 'on this day':

no. 6 (CKI 454): *iśa divasami*
no. 13 (CKI 405): *iśa divasaṃmi*
no. 14 (CKI 251): *aja sudivase s[u]nakṣetre*
no. 16 (CKI 544): *iś[a] (*divasami)*
no. 22 (CKI 401): *[aja d](*i)va[sa]mi*[15]
no. 28 (CKI 331): *iśa divasami*
no. 30 (CKI 60): *iśa diva[se]*
no. 31 (CKI 563): *iśa divasa*

Another, equally frequent variant, involves the word *kṣuna* in the locative or instrumental case and occurs primarily in Kushan-period inscriptions:

no. 26 (CKI 564): *iśa kṣunami*
no. 29 (CKI 172): *imeṇa kṣuṇeṇa*
no. 34 (CKI 225): *iśa kṣunami*
no. 38 (CKI 152): *iś[e] kṣunaṃmi*[16]
no. 39 (CKI 153): *iś[e] kṣunaṃmi*
no. 40 (CKI 368): *iśe kṣuṇami*
no. 41 (CKI 155): *iśa kṣunaṃmi*
CKI 466: *[iśe kṣ](*u)[ṇaṃmi]*

Once, this (or maybe rather its Indian phonetic cousin *kṣaṇa* 'moment') occurs with the added specification *cetrike*, which is echoed in another inscription by simple *cetreṇa* and appears to make explicit a beginning of the year at the spring equinox (i.e. with the Indian month Caitra, cf. Appendix 2 and Baums 2012: 207 n. 15):

no. 8 (CKI 242): *imeṇa cetrike kṣ[a]ṇ[e]*
cf. CKI 455: *imeṇa cetreṇa*

The word *kṣuna* corresponds to Bactrian χϸovo 'year', which itself has been interpreted as a loanword from Greek χρόνος 'time' by A. Thierfelder (Humbach 1966: 24, cf. Davary 1982 s.v. *xšono*). If this is correct, the Gāndhārī occurrences provide important evidence for the semantic specialization of this word from Greek 'time' over Gāndhārī 'date' to Bactrian 'year'.[17] A third variant, occurring only once, is *ghaḍiga* 'period of time' (Sanskrit *ghaṭikā*):

no. 43 (CKI 159): *imeṇa gaḍi̲ge̲ṇa*

Chronology

In the final part of this article, I will now in several steps arrange the inscribed Gandhāran reliquaries in a chronological sequence, making explicit the procedure that led to their their initial arrangement in Baums 2012 and adding the several new items to the corpus in their proper places.

[15] This is my own tentative reconstruction in light of no. 14. In his edition, Salomon 2003b: 44-45 noted that the heavily damaged first word remained unclear, but was certainly not *iśa*.

[16] I prefer this reading over Konow 1929: 152 *kṣunaṃṃi*, taking the horizontal line at the bottom of the third akṣara as a footmark. It is possible, however, that neither of these readings is correct since the inscription in question is lost and only an imprecise eye copy was available to Konow and myself.

[17] I am grateful to Nicholas Sims-Williams for discussing the Bactrian connection with me after the workshop.

In the last complete edition of Gandhāran reliquary inscriptions prior to Baums 2012, Sten Konow's 1929 *Kharoshṭhī Inscriptions*, the relic containers then known were arranged together with the other inscriptions under three rough chronological headings: (A) 'Inscriptions of Greek chiefs and unclassed North-Western records', (B) 'Inscriptions connected with the Old Saka era', and (C) 'Inscriptions connected with the Kanishka era' (followed by 'Inscriptions outside the Kharoshṭhī area' which, however, does not contain any relic inscriptions). As Konow sets out in his introduction (lxxxii–xciv), he did not believe that an equivalent of the Vikrama era was used in the inscriptions (nor that the term *ayasa* referred to King Azes), which left him with only two eras.

The modern scholarly consensus works with three major eras: the Greek era, the Azes era, and the Kushan era.[18] A considerable literature has grown around the question of the most likely starting points of these three eras as epigraphical, numismatic and literary pieces of evidence have continued to emerge (see also Joe Cribb's paper in the present volume).[19] It now seems certain from the information given in Sphujiddhvaja's third-century AD astronomical work *Yavanajātaka* that the Kushan era (the institution of which Kaniṣka proclaimed in the Rabatak inscription) commenced in AD 127 (Falk 2001).[20] The relic inscription of Aprakhaka (no. 33b, CKI 328) similarly provided persuasive new information for placing the commencement of the Azes era in 47 BC (Falk & Bennett 2009).[21] The beginning of the Greek era, finally, is synchronized with the Azes era by the triple dating formula of the relic inscription of Rukhuṇa (no. 13, CKI 405), placing it in 175 BC under the new dating of the Azes era (cf. Salomon 2012a).[22] While the dates adopted here – especially the linked dates for the Azes and Greek eras – are still subject to discussion, they seem to the present author the most reasonable in light of the available evidence and now preferable to the more conservative dates used in Baums 2012.

As a starting point for our chronological sequence, the fourteen inscriptions whose dates are explicitly in the Azes era can be put in a relative order. The inscriptions in question are nos. 8, 13, 14, 16, 17, 21, 23, 26, 28, 29, 30 and 31 in the numbering scheme of Baums 2012, together with the new inscription CKI 828 and the potential forgery CKI 455. The year values given in these inscriptions range from 39 to 139, with no. 8 (year 63) produced after the death of Azes (*maharayasa ayasa atidasa*), and cover a period of altogether 101 years.[23]

[18] I use this term in preference to 'Kaniṣka era' since it is used in Sphujiddhvaja's discussion of this era (Falk 2001a: 126).

[19] A selection of the main publications by the most prominent recent participants in this discussion is: Cribb 1997, 1999, 2000, 2005, 2008; Errington & Curtis 2007: 29-106; Falk 2001, 2002, 2006, 2007, 2008, 2010; Falk & Bennett 2009; Salomon 1998: 180-198, 2005, 2012.

[20] Technically speaking, Sphujiddhvaja states that in the second century of the Kushan era in which he was writing, the difference between the number of the Śaka year and the number of the Kushan year (with hundred omitted) was 149.

[21] Different varieties of the Macedonian month system were used in India and beyond, but there is only one – the Arsacid system – in which the month Gorpiaios functioned as one of two intercalary months once every nineteen years. Therefore, in Aprakhaka's inscription, which is dated to an intercalary month Gorpiaios (*gurpiya yaṃbulima*) of a year 172 in implied Azes era, the Arsacid calendrical system will be in use. The year 172 corresponds to a suitable year with intercalary Gorpiaos (the year AD 126) only if the start date of the era was 47 BC. (In principle, 66 BC and 28 BC would also be possible, but the former would yield too early a year for the Greek era, and the latter would place the Aprakhaka inscription in the year AD 146, when a dating in the Kushan era would be expected.) Based on the affinity between the Arsacid and Azes calendrical systems shown by this inscription, Falk & Bennett 2009: 209-211 suggest further that the Azes era may itself be a reinauguration of the Arsacid era of 248 BC in the first year of its third century.

[22] It is then possible that the Kushan era should be understood as a reinauguration of the Greek era since it commenced its fourth century, similar to the possible origin of the Azes era as a reinauguration of the Arsacid era (Cribb 2005: 214; Falk & Bennett 2009: 208-211).

[23] With the continued use of Azes regnal years after his death, turning them into an era proper, compare the continued issue of Azes-type coins for about one hundred years after the end of his reign (Cribb 2008: 66).

Two other eras are explicitly named in Gandhāran relic inscriptions: that of the Apraca king Vijayamitra – maybe regnal years rather than an era proper – and that of the Greeks. The former occurs in nos. 1c and 13 (years 5 and 27), the latter only in no. 13 (year 201).

The relic inscription of Rukhuṇa (no. 13, CKI 405; first edited in Salomon 2005) not only provides a synchronism between the Azes era and the Greek era (as noted above), but also with the Vijayamitra regnal years. This makes it possible to combine all 15 inscriptions discussed so far into a single sequence. Within this sequence, the earliest date (possibly spurious) is given as a (regnal?) year of Azes, followed after a gap of twelve years by a regnal year of Vijayamitra, which in turn is followed after a gap of another twelve years by the first explicitly posthumous date in the Azes era. The earliest date in the Greek era occurs another ten years later and, notably, is the very first year in the third century of this era.

In addition to these fifteen dated inscriptions with explicit era, there are eighteen dated inscriptions that do not give an era. These are nos. 6, 7, 19, 32, 33a, 33b, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43 and 44, together with the new inscription CKI 466. The year values given in these inscriptions range from 18 to 303. In order to add these inscriptions to the sequence established so far, it is necessary to determine by circumstantial evidence which era is implicit in the date of each of them. In addition to the Greek, Vijayamitra and Azes eras, some of these eighteen inscriptions on the face of it belong to the Kushan period, and the Kushan era thus becomes a fourth possibility.

As a first step, those inscriptions belonging to the reign of Kaniṣka or later can be separated out using the following criteria:

(1) A ruler of this period is explicitly mentioned (nos. 37 and 43).

(2) A Macedonian month name is used. This is not an unequivocal sign of an inscription belonging to the reign of Kaniṣka or later, but Macedonian month names did become predominant in this time, and their occurrence can therefore serve as a dating criterion in conjunction with others. The cases in question are nos. 33b, 38, 39, 40, 41, 43 and 44.

(3) The Greek loanword *kṣuna* ('date') or the Iranian loanword *sasta* ('day') are used. As with the month names, this is a strong tendency from the reign of Kaniṣka onwards and can be used as a dating criterion in conjunction with others. The cases in question are nos. 33b, 38, 39, 40, 41, 43 and 44.

(4) A year value above 300 is likely to be in the Greek era and belong to the time after the beginning of Kaniṣka's reign. This applies to no. 36, dated in the year 303.

(5) For a low year value, the type of object may decide that an inscription belongs to the second century AD (Kushan era) rather than the first century BC (Azes era) or the first century AD (Vijayamitra year). This appears to be the case with the clay pot no. 42 (cf. Strauch 2007: 81-82).

In sum then, the following ten inscriptions are certain or likely to be from around the beginning of the reign of Kaniṣka or later: nos. 33b, 36, 37, 38, 39, 40, 41, 42, 43 and 44. Of these, no. 36 is most likely dated in the era of the Greeks, no. 33b in the Azes era, and the remainder in the Kushan era.

Of the remaining eight pre-Kaniṣka inscriptions with date but without explicit era, no. 19 must belong to the era of Vijayamitra since the donor is his consort Prahodi. Inscriptions nos. 6, 7, 32, 33a, 34 and 35, together with the new inscription CKI 466, are most likely to belong to the Azes era, with year values ranging from 50 (or 60) to 157. (For two of these, nos. 32 and 35, use of the Greek era and a date in the late first century BC cannot be entirely excluded, but in the absence of positive evidence that Greek-era years lower than 201 were used in Gandhāran inscriptions, this seems less safe to assume.)

At this point, we have thirty-two inscriptions that can be assigned to the Greek, Azes, Vijayamitra, or Kushan eras. Of these, twenty-four are in a secure single sequence thanks to the synchronism for the first three of these eras provided by Rukhuṇa's inscription (no. 13, CKI 405). Applying AD 127 as the commencement of the Kaniṣka era, we can next combine all thirty-two into a single chronological sequence and make several summary observations.

The overall range of dated Gandhāran relic inscriptions is from 9/8 BC (CKI 455, if genuine, otherwise AD 3/4 or 13/14, no. 6) to AD 177/178 (no. 44), assuming that all dates in the Kushan era can be assigned to its first century.[24] Within this span of 185 (or 174 or 164) years, the Azes era is used predominantly until just before the beginning of Kaniṣka's reign (no. 33b: AD 125/126). The only exceptions at this point of our discussion are three dates in years of Vijayamitra (nos. 1c, 13 and 19), which can probably all be considered current regnal years rather than an era proper, and one date in the era of the Greeks (no. 13), used in conjunction with dates using the Azes era and a Vijayamitra regnal year, presumably because the year in question was notable for being the very first in the third century of the era of the Greeks. The very first available date after the accession of Kaniṣka is again given using the era of the Greeks (year 303 = the second year of Kaniṣka).[25] Use of the Kushan era itself in the relic inscriptions commences in AD 144/145 (with year 18), after which it is used exclusively until the end of the observable period.

Seven Gandhāran relic inscriptions contain dates that cannot be linked up precisely with the sequence of thirty-three inscriptions established so far. Potentially the oldest preserved relic inscription from Gandhāra, the primary inscription on the Shinkot casket (no. 1a), almost certainly contains a damaged reference to the mid-second-century BC Indo-Greek king Menander. Its position in the date formula (*... minedrasa maharajasa kaṭiasa divasa 4 4 4 1 1*) indicates that it specified the year in which the donation was made, though whether this was in terms of a regnal year or an otherwise unattested era of Menander is unclear. Some doubt has also surrounded the genuineness of this inscription (Falk 2005), and it does contain many peculiarities of wording. To me, however, the way the number signs for the day are corrected from one evidently popular date (*4 4* '8th') to another (*4 4 4 1 1* '14th') rings true, and its deviations from the standard formula could follow from its early date. As archaic as the palaeography of the Shinkot casket is that of the Gomitra relic-chamber slab (no. 2), which in its broken beginning contains the value of a year ('current twelfth year') with lost further specification (*? + + .[u] ? ... [va]ṣe vatamane ya [d]u[va]d̲aya ? ? ? ?*), and this slab may therefore also belong to the second or first century BC.

The above-mentioned miniature *stūpa* of the eleventh year of Namipala (CKI 827) is so similar in terms of its decoration, formula, and palaeography to an inscribed plate of year 9 of Azes (CKI 459) that its year 11 should probably also refer to the Azes era, whether as a simple case of renaming or as an independent reuse of the Arsacid era (following Falk 2007: 140). If this is the case, then this would be by far the earliest use of the Azes era in a relic inscription, predating no. 6 by thirty-nine or even forty-nine years. A somewhat parallel case is the well-known copper-plate inscription of Patika dated to the year 78 'of Maues' (no. 12: *[saṃva]tsaraye aṭhasatatimae 20 20 20 10 4 4 maharayasa mahaṃtasa mogasa*). If this refers to an otherwise unattested era of Maues, then it would date to the early years of the first century AD (Baums 2012: 211, n. 23), which would make it one of the oldest dated relic inscriptions. If, on the other hand, here too we have to do with the Azes era under another name, then the date of the copper plate would be AD 31/32.

[24] Five inscriptions (nos. 38, 39, 40, 41 and 42) could conceivably – with omission of the number sign 100 – belong to the second century of the Kushan era and would then date from between AD 244/245 and 270/271. There is no positive evidence to support this, however, and the resultant chronological gap in the reliquary record of at least 67 years between AD 177/178 (no. 44) and AD 244/245 (no. 38) would be highly unlikely.

[25] It is the (expected) third year if – with Falk & Bennett 2009: 208-209 – we assume that Kaniṣka established the Kushan era with reference to a (hypothetical) Bactrian ('Macedonian') version of the era of the Greeks in which the year started at the autumn equinox following the spring equinox of the corresponding Gandhāran era of the Greeks.

The last major piece of the chronological puzzle concerns the position of the Oḍi kings vis-à-vis the other eras. In Baums 2012 (209-210 n. 20), I proposed an argument for the approximate synchronization of the Oḍi kings with the main chronological sequence. In the following, I slightly reformulate this argument for the later date of Azes used in the present article.

The three known inscriptions of the Oḍi royal house are all dated by regnal year only: year 4 of Ajidasena (no. 11), year 5 of his son Varmasena (no. 22), and year 14 of the latter's brother Senavarma (no. 24). The inscription of Senavarma mentions Kujūla Kadphises as 'great king, chief king of kings' and is accordingly to be dated in the latter's reign, some time between AD 40 and 90 or 95 (Errington and Curtis 2007: 54, Bopearachchi 2008: 52). If Suhasoma, the minister mentioned in Senavarma's inscription, is the same person as Suhasoma, the co-donor of the earthenware pot inscription CKI 369 associated with the British Library collection of Gāndhārī manuscripts, then this suggests a dating around the middle of the first century AD. Such a dating would receive further support if Vasavadata, wife of Suhasoma and main donor in CKI 369, is the same person as Vasavadata, sister of Indravarma I in relic inscription no. 8, since for the latter we have the firm dates AD 16/17 and 26/27. Both possible correlations point to an earlier rather than later point in the reign of Kujūla Kadphises for Senavarma's inscription. If Senavarma ascended the throne around AD 35, then an approximate date for the accession of his brother Varmasena would be AD 25, and one for his father Ajidasena AD 5. Their three inscriptions would then date from approximately AD 9 (no. 11), AD 30 (no. 22) and AD 39 (no. 24).

Of the remaining twenty-eight Gandhāran relic inscriptions that contain no date at all, some mention persons that we can at least associate with other, dated material: two inscriptions (nos. 3 and 4) are conspicuous for their archaic palaeography, and the donors of both are meridarchs, suggesting they belong to the Indo-Greek period of the second to first centuries BC. Nos. 20a and 20b (the two inscriptions on the Mathurā Lion Capital) relate to the family of the satrap Śuḍasa and thus belong to the second half of the first century BC. Its unusual concertina format associates the copper-plate inscription no. 27 with no. 26. Six inscriptions (nos. 1b, 5, 9, 10, 18 and 25) mention members of the Apraca royal house and thus belong to the first half of the first century AD. For no. 45, the find context included coins of Huviṣka and suggests a date during his reign. The relic container no. 15 was found together with the dated relic-chamber slab no. 14 and is possibly (though not certainly) contemporary with it.

After all is said and done, we are left with fifteen relic inscriptions (nos. 45-59 and the new inscription CKI 975) that provide none of the evidence used above and that, in the present state of our knowledge, can at best be assigned to the 'early', 'middle' or 'late' phase of the Gāndhārī epigraphic record, based mostly on palaeographic impressions (as done in Baums 2012).

Appendix 1: chronological sequence of Gandhāran relic inscriptions

The following table lists the thirty-four Gandhāran relic inscriptions for which precise datings can be suggested. The first column gives each inscription's number in Baums 2012 (where available), the second its number in Baums & Glass 2002- a. The third column provides the year and era, including in parentheses elements that are only implied. The last column contains a keyword (most often the name of the donor) to help the reader more quickly identify the inscription in question.

Table 1. Chronological sequence of Gandhāran relic inscriptions.

no.	**CKI**	**Year**	**Date**	**Keyword**
—	827	11 Namipala (= Azes?)	37/36 BC(?)	Balamitra
—	455	39 Azes(?)	9/8 BC(?)	Tora et al.
6	454	50 or 60 (Azes)	AD 3/4 or 13/14	Naganaṃda
1c	176	5 Vijayamitra	AD 4/5	Vijayamitra (II)
7	403	60 (Azes)	AD 13/14	Saṃgharakṣida
8	242	63 Azes	AD 16/17	Iṃdravarma (I) et al.
13	405	73 Azes 27 Vijayamitra 201 Greeks	AD 26/27	Rukhuṇa
14	251	74 Azes	AD 27/28	Ramaka
16	544	76 Azes	AD 29/30	Gunyar Slab
17	257	77 Azes	AD 30/31	Śatruleka
19	359	32 (Vijayamitra)	AD 31/32	Prahodi
—	828	80(?) Azes	AD 33/34(?)	Diśaśpa Stūpa
21	266	83 Azes	AD 36/37	sons of Dhramila et al.
23	358	98 Azes	AD 51/52	Ariaśrava
—	466	118 or 128 (Azes)	AD 71/72 or 81/82	Sazaṃduṣa et al.
26	564	121 Azes	AD 74/75	Helaüta
28	331	126 Azes	AD 79/80	Priavaśa
29	172	134 Azes	AD 87/88	Caṃdrabhi
30	60	136 Azes	AD 89/90	Urasaka
31	563	139 Azes	AD 92/93	Year 139 Reliquary
32	536	147 (Azes)	AD 100/101	Relic Cube
33a	328	156 (Azes)	AD 109/110	Sataṣaka and Muṃji
35	226	157 (Azes)	AD 110/111	Utara
34	225	157 (Azes)	AD 110/111	Khaṃdadata
33b	328	172 (Azes)	AD 125/126	Aprakhaka
36	178	303 (Greeks)	AD 128/129	'Macayemana'
37	149	18 (Kushan)	AD 144/145	Lala
38	152	18 (Kushan)	AD 144/145	Box Lid
39	153	20 (Kushan)	AD 146/147	Śveḍavarma
40	368	20 (Kushan)	AD 146/147	Mitravarma
41	155	28 (Kushan)	AD 154/155	Saṃghamitra
42	511	44 (Kushan)	AD 170/171	Budhapriya and others
43	159	51 (Kushan)	AD 177/178	Vagamarega
44	509	51 (Kushan)	AD 177/178	daughter of Vagamarega

Appendix 2: months of relic establishments

The following table provides an overview and concordance of the two systems of month names – Macedonian (Babylonian) and Indian – that are used interchangeably in Gandhāran inscriptions, and shows how often each month name is attested in the corpus of relic inscriptions. Like the Indian year, the Babylonian year began at (or close to) the spring equinox. Most variants of the Macedonian calendar began at the autumn equinox, but for the Arsacid variant as used in Gandhāra a beginning of the year in spring is here assumed (following Falk & Bennett 2009, also for the correspondence of Babylonian and Macedonian month names in this variant). The month name *ira* (no. 33a) is here interpreted as Babylonian Aiaru (with Falk & Bennett 2009 and Baums 2012), but could phonetically also correspond to a Greek month name Ἡραῖος (attested at Delphi and elsewhere, cf. Liddell & Scott 1940 s.v., as an equivalent of Ὑπερβερεταῖος, but not to my knowledge in Macedonian calendars). The month name *ulo* (no. 40) has here been taken as Ὀλώιος (so also in Falk & Bennett 2009 and Baums 2012), but could also represent the Babylonian month name Ululu (a possibility considered in Falk 2003: 72–73).

Table 2. Concordance of month names used in relic inscriptions.

Macedonian (Babylonian)	**Indian**
Ξανδικός (Nisannu) (1)	Caitra (1)
Ἀρτεμίσιος (Aiaru) (4)	Vaiśākha (1)
Δαίσιος (Simanu)	Jyaiṣṭha (2)
Πάνημος (Du'zu) (1)	Āṣāḍha (6)
Ὀλώιος (Abu) (1)	Śrāvaṇa (6)
Γορπιαῖος (Ululu) (1)	Prauṣṭhapada (2)
Γορπιαῖος ἐμβόλιμος (1)	
Ὑπερβερεταῖος (Tashritu)	Āśvayuj (1)
Δίος (Araḫsamnu)	Kārttika (6)
Ἀπελλαῖος (Kislimu) (1)	Mārgaśīrṣa
Αὐδυναῖος (Tebetu) (1)	Tiṣya (1)
Περίτιος (Shabatu)	Māgha
Δύστρος (Addaru)	Phālguna
Δύστρος ἐμβόλιμος	

Appendix 3: days of relic establishments

The following is a list of the days of the month specified in Gandhāran relic establishments and of how often each of them occurs. Babylonian and Macedonian months begin with the day following the new moon, so that the full moon falls into the middle of the month. In India, both this practice (*amānta*) and the beginning of months with the day after the full moon (*pūrṇimānta*) were and are used. In the following table, the *amānta* system is assumed, at least as predominant. This is supported by the evidence of inscription no. 6 (CKI 454), where day 24 of the month Kārttika correponds to the lunar mansion (*nakṣatra*) Hasta, and no. 26 (CKI 564), where day 13 of the month Gorpiaios corresponds to the lunar mansion Uttara-Proṣṭhapada. Inscription no. 14 (CKI 251), however, where day 3 of the month Āśvayuj corresponds to the lunar mansion Aśvayuj, would seem to indicate *pūrṇimānta* reckoning. Under our assumption of predominantly *amānta* dates, the popularity of, especially, the 8th and the middle (15th) of the month are conspicuous, probably due to being waxing half and full moon days as well as Buddhist *uposatha* days (cf. Brough 1961: 520–522).

1 (2×), 3, 4, 5 (2×), 8 (5×), 9, 10 (3×), 13, 14 (2×), 15 (5×), 16, 20 (2×), 21, 23 (2×), 24 (4×), 25, 27, 30

Appendix 4: dated Gandhāran image inscriptions

The readings in this appendix follow those adopted in Baums & Glass 2002- b. See Baums & Glass 2002- a for bibliographical coverage of alternative proposals.

sa[ṃ] 4 1 phagunasa masasa di paṃcami budhanadasa trepiḍakasa danamukhe madapidarana adhvadidana puyaya bhavatu

'Year 5, on the fifth day of the month Phālguṇa. Donation of the master of the three collections Budhanaṃda. May it be in honor of his mother and father who have passed on.' (CKI 232, 'Brussels Buddha', 5 Kushan = AD 131)

sa 1 1 1 100 10 4 4 proṭhavadasa di 20 4 1 1 1 budhaghoṣasa daṇamu[khe] saghorumasa sadaviyarisa

'Year 318, on the 27th day of Prauṣṭhapada. Donation of Budhaghoṣa, the companion of Saṃghavarma.' (CKI 111, Loriyān Tangai, 318 Greeks = AD 143/144)

saṃ 1 1 1 100 20 20 20 20 4 proṭhavadasa masasa divasaṃmi paṃcami 4 1

'Year 384, on the fifth – 5th – day of the month Prauṣṭhapada.' (CKI 124, Hashtnagar, 384 Greeks = AD 209/210)

saṃ 20 20 20 20 4 4 1 margaśiraṣa masi 4 1 iśe kṣunami niryaïde ime deyadharme dharmapriena ṣamanena piduno arogadakṣinae upajayasa budhapriasa puyae samanuyayaṇa arogadakṣinae

'Year 89, on the 5th of the month Mārgaśira. On this date this donation is offered by the monk Dharmapriya for the reward of health of his father, in honor of his teacher Budhapriya, for the reward of health of his fellow pupils.' (CKI 161, Mamāne Ḍherī, 89 Kushan = AD 215/216)

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Problems of Chronology in Gandhāran Art

Proceedings of the First International Workshop of the Gandhāra Connections Project, University of Oxford, 23rd-24th March, 2017

Edited by
Wannaporn Rienjang
Peter Stewart

Archaeopress Archaeology

Archaeopress Publishing Ltd
Summertown Pavilion
18-24 Middle Way
Summertown
Oxford OX2 7LG

www.archaeopress.com

ISBN 978 1 78491 855 2
ISBN 978 1 78491 856 9 (e-Pdf)

This book is available direct from Archaeopress or from our website www.archaeopress.com