

**Amaravati:
The Art of an Early
Buddhist Monument in
Context**

Edited by Akira Shimada
and Michael Willis

Chapter 3

Money and the Monuments: Coins of the Sada Dynasty of the Coastal Andhra Region

Shailendra Bhandare

The region of the Krishna–Godavari delta, drained by those two major rivers and their several tributaries, is one of the most fertile parts of peninsular India. It is no wonder, therefore, that it produced a large agricultural surplus and emerged as a zone of considerable economic activity. A good survey of pre-historic, proto-historic and Early Historic settlements in the region has been provided by Shimada in his study of the Amaravati *stūpa* (Shimada 2013: 128–31). Around this core area lining the banks of the Krishna River, a number of sites of archaeological interest lay along the river’s tributaries and along the maritime coast of Andhra Pradesh (ibid.: Appendix B).

The chief site of interest in the region has, of course, been Amaravati and its key monument – the famous Buddhist ‘Great Stupa’. However, one of the major problems of the study of Amaravati is that it tends to place excessive emphasis on the monument itself and to focus mainly on sculptural remains from the site in an art-historical perspective. Right from its earliest ‘discovery’ by Colin Mackenzie through to the local *zamindar*’s vandalizing it for building material in the late 18th–early 19th centuries, much scholarly attention has been paid to the monument in regards to what the *stūpa* looked like, what its phases of construction and chronology were and who its political patrons were. By and large this obsession appears to have spilled over to other sites in the region as well. As rightly lamented by H. Sarkar (Sarkar 1987: 631–2; Shimada 2013: 23):

When sites like Amarāvati, Bhaṭṭiprolu or Sālihundam were excavated our emphasis had been on individual buildings or groups of sculptures and we had only a vague idea about the social and economic dynamics operating behind the rise and decline of a township or settlement. We excavated Amarāvati not as a suburb of Dhānyakaṭaka or Dharanikota but as a mere Buddhist establishment or a number of them. A proper approach should have been to study the entire area as an organic whole. ... We focused all our attention on the Buddhist Stūpas as they yielded fine examples of architecture and sculptural art. The fact that they formed part of a larger social and economic fabric was completely lost sight of.

In an attempt to remedy this to a degree, this chapter shifts the emphasis from the monuments and sculpture to contemporary objects (coins) which were shared by all the sites in the region, and which no doubt sustained the monuments from an economic perspective. Monumental architecture needs artisans and craftsmen and they need to be paid. Although we do not know exactly what the mode of payment might have been, it is reasonable to assume that at least some transactions must have been with coins. After all, they are found – both as stray finds and in archaeological contexts – at many sites in the region. This chapter will focus on one series, issued under the Sada dynasty, which is regionally specific to the region of the lower Krishna valley and to coastal Andhra Pradesh in general. These coins are characterized by a shared numismatic vocabulary – they are broadly of the same type, same metal and many bear Brahmi legends which indicate their issuing authority. However, I will not make this an essentially numismatic essay; I will rather focus on the history of their discovery and their appearance in the numismatic literature and offer for comment salient points that contextualize the coins in

broader historical themes like chronology. I will also argue for a reappraisal of previously published aspects of some of the coins, such as their legends.

The beginning of coinage in the lower Krishna valley

'Monetization' was a phenomenon not unknown in the lower Krishna valley by the time the region was teeming with Buddhist activity. By far the chronologically earliest coins ever to be discovered in the Amaravati region are the punch-marked coins. Two hoards are well known to numismatists – the Singavaram hoard and the Amaravati hoard. The contents of these hoards, although generically described as 'punch-marked' coins, vary significantly. The Singavaram hoard was brought to scholarly notice in 1936 (Aravamathan 1938). It apparently consisted of about 60,000 silver coins. Each of them had four marks, which is a type commonly ascribed to the pre-Mauryan horizon and attributed to the 'period of the sixteen Mahajanapadas'. These are thus believed to be issues of 'Andhra Janapada' (Rajgor 2001: 23–6) and dated to approximately the 4th–3rd centuries BCE. A group of 90 coins from this hoard were republished by Puljal and Reddy (2005) after they managed to track them down in the reserve collections of Government Museum, Chennai.

The Amaravati hoard was published in detail by P.L. Gupta (Gupta 1963). It was discovered 'about 20 yards away from the Stupa site and 15 yards to the north of the Travelers' Bungalow, in a Government land' on 3 August 1953 in an earthen pot buried at a depth of about 8–10 feet (2.5–3.0m) from the surface level. The pot contained punch-marked coins estimated to weigh about 60lb (27.215kg). On actual weighing, they were found to be 2,333 *tolas* (around 27kg) comprising 7,668 coins. These coins belong to the 'imperial' Karshapana series, widely considered to be the monetary apparatus of the Magadha–Maurya Empire (Gupta and Hardaker 1985: 1–2), and consequently dated to approximately the 3rd–2nd centuries BCE.

The Sadas: predecessors of the Sātavāhanas in coastal Andhra

The dynastic history of the Krishna–Godavari delta region after the Mauryan period is discussed by Shimada (2013: 39–48). The sites of the Krishna delta are generally associated with the Sātavāhanas and the Ikṣvākus. However, the Sātavāhanas were preceded in coastal Andhra by rulers with names ending in '-Sada'. They are therefore conveniently identified as the 'Sadas of coastal Andhra'. Their coins have been chiefly reported from the Krishna and Godavari Districts, from sites as various as Gudivada, Amaravati, Dharanikota, Bapatla, Chebrolu and Vaddamanu.

The coins of the Sadas have been known for a long while, but it took almost a century to arrive at their correct attribution. The general type of these coins consists of, on the obverse, a lion, standing majestically in profile, mostly facing right, but on some coins to the left. He is usually accompanied by a symbol in front of his mouth, frequently a 'tree-in-railing' symbol. On the reverse these coins have an 'arched hill' symbol, often enclosed in a rectangular border, sometimes accompanied by crescent. However, on many coins the reverse is found obliterated. Sir Walter Elliot

described some of these in his publications (Elliot [1886] 1976: 152b). Rapson was the first to make a note of the specimens held in the British Museum (Rapson 1908: 10–11: pl. 3, 33–46, GP-2 and GP-3), which came from the collections of Elliot, Alexander Cunningham and Robert Sewell, who had collected them from sites dotted across the Krishna and Godavari Districts. On one small lead coin, he also read the legend '...(gha)sadasa'. This was by far the earliest recorded mention of a name ending in '-Sada'.

At the outset, it must be said that Rapson's treatment of these coins is rather unusual and this contributed to a great degree to their incorrect attribution. For understandable reasons he identified them as 'Andhradeśa' coins. He categorized them into two classes by their 'fabrics', and further grouped them by type and weight (*ibid.*: lxxi). This is against the grain of the normal numismatic treatment, where one places primacy on the type, not the 'fabric'. Why Rapson employed such a method of classification for this category of coins is puzzling and the fact he did not define these classificatory 'fabrics' doesn't help the researcher either!

Rapson considered the geographic label 'Andhra' to mean a dynastic appellation too. He therefore tried to attribute coins of both 'fabrics' to the rulers of the 'Andhra' or Sātavāhana dynasty. He grouped 23 coins of 'Fabric B' as of 'lion' type under the category 'name uncertain', because they 'are either uninscribed or have coin-legends so fragmentary that their decipherment must for the present remain uncertain'. However, he did restore the truncated Brahmi legend seen on some of them as '...saka sa[da]sa' and offered a speculation that these could be attributed to Madhariputa Siri Sakasena, an ephemeral 'Andhra' monarch (*ibid.*: lxxv). Further to these, two large 'lion'-type lead coins, originally collected by Walter Elliot 'from Chittala in Yernagudem Talook Godavari district', were listed by Rapson in the 'Andhradeśa' category, but under a different heading, after reading the truncated inscription on one of them as '...vira' (*ibid.*: 2, pl. 1, item 4). Lastly, he noticed two more 'lion'-type coins bearing legends which 'might well contain the title and name of Pulumavi' but hesitated to attribute them conclusively owing to the truncated nature of the inscriptions (*ibid.*: lxxv–lxxvi). The small lead coin with the '...(gha)sadasa' legend was tentatively ascribed by Rapson to the Sātavāhana ruler 'Meghasvati', and the animal on it hesitantly described as a horse (*ibid.*: lxxvii).

The 'Andhra' attribution of Rapson made a lasting impact on the identification of these coins. Rama Rao published similar coins from Amaravati (Rama Rao 1942: 92) and Dharanikota (Rama Rao 1961: 39) but attributed them to the Sātavāhanas. A coin bearing the legend 'Sivamaka Sada' was reported from Chebrolu (Hanumantha Rao 1966). This ruler is mentioned in one of the Amaravati inscriptions (Shimada 2013: 41); however, the inscription had already been identified as belonging to Siva Siri Sātakaṇi, a Sātavāhana king, by Rapson (1908: lii) on the basis of a strange linguistic logic. I.K. Sarma attributed the British Museum's 'lion'-type coins to the Sātavāhana ruler Vāsiṭhiputa Siri Puḷumāvi. In addition to the British Museum coins, the Dharanikota coin published earlier by

Rama Rao was attributed by Sarma to Vāsīthiputa Sātakaṇi, as was another very large lead coin, weighing 39g, found at Mukhalingam and reported in *IAR* 1957–8 (Sarma 1980b: 240).

D. Raja Reddy and P. Suryanarayan Reddy (Reddy and Reddy 1985) were the first to distinguish the ‘lion’-type coins as separate from the Sātavāhana or ‘Andhra’ dynasty. They listed a further 11 coins in their monograph with legends ending in ‘-Sada’, most of them collected as stray finds at Amaravati and Dharanikota. The names recorded on these coins include Maha Sada, Siri Sada, Siva Sada and Sivamaka Sada. After an inscription of a ‘Maharaja Siri Sada’, reported from Guntupalli (Srinivasan 1971–3), which records him as a member of the ‘Mahāmeghavāhana’ family, these coins were identified as ‘Mahāmeghavāhana’ coins by Reddy and Reddy (hence the name of their monograph). The dynastic name ‘Mahāmeghavāhana’ was indeed not new – Khāravēla, the 1st-century BCE king of Kalinga, well known from his Hathigumpha inscription (Jayaswal 1927), was known to have used it. Based on this link, Reddy and Reddy suggested that the rulers who struck these coins must have shared an ancestry with Khāravēla (Reddy and Reddy 1985: 2–5).

Around the same time that Reddy and Reddy published their monograph, the Birla Archaeological and Cultural Research Institute (BACRI) of Hyderabad conducted excavations at Vaddamanu, to the east of Amaravati, in four seasons between 1981 and 1985. These excavations yielded coins with legends ending in ‘-Sada’ in archaeological context, which were published in detail by Kasturi Bai (1986; 1987). The names Maha Sada, Asaka Sada and Sivamaka Sada were noticed on the coins and it was apparent that the suffix ‘Sada’ indeed had dynastic connotation. Accordingly, Kasturi Bai called them the coins of the ‘Sada dynasty’. A total of 47 inscribed and 40 uninscribed ‘lion’-type coins were found at Vaddamanu. Kasturi Bai reattributed the British Museum coins with truncated legends published by Rapson (see above) to Asaka Sada and Sivamaka Sada in light of the new finds at Vaddamanu (1986: 19) and offered a view that ‘Maharaja Siri Sada’ of the Guntupalli inscription might have been the same as ‘Maha Sada’ of the coins found at Vaddamanu. This view was later also advocated by A.M. Shastri, who contended that ‘Maha’ (= ‘great’) was a title Siri Sada adopted after he became the ‘Lord of the *Kalinga-Mahīṣaka* Country’ as indicated in the Guntupalli inscription (Shastri 1993).

The excavators of Vaddamanu, however, took the stratigraphy of their finds too literally and proposed the existence of three rulers named Sivamaka Sada, namely Sivamaka Sada I, II and III, judging from their stratigraphic placement of their coins. The chronology they proposed was to regard Maha Sada as the earliest ruler, followed by Sivamaka Sada I and Asaka Sada, who were succeeded by Sivamaka Sada II, then an unidentified ruler and, lastly, Sivamaka Sada III (Kasturi Bai 1986: 16–19). This sequence is based on the stratigraphic locations of the coins bearing the legends of these rulers, but as the coins came from trenches situated in different localities it will not be until the stratigraphic evidence has been conflated that they can be correlated to one another in an ‘exact’

chronological fashion. It is not, therefore, reasonable to infer that there was more than one ruler named ‘Sivamaka Sada’.

The Sadas finally arrived on the numismatic scene of Amaravati with the publications of archaeologist P.R.K. Prasad (Prasad 1993a; 1999b). He consolidated previous reports of these coins, such as those by Reddy and Reddy and by the excavators of Vaddamanu. In addition, he noted one more coin of Asaka Sada from the collection of the Archaeological Museum at Amaravati (Prasad 1993b), most of the contents of which are made up of excavated finds from that site. Here he offered a view that ‘Asaka Sada’ of the coins might have been named ‘Asoka Sada’, in memory of the great king of the same name. He identified him with a ruler named ‘Dhammaraña Asoka Siri’ mentioned in an inscription found on a slab from Sālihundam. He noted the presence of several Sada coins in the collection of the State Archaeology Museum in Hyderabad and pleaded for a detailed study in order to ascertain the existence of more issuing entities.

Prasad also offered a scheme for the chronological placement of individual Sada kings. According to him, the Siri Sada mentioned in the Guntupalli inscription should be regarded as the progenitor of the dynasty, although he did consider the possibility that Siri Sada and Maha Sada were the same individual. He further proposed the order of succession in the Sada dynasty as Siri Sada > Mahā Sada > Asaka Sada > Siva Sada > Sivamaka Sada. He contended that the dynasty must have ended with Sivamaka Sada, whose coins show similarities to those issued in the same type by Vāsīthiputa Siri Puḷumāvi. Another numismatic marker he employed to corroborate this dynastic succession are some Sada coins which are countermarked with a ‘*nandīpada*’ symbol. Prasad contended that the countermark must have been applied by the Sātavāhanas when they took over from the Sadas. In addition to the lead coins, Prasad published a hoard of small, uninscribed copper coins found at Amaravati (Prasad 1999a). Most of these coins had a ‘standing lion with curved and uplifted tail to left facing a tree-in-railing’ on the obverse, while the majority had a *svastika* on the reverse. A few were also noticed with other symbols, such as a *nandyavarta*, a wheel and a ‘*śrīvatsa*’ symbol. In spite of the obvious similarity of the contents of the obverse motif with Sada coins, Prasad placed a greater emphasis on the ‘crude’ style of manufacture of these small, uninscribed copper pieces, which led him to comment that ‘no doubt the present series of the hoard are archaic’ (1999b: 321). He therefore opted to place them chronologically before the Sadas, commenting that the Sadas might have copied the design motif from these uninscribed coins. However, it is difficult to agree with him, particularly in light of the fact that several similarly uninscribed coins are also found in lead (see below) and they are undoubtedly Sada issues of a lesser denomination. It is more plausible, therefore, to regard the uninscribed copper coins as Sada issues, particularly considering the strong typological link of employing the same ‘lion’-type and having the same overall design as the lead fractional pieces. Most likely, they represented copper equivalents of the small lead denomination.

Notwithstanding the Vaddamanu finds and Prasad’s contributions, Sada coins continued to be published as

‘Sātavāhana’ issues. In 1998 I.K. Sarma published the findings of a small excavation he had undertaken at Amaravati in 1973–5. Here, ‘lion’-type lead coins were recovered from Period II (2 coins) and Period III (37 coins). These are clearly Sada issues and should have been recognized as such but Sarma identified them, as before, as Sātavāhana coins. Not all are illustrated, but nos 3, 5, 6, 7 and 8 shown on plate 4 (Sarma 1998) are most certainly Sada issues. Most of the larger coins are in a poor condition; they have no readable legends and cannot be attributed to specific rulers. The smaller coins appear to be uninscribed fractional Sada issues. The most recent notice of Sada coins in an excavated context comes from M. Veerender and G. Kamalakar of BACRI (Veerender and Kamalakar 2010: 29), who published a preliminary report on the excavations conducted in 1992–4 at Garapadu, located in Peddakurapadu Mandala of Guntur District, Andhra Pradesh. No illustrations are supplied.

According to Prasad’s dynastic scheme, five Sada rulers are known from inscriptions and coins. To these, we may add one more. The coin on which Rapson read the legend ‘...(*gha*)sadasa’ can also be identified as a Sada issue, particularly because it has a legend that ends with the genitive form of ‘Sada’, much like other Sada issues. Rapson had attributed this coin to the Sātavāhana ruler Meghasvati (see above), but the legend on this coin can be restored as ‘...*ya Sadasa*’. In all probability therefore the issuer of this coin is another Sada ruler whose name was (Vija?)ya Sada.

In this context it is useful to examine some lead coins obtained from Ghantasala, published by I.K. Sarma (2000: 185–90). These have on the obverse a lion standing, facing left, with tail curled on the back, fairly similar to that seen on most Sada coins. Some show traces of a Brahmi legend in exergue around the lion. Sarma has proposed reading it as ‘Maharaja Vijayadeva...’ and suggests identifying this ruler with Vijaya Deva Varman of the Śālikāyana dynasty that succeeded the Ikṣvākus in the coastal Andhra region in the late 3rd or the early 4th century CE. However, as the lion on these coins is overwhelmingly similar to that on the Sada coins, it seems unlikely that they are separated by nearly two centuries. Even more interesting is the reverse motif on these coins – they show a two-mast ship exactly like the one seen on Sātavāhana issues of Vāsiṭhiputa Siri Puḷumāvi (Rapson 1908: 22–3) and Siri Yaña Sātakaṇi (Mirashi 1941). This feature, too, gives a mid 1st- to mid 2nd-century CE context for the coins. It is plausible therefore to regard ‘Maharaja Vijayadeva’ to be a Sada or Sada-affiliated ruler, who ruled the Krishna delta region sometime in the 2nd century CE, perhaps as a viceroy of the Sātavāhanas.

A fascinating insight into how Sada coins might be deployed as markers of cultural connectivity between the ‘Buddhist’ worlds of the Indian subcontinent was offered by Walburg (2005: 373–6), who published a lead coin excavated at the monastery of Tissamaharama in Sri Lanka. This coin, ostensibly of ‘lion’ type, bears a truncated legend which identifies it as an issue of a ‘*mahārathi*’, a feudatory title well known from several inscriptions in the Deccan. The lion is closely modelled on the lion seen on many Sada coins but on the reverse the coin bears a symbol (a *svastika* standard in railing) which is entirely Sri Lankan in its employment. It is

certain that this is a locally issued Sri Lankan coin, but the type, the style and script employed and the overall ‘fabric’ and design are all informed by contemporary coins from the delta regions of Andhra. Walburg also mentions one more coin bearing very similar designs, found at Kantarodai and published by Codrington, which he considers to be a fraction of the Tissamaharama coin (Walburg 2005: 375). The Buddhist connections between Andhra Pradesh and Sri Lanka have been discussed by Padma and Holt (2008) and Walburg’s coins fit in with the context neatly.

Chronological considerations

As indicated by Prasad (1999a: 334), it is almost certain that Sivamaka Sada was the last Sada ruler in the region of Amaravati–Dharanikota. His successor was the Sātavāhana ruler Vāsiṭhiputa Siri Puḷumāvi, as is evident from a number of observations. Numismatically, the regiospecific coins (i.e. those coins peculiar to a particular area) of Vāsiṭhiputa Siri Puḷumāvi are the direct type successors of Sivamaka Sada’s coins. The coins in the British Museum published by Rapson are a classic example of such type succession. They retain the Sada lion in its entire splendour, but conspicuously substitute the arched hill motif with Sada affinity on the reverse with an ‘Ujjain’ symbol, which has Sātavāhana affiliations. The tree-in-railing in front of the lion on Sada coins has been omitted on the Sātavāhana coin. Epigraphic evidence also points to such a succession of authority at Amaravati. Excavations at several sites in the lower Krishna–Godavari valleys have amply demonstrated the complete lack of any traces of Sātavāhana rule before Vāsiṭhiputa Siri Puḷumāvi, thus making it clear that it was during his reign that the region was brought under Sātavāhana control, taking over from the preceding dynasty of the Sadas.

The chronological considerations of this dynastic interface are unfortunately not clear. The inscription of Vāsiṭhiputa Siri Puḷumāvi at Amaravati has lost its chronological detail of regnal year, and that of Sivamaka Sada is too fragmentary to indicate one. Other inscriptions say that Vāsiṭhiputa Siri Puḷumāvi reigned for 35 years, while the *Puranas* assign him a rule of 28 years. I have argued for the dates of Gotamīputa Siri Sātakaṇi to be c. 60–85 CE (Bhandare 1999: 168–78). If this is the case, we can regard the accession of Vāsiṭhiputa Siri Puḷumāvi as taking place after that date.

An epigraphical clue that helps ascertain the date of conquest of the lower Krishna valley lies in Vāsiṭhiputa Siri Puḷumāvi’s inscription at Nasik (Senart 1905–6: no. 2). This is dated in his 19th regnal year, which would correspond to 104 CE if we consider Puḷumāvi to have succeeded Gotamīputa Siri Sātakaṇi c. 85 CE. The epithet accorded to Puḷumāvi here is *dakṣiṇāpathésara* (Skt *dakṣiṇāpathéshwara*), meaning ‘the Lord of the Deccan’. Such a lofty epithet could be applied to him only after his conquests, which can be dated c. 85–103 CE. It is reasonable therefore to assume that the Sātavāhanas succeeded the Sadas around 100 CE.

Based on this chronological surmise, the Sada ruler Sivamaka can be dated to the same epoch. Prasad has argued on linguistic evidence that Siva Sada was the father of Sivamaka (1999b: 334). The second chronological marker,

for the inception of the Sada dynasty, may be decided by the palaeography of the inscriptions of Maha Sada and Siri Sada, which exhibit an earlier, simpler form of the script than that seen in the case of the inscription bearing Sivamaka Sada's name. The link between Siri Sada and Khāravēla, the 1st-century BCE king of Kāliṅga, is clear because they use the same familial term *'Mahāmeghavāhana'* for them. It is reasonable therefore to regard Siri Sada, the first of the Sada dynasty, to be a close successor of Khāravēla. Shimada, discussing this epigraphic context (Shimada 2013: 57), suggests an inception date for the Sadas of around 40–20 BCE. Working within these parameters, we get the following chronology for the Sadas:

| | |
|----------------|-----------------|
| Siri Sada | c. 20 BCE–10 CE |
| Maha Sada | c. 10–30 CE |
| (Vija?)ya Sada | c. 30–40 CE |
| Asaka Sada | c. 40–65 CE |
| Siva Sada | c. 65–75 CE |
| Sivamaka Sada | c. 75–100 CE |

It may be seen that a relatively shorter period has been proposed for (Vija?)ya Sada and Siva Sada than the other kings. This is because not many coins of these rulers are known, which suggests they probably had short reigns. The kings with most numerous coins known are Asaka Sada and Sivamaka Sada, hence the broader span of years proposed for their rule.

A word may be said here about Prasad's contention that the coins counterstruck with a *nandipada* symbol should be regarded as a marker for dynastic succession between the Sadas and the Sātavāhanas. As will be shown below, the counterstriking appears not to have been confined to Sada coins alone – even Sātavāhana issues are known with a *nandipada* countermark. It is more reasonable, therefore, to see the countermarking as a process that happened later, perhaps in late 2nd–early 3rd century CE, to revalidate older coins already in circulation. The reasons behind such revalidation can be numerous – and dynastic succession can indeed be one of them, though available data suggest this was certainly not the Sada–Sātavāhana interface. A plausible guess would be the Sātavāhana–Ikṣvāku interface, but other more mundane reasons such as the reintroduction of older coins into circulation because of an episode of paucity of metal to make new ones should also be considered.

Sada coins: reattribution and commentary

With this backdrop, I will now turn to some coins. A number of Sada coins are listed below. In each case I give a numismatic description of the coin and add further commentary if necessary. Most are from the British Museum's collection. After the initial publication of Rapson, who regarded them as 'Andhra' (or Sātavāhana) coins, it is time that they are now accorded their correct attribution as 'Sada' issues.

1. Coin with the title 'Aira' (lead, 36.2g; BM no. 1886,0505.7; ex-Walter Elliot) (Fig. 29)

- Obv.: a lion in profile, facing to left; truncated; Brahmi legend *'airasa (rañō)...*' above.
- Rev.: obliterated.

Notes: Rapson (1908: lxxiv–lxxv; also 2, n. 4, pl. 1) suggests this coin bore 'a name ending in *-vira*' but postulates that it cannot be attributed to any known member of the 'Andhra' dynasty. He also considers it to be a uniface coin and as such of an 'early date' and therefore rules out its attribution to the Ikṣvāku ruler Śrī Vīra Puruṣadatta.

The legend in fact is *'airasa (rañō)...*' and there is nothing to suggest that it was struck only on one side. As many 'lion'-type coins listed by Rapson and indeed hereunder show, it is quite common for these coins to have an obliterated reverse. The palaeography of the visible letters appears to be early. The positioning of the letters also suggests that it begins with the visible word rather than ending with it.

'Aira' as a title is known from a number of inscriptions in the coastal Andhra region or the *Kāliṅga-Mahīṣaka* country of yore. It is appended to the name of King Khāravēla in the Hathigumpha inscription (Jayaswal 1927: 221) of the Udayagiri monastic cave complex. In the same complex cave no. 9, or 'Manchapuri cave', has an inscription of a king named 'Kudepasiri' who sports this title (Sircar 1965: 221–2). Most importantly, it was also held by Maha Sada in the Velpuru inscription (Sircar 1957: 82–6). The exact meaning of this title has eluded scholars, but Sircar suggests it means 'noble', deriving it from the Sanskrit *'ārya*'. The occurrence of this title on the coin undoubtedly indicates that its issuer was either a Sada or related to other kings in the region where the Sadas flourished and claimed a kinship and/or ancestry by the use of similar titles. It would not be implausible to take it as an issue of Maha Sada, because it weighs close to his coins unearthed at Vaddamanu (see below) and he is known to have used the title.



Figure 29 Coin with the title 'Aira', lead, 36.2g, British Museum, 1886,0505.7

2. Coin of Siri Sada (lead, 3.7g; Reddy and Reddy 1985: 14, no. 9; collection of Dr T. Devendra Rao, New Hampshire/Hyderabad) (Fig. 30)

- Obv.: lion standing facing right, traces of a symbol in its front; Brahmi legend *'...Siri Sadasa'* above.
- Rev.: three-arched hill enclosed in a double rectangle.

Note: Reddy and Reddy 1985 describe the material as copper, but on physical examination it was found to be of lead.



Figure 30 Coin of Siri Sada, lead, 3.7g, collection of Dr T. Devendra Rao, New Hampshire/Hyderabad

3. Coins of Maha Sada

Example 1 (lead, 35.5g; Vaddamanu excavations, no. 1165, C 7.2 VDM III; (Fig. 31)

- Obv.: lion in profile standing facing right, tree-in-railing to right; Brahmi legend ‘...ño Siri Maha Sadasa’ above.
- Rev.: obliterated.

Example 2 (lead, 7.21g; Reddy and Reddy 1985: 9, no. 1; collection of Dr T. Devendra Rao, New Hampshire/Hyderabad) (Fig. 32)

- Obv.: lion standing facing left with curved tail; Brahmi legend ‘Raño Siri Maha Sadasa’ above.
- Rev.: six-arched hill with dots in each arch, enclosed in a double rectangle.

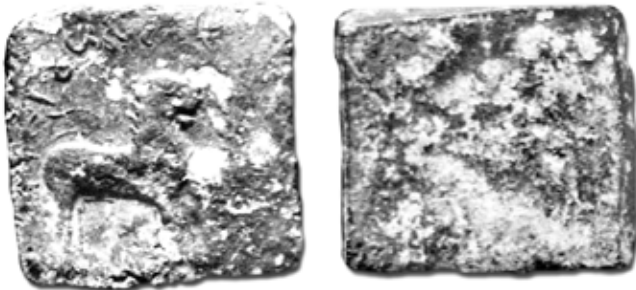


Figure 31 Coin of Maha Sada, lead, 35.5g, Vaddamanu



Figure 32 Coin of Maha Sada, lead, 7.21g, collection of Dr T. Devendra Rao, New Hampshire/Hyderabad

4. Coin of (Vija?)ya Sada

Example 1 (lead, 1.63g; BM no. 1908,0902.27; ex-Pearse) (Fig. 33)

- Obv.: lion standing facing left; Brahmi legend ‘...ya Sadasa’ above.
- Rev.: obliterated.



Figure 33 Coin of [Vija?]ya Sada, lead, 1.63g, British Museum, 1908,0902.27

5. Coins of Asaka Sada (Figs 34–7)

Example 1 (lead, 9.9g; BM no. 1908,0912.3; Rapson 1908: 10, no. G.P. 2; ex-Pearse) (Fig. 34)

- Obv.: lion standing majestically facing right; Brahmi legend ‘...(A)sakasadasa’ above.
- Rev.: part of rectangular border and a crescent visible.

Example 2 (lead, weight not recorded; BM no. 1908,0912.4; Rapson 1908: 10, no. G.P. 3; ex-Pearse) (Fig. 35)

- Obv.: lion standing majestically facing right, a tree-in-railing in its front; Brahmi legend ‘...kasadasa’ above.
- Rev.: part of rectangular border and a crescent visible.

Example 3 (lead, 7.7g; collection of K.K. Maheshwari, Mumbai) (Fig. 36)

- Obv.: lion standing majestically facing right on a double-lined platform, tree-in-railing to right; Brahmi legend ‘...ri Asa(ka)...’ visible in top left corner.
- Rev.: six-arched hill, with a dot in each arch, enclosed in a double rectangular border.

Note: the coin was reportedly obtained at Hyderabad.

Example 4 (lead, weight not available; Prasad 1993a: 55, nos 2 and 3) (Fig. 37)

- Obv.: lion standing facing right, Brahmi legend ‘...(Si)ri Asaka Sadasa’ above.
- Rev.: six-arched hill, with a dot in each arch, enclosed in a double rectangular border; wavy lines below, outside the border.



Figure 34 Coin of Asaka Sada, lead, 9.9g, British Museum, 1908,0912.3



Figure 35 Coin of Asaka Sada, lead, weight not recorded, British Museum, 1908,0912.4



Figure 36 Coin of Asaka Sada, lead, 7.7g, collection of K.K. Maheshwari, Mumbai



Figure 37 Coin of Asaka Sada, lead, weight not available



6. Coin of Siva Sada (lead, 4.4g; Reddy and Reddy 1985: 11, no. 4; collection of Dr T. Devendra Rao, New Hampshire/Hyderabad) (Fig. 38)

- Obv.: lion facing right, Brahmi legend ‘...ño Siva Sa(da)sa’ above.
- Rev.: six-arched hill, surmounted by crescent and a wavy line below, enclosed in a border of double rectangle with a frill in between.



Figure 38 Coin of Siva Sada, lead, 4.4g, collection of Dr T. Devendra Rao, New Hampshire/Hyderabad



7. Coins of Sivamaka Sada

Example 1 (lead, 12.03g; Vaddamanu excavations, no. 1408, R7.3, VDM IV) (Fig. 39)

- Obv.: lion standing facing to right, tree-in-railing to right; Brahmi legend ‘... (ño) Siri Sivamaka Sada...’ above.
- Rev.: traces of double rectangle and crescent.

Example 2 (lead, 15.08g; Vaddamanu excavations, no. 1407, D5.3 VDM II) (Fig. 40)

- Obv.: lion standing in profile facing right and a *Dharmachakra* or wheel-standard in its front, both on two-lined platform; Brahmi legend ‘...Sivamaka Sadasa’ from 11 o’clock to 5 o’clock.
- Rev.: six-arched hill with a dot in each arch, surmounted by a crescent, enclosed within a double rectangular border.

Note: the device of a wheel standard in front of the lion definitely alludes to a Buddhist context.

Example 3 (lead, 7.55g; BM no. 1905,1007.55; Rapson 1908: 53, no. 205; ex-Sewell) (Fig. 41)

- Obv.: lion seated on its hind legs, facing; Brahmi legend ‘Raño Siri Sivama[ka Sa]dasa’.
- Rev.: indistinct, but appears to be a ‘grain’ shape between two vertical lines, all executed with rows of dots.

Note: this rather impressive coin was relegated to the category of ‘uninscribed or of uncertain attribution’ by Rapson. Perhaps before its cleaning and conservation the legend was invisible to Rapson but it is quite clear on the coin now. Although the top ends of the letters are truncated beyond the visible field, the legend can be assuredly reconstructed as indicated above.

The type of the coin is remarkable for showing the seated lion in its frontal view much like it would be depicted sitting on a pillar capital. If the depictions on drum slabs from the Amaravati *stūpa* (Shimada 2013: pls 21 and 61) are taken to be realistic, we see such pillars with seated lions adorning the entrance vestibules of the monument, as seen in different reconstructions of the *stūpa* (ibid.: 13–15).



Figure 39 Coin of Sivamaka Sada, lead, 12.03g, Vaddamanu



Figure 42 Unscripted Sada coin, lead, 5.5g, British Museum, 1905,1007.2



Figure 40 Coin of Sivamaka Sada, lead, 15.08g, Vaddamanu



Figure 43 Unscripted Sada coin, lead, 2.87g, British Museum, 1908,0912.26



Figure 41 Coin of Sivamaka Sada, lead, 7.55g, British Museum, 1905,1007.55



Figure 44 Unscripted Sada coin, lead, 1.6g, collection of Dr T. Devendra Rao, New Hampshire/Hyderabad

8. Unscripted fractional Sada coins

Example 1 (lead, 5.5g; Rapson 1908: 12, no. 44; BM no. 1905,1007.2; ex- Sewell) (Fig. 42)

- Obv.: lion standing facing to right.
- Rev.: obliterated.

Example 2 (lead, 2.87g; Rapson 1908: 53, no. 206; BM no. 1908,0912.26; ex- Sewell) (Fig. 43)

- Obv.: lion standing facing to right.
- Rev.: obliterated.

Example 3 (lead, 1.6g; Reddy and Reddy 1985: 14, no. 10; collection of Dr T. Devendra Rao, New Hampshire/Hyderabad) (Fig. 44)

- Obv.: lion standing facing right, a round object to right.
- Rev.: six-arched hill with a dot in each arch.

Example 4 (lead, 3.2g; collection of Dr T. Devendra Rao, New Hampshire/Hyderabad) (Fig. 45)

- Obv.: lion standing facing left, on a platform; tree-in-railing to left and *nandipada* symbol above.
- Rev.: blank.



Figure 45 Unscripted Sada coin, lead, 3.2g, collection of Dr T. Devendra Rao, New Hampshire/Hyderabad

9. Coins of Siri Pulumāvi in 'lion' type

Example 1 (lead, 8.72g; Rapson 1908: 24, no. G.P. 2; BM no. 1908,0912.17) (Fig. 46)

- Obv.: lion standing in profile, facing right; Brahmi legend '...Samisa Siri...'
- Rev.: Ujjain symbol.

Example 2 (lead, 7.2g; Rapson 1908: 24, no. G.P. 3; BM no. 1908,0912.18) (Fig. 47)

- Obv.: lion standing in profile, facing right; Brahmi legend '...Siri Pulu...'
- Rev.: Ujjain symbol.



Figure 46 Coin of Siri Pulumāvi in 'lion' type, lead, 8.72g, British Museum, 1908.0912.17



Figure 48 Countermarked coin, lead, 11.5g, British Museum, 1922,0817.10



Figure 47 Coin of Siri Pulumāvi in 'lion' type, lead, 7.2g, British Museum, 1908,0912.18



Figure 49 Countermarked coin, lead, 10.2g, British Museum, 1922,0817.15

10. Countermarked coins

Example 1 (lead, 11.5g; BM no. 1922,0817.10; ex-E.D. Puzey, Esq.) (Fig. 48)

- Obv.: lion standing profile to right, *nandipada* symbol countermarked on front legs.
- Rev.: blank.

Example 2 (lead, 10.2g; BM no. 1922,0817.15; ex-E.D. Puzey, Esq.) (Fig. 49)

- Obv.: lion standing profile to left, *nandipada* symbol countermarked on its face.
- Rev.: blank.

Example 3 (lead, weight not recorded; BM no.1905,1007.47) (Fig. 50)

- Obv.: horse facing left, countermarked twice with *nandipada* symbol; Brahmi legend 'Raño Gotamipu(ta)...' around.
- Rev.: traces of Ujjain symbol.



Figure 50 Countermarked coin, lead, weight not recorded, British Museum, 1905,1007.47

Example 4 (lead, weight not recorded; BM no. 1922,0817.14) (Fig. 51)

- Obv.: six-arched hill surmounted by crescent in centre, deeply countermarked by a *nandipada* symbol; Brahmi legend '...ri Yaña Satakani...' around.
- Rev.: traces of Ujjain symbol.

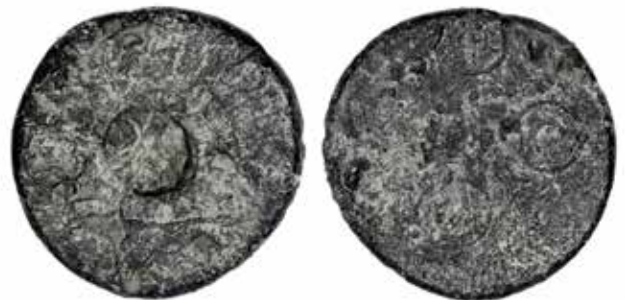


Figure 51 Countermarked coin, lead, weight not recorded, British Museum, 1922,0817.14

Note: the last two coins in this group are of the Sātavāhana ruler Gotamiputa Siri Yaña Satakani. The presence of *nandipada* countermarks demonstrates that this was not done by the Sātavāhanas when they succeeded the Sadas.

Bibliography

- Abraham, S. 2003. Social complexity in Early Tamilakam: sites and ceramics from the Palghat Gap, unpublished PhD thesis, University of Pennsylvania, Philadelphia.
- Allchin, B. and Allchin, F.R. 1982. *The Rise of Civilization in India and Pakistan*, Cambridge.
- Allchin, F.R. 1956. The stone alignments of southern Hyderabad, *Man* 150: 133–6.
- Almond, P. C. 1988. *The British Discovery of Buddhism*, Cambridge.
- Anderson, J. 1883. *Catalogue and Hand-book of the Archaeological Collections in the Indian Museum*, 2 vols, Calcutta.
- Aramaki, N., Dayalan, D. and Nakanishi, M. 2011. *A New Approach to the Origin of Mahāyānasūtra Movement on the Basis of Art Historical and Archaeological Evidence. A Preliminary Report on the Research* (Grant-in-Aid for Scientific Research, The Japan Society for Promotion of Science, Project (C), no. 20520050), Kyoto.
- Aravamuthan T.G. 1938. A new type of punch marked coin, in *Transactions of the International Numismatic Congress, 1936* (ed. J. Allan, H. Mattingly and E.S.G. Robinson): 393–400, London.
- Arlt, R. and Hiyama, S. 2015. Theatrical figures in the mural paintings of Kucha, *Journal of the International Association of Buddhist Studies* 38 (*Proceedings of the 17th Congress of the International Association of Buddhist Studies (IABS) 2014*, Vienna): 313–48.
- Arunasiri, K. 2002. Mahāthūpa (2), in Weeraratne 2002: 486–99.
- Babington, J. 1823. Description of the Pandoo coolies in Malabar, *Transaction of the Literary Society of Bombay* 3: 234–330.
- Bachhofer, L. 1929 [1972], *Early Indian Sculpture*, Munich (reprinted New York, 1972).
- Bagchi, P.C. 1941. The eight great caityas and their cult, *Indian Historical Quarterly* 17: 223–35 (reprinted in *Indological Studies: A Collection of Essays*: 138–53, Santiniketan, 1982).
- Banerjee, N.R. 1965. *The Iron Age in India*, Delhi.
- Barrett, D.E. 1954a. *Sculptures from Amaravati in the British Museum*, London.
- Barrett, D.E. 1954b. The later school of Amaravati and its influences, *Arts and Letters (Journal of the India, Pakistan and Ceylon Society)* 28(2): 41–53.
- Barrett, D.E. 1959. A rare sculpture from the Andhradeśa, *British Museum Quarterly* 21(4): 102–4.
- Bauer, A.M. 2011. Producing the political landscape: monuments, labor, water, and place in Iron Age central Karnataka, in *The Archaeology of Politics: The Materiality of Political Practice and Action in the Past* (ed. P.G. Johansen and A.M. Bauer): 83–113, Newcastle upon Tyne.
- Bauer, A.M. 2014. Impacts of mid- to late-Holocene land use on residual hill geomorphology: a remote sensing and archaeological evaluation of human-related soil erosion in Central Karnataka, South India, *Holocene* 24: 3–14.
- Bauer, A.M. 2015. *Before Vijayanagara: Prehistoric Politics and Landscapes in the Tungabhadra Basin*, Vijayanagara Research Project Monograph Series, New Delhi.
- Bauer, A.M. and Johansen, P.G. 2015. Prehistoric mortuary practices and the constitution of social relationships: implications of the first radiocarbon dates from Maski on a south Indian ‘type site’, *Radiocarbon* 57(4): 1–12.
- Bauer, A.M. and Morrison, K.D. 2008. Water management and reservoirs in India and Sri Lanka, in *Encyclopaedia of the History of Science, Technology, and Medicine in Non-Western Cultures* (ed. H.L. Selin), 2nd edn: 2207–14, New York.
- Bauer, A.M. and Trivedi, M. 2013. Contextualizing megalithic places: survey, mapping and surface documentation in the environs of Hire Benakal, *Man and Environment* 38(2): 46–61.
- Bauer, A.M., Johansen, P.G. and Bauer, R.L. 2007. Toward a political ecology in early south India: preliminary considerations of the social context of land and animal use in the southern Deccan, Neolithic through Early Historic periods, *Asian Perspectives* 46(1): 1–38.
- Bauer, R.L. 2007. *Animals in Social Life: Animal Use in Iron Age Southern India*, Saarbrücken.
- Becker, C. 2009. Remembering the Amaravati stupa: the revival of a ‘ruin’, in Hawkes and Shimada 2009: 267–87.
- Becker, C. 2015. *Shifting Stones, Shaping the Past: Sculpture from the Buddhist Stūpas of Andhra Pradesh*, New York.
- Begley, W.E. 1968. The identification of the Ajanta fragment in the Boston Museum, *Oriental Art* 14: 24–33.

- Bendall, C. (ed.) [1897–1902]. *Çikshāsamuccaya: a compendium of Buddhist teaching compiled by Çāntideva chiefly from earlier Mahāyāna-Sūtras*, Bibliotheca Buddhica 1, St Petersburg (reprinted Delhi, 1992).
- Bénisti, M. 1959. Nāgārjunakoṇḍa: Essai de ‘caractérogie’, *Arts Asiatiques* 6(3): 217–34.
- Berkwitz, S. (trans.) 2007. *The History of the Buddha’s Relic Shrine: A Translation of the Sinhala Thupavamsa*, New York.
- Bhandare, S. 1999. Historical analysis of the Sātavāhana era: a study of coins, unpublished PhD thesis, University of Mumbai.
- Bilbey, D. and Trusted, M. 2010. ‘The question of casts’: collecting and later reassessment of the cast collections at South Kensington, in *Plaster Casts: Making, Collecting, and Displaying from Classical Antiquity to the Present* (ed. R. Frederiksen and E. Marchand): 465–83, Berlin and New York.
- Bird, J. 1847. *Historical Researches on the Origin and Principles of the Bauddha and Jaina Religions*, Bombay.
- Birla Archaeological and Cultural Research Institute 1983. *Vaddamanu Excavations and Exploration in the Krishna Valley*, Hyderabad.
- Boëthius, A. and Ward-Perkins, J.B. 1970. *Etruscan and Roman Architecture*, Harmondsworth.
- Boivin, N., Fuller, D., Korisettar, R. and Petraglia, M. 2008. First farmers in south India: the role of internal processes and external influences in the emergence and transformation of south India’s earliest settled societies, *Pragdhara* 18: 179–200.
- Boppearachchi, O. 2008. Sculptures of Amaravati tradition in Sri Lanka, *Journal of the Asiatic Society* 50: 1–26.
- Boswell, J.A.C. 1871. A letter from J.A.C. Boswell to the Acting Secretary to the Board of Revenue, dated Masulipatam, 31 March 1870, India Home Proceeding, Public, August 19 (no. 1301), 1871 (BL, IOR, P/507).
- Branfill, B.R. 1881. On the Savandurga Rude stone cemetery, central Maisur, *Indian Antiquary* 10: 1–12.
- Brilliant, R. 1963. *Gesture and Rank in Roman Art: The Use of Gestures to Denote Status in Roman Sculpture and Coinage*, Memoirs of the Connecticut Academy of Arts and Sciences 14, New Haven, Conn.
- Brilliant, R. 1967. *The Arch of Septimius Severus in the Roman Forum*, Memoirs of the American Academy in Rome 29, Rome.
- Brown, P. 1942. *Indian Architecture (Buddhist and Hindu Periods)*, 2nd edn, Bombay.
- Brown, R.L. 2004. Vākātaka-period Hindu sculpture, in *The Vākātaka Heritage, Indian Culture at the Crossroads* (ed. H.T. Bakker): 59–69, Groningen.
- Brown, R.L. 2014. *Carrying Buddhism: The Role of Metal Icons in the Spread and Development of Buddhism*, 20th J. Gonda lecture, 2012, Amsterdam.
- Brubaker, R. 2001. Aspects of mortuary variability in the south Indian Iron Age, *Bulletin of Deccan College Post-Graduate and Research Institute* 60–1: 253–302.
- Buchthal, H. 1943. The common classical sources of Buddhist and Christian art, *Journal of the Royal Asiatic Society of Great Britain and Ireland* ns 75: 137–48.
- Burgess, J. 1882a. A letter from J. Burgess to the Secretary to the Government of India, dated 22 Seton Place, Edinburgh, 2 August 1882, Home Proceeding, Archaeology, September 1882 (BL, IOR, P/1681).
- Burgess, J. 1882b. *Notes on the Amaravati Stupa*, Madras.
- Burgess, J. 1887. *The Buddhist Stupas of Amaravati and Jaggayapeta in the Krishna District, Madras Presidency, Surveyed in 1882*, Archaeological Survey of Southern India 1, London (reprinted Varanasi, 1970).
- Buswell, R.E. and Lopez, D.S. (eds). 2014. *The Princeton Dictionary of Buddhism*, Princeton, N.J.
- Butcher, K. 2003. *Roman Syria and the Near East*, Los Angeles.
- Casson, L. 1989. The ‘Periplus Maris Erythraei’, Princeton, N.J.
- Chanda, R. 1925. Some unpublished Amaravati inscriptions, *EI* 15: 258–75.
- Chatopadhyaya, B.D. 2003. Transition to the Early Historical phase in the Deccan: a note, in *Studying Early India: Archaeological Texts and Historical Issues* (ed. B.D. Chattopadhyaya): 39–47, New Delhi.
- Childe, V.G. 1947. Megaliths, *Ancient India* 4: 4–13.
- Chirapravati, P. 2008. Illustrating the lives of the Bodhisattva at Wat Si Chum, in *Past Lives of the Buddha: Wat Si Chum-Art, Architecture and Inscription* (ed. P. Skilling): 13–39, Bangkok.
- Chowdhary, S.N. 2010. *Devnimori: Buddhist Monuments*, Maharaja Sayajirao University Archaeology Series 19, Vadodara, Gujarat.
- Chung, Jin-Il and Schmidt, M. 2008. *Sanskrit-Wörterbuch der buddhistischen Texte aus den Turfan-Funden und der kanonischen Literatur der Sarvāstivāda-Schule*, fasc. 20, Göttingen.
- Cimino, R.M. 1994. The ‘Tabula Putingeriana’, in *Ancient Rome and India: Commercial and Cultural Contacts between the Roman World and India* (ed. R.M. Cimino): 10–11, New Delhi.
- Claridge, A. 1998. *Rome: An Oxford Archaeological Guide*, New York.
- Cleveland Museum of Art, 1964. *Ancient Sculpture from India* (exhib. cat.), Cleveland, Ohio.
- Coarelli, F. and Patterson, H. 2008. *La Colonna de Marco Aurelio*, Rome.
- Cody, J.M. 1973. New evidence for the Republican *Aedes Vestae*, *American Journal of Archaeology* 77(1): 43–50.
- Cole, H.H. 1872. *The Architecture of Ancient Delhi: Especially the Buildings around the Kutb Minar*, London.
- Cole, H.H. 1882a. Memorandum of the present condition of Amaravati tope in Madras, India Home Proceedings, Archaeology, June 1882 (BL, IOR, P/1681).
- Cole, H.H. 1882b. A letter from H.H. Cole to the Secretary to the Government of India, Home Department, Simla, dated Madras, 27 March 1882, Madras Public Proceedings, 16 June 1882, nos 412, 413 (BL, IOR, P/1925).
- Cook, E. 1997. *The Stupa: Sacred Symbol of Enlightenment*, Crystal Mirror Series 12, Berkeley, Calif.
- Coomaraswamy, A.K. 1908. *Mediaeval Sinhalese Art*, New York.
- Coomaraswamy, A.K. 1927. *History of Indian and Indonesian Art*, New York.
- Coomaraswamy, A. K. 1928a. *Yakṣas: Part I*, Washington, D.C.
- Coomaraswamy, A.K. 1928b. Notes sur la sculpture bouddhique, *Révue des Arts Asiatiques* 5: 244–52.
- Coomaraswamy, A.K. 1929. Buddhist reliefs from Nāgārjunakoṇḍa and Amarāvātī, *Rupam* 38–39: 70–6.
- Coomaraswamy, A.K. 1931. *Yakṣas: Part II*, Washington, D.C.
- Cousins, L.S. 2003. ‘Sākiyabhikkhu/Sakyabhikkhu/Śākyabhikṣu’: a mistaken link to the Mahāyāna?, *Nagoya Studies in Indian Culture and Buddhism: Sambhāsā* 23: 1–27.
- Cowell, E.B. and Neil, R.A. 1886 (eds). *Dīvyāvadāna: A Collection of Early Buddhist Legends*, Cambridge (reprinted Delhi, 1987).
- de Coral Rémusat, G. 1934. De l’origine commune des linteaux de l’Inde Pallava et des linteaux khmers préangkorien, *Révue des Arts Asiatiques* 8(3): 242–50.
- De Puma, R.D. 1991. Roman bronzes from Kolhapur, in *Rome and India. The Ancient Sea Trade* (ed. V. Begley and R.D. De Puma): 82–112, Madison, Wis.
- DeCaroli, R. 2007. Text versus image: the implications of physical evidence for Buddhist history, in *Theoretical Approaches to the Archaeology of Religion: Belief in the Past* (ed. D.S. Whitley and K. Hays-Gilpin): 119–28, Walnut Creek, Calif.
- Dehejia, V. 1997. *Discourses in Early Buddhist Art: Visual Narratives of India*, Delhi.
- Delatour, C.R. 1996. Gabriel Jouveau-Dubreuil: l’érudit de Pondichéry, in *Âges et visages de l’Asie: un siècle d’exploration à travers les collections du musée Guimet* (ed. J.-P. Desroches, E. Starcky and C. Gras): 31–40, Dijon.
- Deo, S.B. 1985. The megaliths: their culture, ecology, economy and technology, in *Recent Advances in Indian Archaeology, Proceedings of the Seminar Held in Poona in 1983* (ed. S.B. Deo and K. Paddayya): 89–99, Poona.
- Deo, S.B. and Jamkhedkar, A.P. 1982. *Excavations at Naikund 1978–80*, Bombay.
- Derrett, D.M. (trans.) 1983. *A Textbook for Novices: Jayarakṣita’s ‘Perspicuous Commentary on the Compendium of Conduct by Śrīghana’*, Pubblicazioni di ‘Indologica Taurinensia’ 15, Turin.
- Desmond, R. 1982. *The India Museum, 1801–1879*, London.
- Dewan, D. Deen Dayal, and Hutton, D. 2013. *Raja Deen Dayal: Artist-Photographer in 19th-Century India*, New Delhi.
- Dimand, M.S. 1928. Two Indian reliefs of the Amarāvātī school, *Bulletin of Metropolitan Museum Art* 23(10): 238–44.
- Disanayaka, J.B. 1987. *Mihintale: Cradle of Sinhala Buddhist Civilization*, Colombo.
- Dowman, K. (trans.) 1973. Padmasambhava and Yeshe Tsogyal, *The Legend of the Great Stūpa (mChod-rtan-chen-po-bya-rung-kha-shor-gyi-lo-*

- rgyu-thos-pas-grol-ba), *The Life Story of the Lotus Born Guru (Zab-pa-skor-bdon-las-O-rgyen-rnam-thar-dpag-bsam-lyon-sing)*, Berkeley, Calif.
- ET = *Epigraphia Indica*
- Ejima, Y. et al. 1985–93. *Index to the Saddharmapundarikasūtra – Sanskrit, Tibetan, Chinese*, Tokyo.
- Elliot, W. 1871. Letter from Sir Walter Elliot to the Secretary of State for India, Enclosure no. 2, Preservation of the important Buddhist remains at Amaravati, India Home Proceeding, 1871 (BL, IOR, P/507).
- Elliot, W. 1872. Archaeology in the Krishna District, *The Indian Antiquary* 1: 346–8.
- Elliott, W. [1886] 1976. *Coins of Southern India*, Varanasi (originally published London, 1886).
- Elphinstone, M. 1815. *An Account of the Kingdom of Caubul and its Dependencies in Persia, Tartary and India*, London.
- Emmerick, R.E. (ed.) 1967. *Tibetan Texts Concerning Khotan*, London.
- Falk, H. 2012. A new Kuṣāna Bodhisattva from the time of Huvīṣka, *ARIRIAB* 1: 13–18 and pl. 4.
- Fergusson, J. 1867. Description of the Amravati tope in Guntur, *Journal of the Royal Asiatic Society of Great Britain and Ireland* 3: 132–66.
- Fergusson, J. 1868. *Tree and Serpent Worship: Or, Illustrations of Mythology and Art in India in the First and Fourth Centuries after Christ. From the Sculptures of the Buddhist Topes at Sanchi and Amravati*, London.
- Fergusson, J. 1873. *Tree and Serpent Worship: Or, Illustrations of Mythology and Art in India in the First and Fourth Centuries after Christ. From the Sculptures of the Buddhist Topes at Sanchi and Amravati*, 2nd edn, London.
- Fergusson, J. 1891. *History of Indian and Eastern Architecture*, London.
- Fogelin, L. 2006. *Archaeology of Early Buddhism*, Lanham, Md.
- Foucher, A. 1928. Les sculptures d'Amarāvati, *Révue des Arts Asiatiques* 5: 9–24.
- Fuller, D.Q. 2005. Ceramics, seeds and culinary change in prehistoric India, *Antiquity* 79(4): 761–77.
- Fuller, D.Q. 2006. Agricultural origins and frontiers in South Asia: a working synthesis, *Journal of World Prehistory* 20(1): 1–86.
- Fuller, D.Q., Boivin, N. and Korisettar, R. 2007. Dating the Neolithic of south India: new radiometric evidence for key economic, social and ritual transformations, *Antiquity* 81(3): 755–78.
- Fürer-Haimendorf, C. von 1953. New aspects of the Dravidian problem, *Tamil Culture* 2: 127–35.
- Geary, D. 2008. Destination enlightenment: branding Buddhism and spiritual tourism in Bodhgaya, Bihar, *Anthropology Today* 24(3): 11–14.
- Geiger, W. and Bode, M.H. (trans.) 1912. *The Mahāvamsa or The Great Chronicle of Ceylon*, Colombo.
- Ghosh, A. 1979. The early phase of the stupa at Amaravati, south-east India, *Ancient Ceylon* 3: 97–103.
- Ghosh, A. and Sarkar, H. 1967. Beginning of sculptural art in south-east India: a stele from Amaravati, *Ancient India* 20–1 (1964–5): 168–77.
- Ghosh, N.C. 1986. *Excavations at Satanikota 1977–80*, New Delhi.
- Gnoli, R. (ed.) 1977. *The Gilgit Manuscript of the Saṅghabhedavastu: Part I*, Rome.
- Gokhale, S. 1991. *Kanheri Inscriptions*, Pune.
- Gordon, D.H. 1943. Early Indian terracottas, *Journal of the Indian Society of Oriental Art* 11: 136–95.
- Gordon, D.H. 1958. *The Prehistoric Background to Indian Culture*, Bombay.
- Government of India 1908. *Imperial Gazetteer of India: Vol. 19*, Oxford.
- Guha-Thakurta, T. 2004. *Monuments, Objects, Histories: Institutions of Art in Colonial and Postcolonial India*, Delhi.
- Gullapalli, P. 2009. Early metal in South India: copper and iron in megalithic contexts, *Journal of World Prehistory* 22: 439–59.
- Gupta, P.L. 1963. *The Amarāvati Hoard of Silver Punch-marked Coins*, Hyderabad.
- Gupta, P.L. 1965. *Roman Coins from Andhra Pradesh*, Andhra Pradesh Government Museum Series 10, Hyderabad.
- Gupta, P.L. and Hardaker, T. 1985. *Ancient Indian Silver Punch-marked Coins of the Magadha-Maurya Karshapana Series*, Nasik.
- Gupta, S.S. 2008. *Sculptures and Antiquities in the Archaeological Museum, Amarāvati*, New Delhi.
- Gururaja Rao, B.K. 1972. *Megalithic Culture in South India*, Mysore.
- Guy, J. 2000. Buddhist bronzes of southern India: discovering a lost history, *Arts of Asia* 30(6): 103–10.
- Guy, J. (ed.) 2007a. *La escultura en los templos indios: el arte de la devoción*, Barcelona.
- Guy, J. 2007b. *Indian Temple Sculpture*, London.
- Guy, J. 2014. *Lost Kingdoms: Hindu-Buddhist Sculpture of Early Southeast Asia*, New York.
- Hanson, J.A. 1969. *Roman Theater-Temples*, Princeton.
- Hanumantha Rao, B.S.L. 1966. A lead coin from Chebrolu, *Proceedings of the Indian History Congress (Mysore)*: 112–14.
- Haque, E. 2001. *Chandraketugarh: A Treasure House of Bengal Terracottas: With 678 Illustrations*, Dhaka.
- Hardy, E. (ed.) 1901. *Dhammapāla's Paramatthadīpanī: Part IV, Being the Commentary on the Vimāna-vatthu*, London.
- Haricharan, S., Achyuthan, H. and Suresh, N. 2013. Situating burials in the Iron Age–Early Historic landscape of south India, *Antiquity* 87: 488–502.
- Hawkes, J. and Shimada, A. (eds) 2009. *Buddhist Stupas in South Asia: Recent Archaeological, Art-historical and Historical Perspectives*, Delhi and Oxford.
- Heitzman, J. 1984. Early Buddhism, trade and empire, in *Studies in the Archaeology and Palaeoanthropology of South Asia* (ed. A.R. Kenneth and G.L. Possehl): 121–37, New Delhi.
- Holliday, P. 1997. Roman triumphal painting: its function, development, and reception, *Art Bulletin* 19(1): 130–47.
- Hornor, I.B. (trans.) 1974. *Vimānavatthu: Stories of the Mansions: New Translation of the Verses and Commentarial Excerpts*, The Minor Anthologies of the Pali Canon 4: 71–5, London.
- Horsfall, J.G. 1880. From J.G. Horsfall Esq collector, Kistna District, to the Chief Secretary to Government, dated Masulipatam, 16 April 1880, no. 794, Madras Proceedings 1881 (BL, IOR, P/1746).
- Howes, J. 2002. Colin Mackenzie and the stupa at Amaravati, *South Asian Studies* 18: 53–64.
- Howes, J. 2009. The colonial history of sculptures from the Amaravati stupa, in Hawkes and Shimada 2009: 20–37.
- Howes, J. 2010. *Illustrating India: The Early Colonial Investigations of Colin Mackenzie (1784–1821)*, New Delhi.
- Hultsch, E. 1883. Amarāvati-Inschriften, *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 37: 548–61.
- Hultsch, E. 1886. Berichtigungen und Nachträge zu den Amarāvati-Inschriften, *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 40: 343–46.
- Hultsch, E. 1925. *Inscriptions of Aśoka, New Edition, CII*, Oxford.
- Hunt, E.H. 1912. The regulation of body temperature in extremes of dry heat, *Journal of Hygiene* 12(4): 479–88.
- Hunt, E.H. 1916. Hyderabad cairns (their problems), *Journal of Hyderabad Archaeology Society* 2: 180–224.
- Hunt, E.H. 1924. Hyderabad cairn burials and their significance, *Journal of the Royal Anthropological Institute of Great Britain and Ireland* 54: 140–56 and plates.
- Huntington, S.L. 1985 (with contributions by J.C. Huntington). *The Art of Ancient India: Buddhist, Hindu, Jain*, Tokyo and New York. *IAR: Indian Archaeology: A Review*
- Ippel, A. 1929. *Indische Kunst und Triumphalbild*, Leipzig.
- Ireland, J.D. (trans.) 1996. Sesavati's mansion, *Buddhist Studies Review* 13(2): 107–8.
- Jayaswal, K.P. 1927. The Hathigumpha inscription of the emperor Kharavela, *Journal of the Bihar and Orissa Research Society* 13: 221–46.
- Jayawickrama, N.A. (ed. and trans.) 1971. *The Chronicle of the Thūpa and the Thūpavamsa, Being a Translation and Edition of Vācissarathera's Thūpavamsa*, London.
- Jayawickrama, N.A. (ed.) 1977. *Vimānavatthu and Petavatthu*, London.
- Jha, A.K. and Garg, S. (eds) 1998. *Ex Moneta: Essays on Numismatics, History and Archaeology in honour of Dr. David W. McDowall*, 2 vols, New Delhi.
- Johansen, P.G. 2003. Recasting the foundations: new approaches to regional understandings of South Asian archaeology and the problem of culture history, *Asian Perspectives* 42(2): 193–206.
- Johansen, P.G. 2009. Site structure and settlement organization at Iron Age Bukkasagara and Rampuram: results from surface collections and documentation, *Man and Environment: Journal of the Indian Society for Prehistoric and Quaternary Studies XXXIV* (1): 17–29.
- Johansen, P.G. 2010. Site maintenance practices and settlement social organization in Iron Age Karnataka, India: inferring settlement places and landscapes from surface distributions of ceramic assemblage attributes, *Journal of Anthropological Archaeology* 29(4): 432–54.

- Johansen, P.G. 2011. Practising social difference, producing social space: the political architectonics of Iron Age settlement places, in *The Archaeology of Politics: The Materiality of Political Practice and Action in the Past* (ed. P.G. Johansen and A.M. Bauer): 186–220, Newcastle upon Tyne.
- Johansen, P.G. 2014a. 'Early iron working in Iron Age South India: new evidence for the social organization of production from northern Karnataka, *Journal of Field Archaeology* 39(3): 256–75.
- Johansen, P.G. 2014b. The politics of spatial renovation: reconfiguring ritual places and practice in Iron Age and Early Historic South India, *Journal of Social Archaeology* 14(1): 59–86.
- Johansen, P.G. and Bauer, A.M. 2015. Beyond culture history at Maski: land use, settlement and social differences in Neolithic through medieval South India, *Archaeological Research in Asia* 1–2: 6–16.
- Jongeward, D., Errington, E., Salomon, R. and Baums, S. 2012. *Gandharan Buddhist Reliquaries*, Seattle, Wash.
- Jouveau-Dubreuil, G. 1932. L'architecture d'Amaravati, *Bulletin de l'association des amis de l'Orient* 12: 5–16.
- Kaimal, P. 2012. *Scattered Goddesses: Travels with the Yoginis*, Ann Arbor, Mich.
- Kajale, M.D. 1984. Appendix: botanical remains from Veerapuram, in *Veerapuram: A Type Site for Cultural Study in the Krishna Valley* (ed. T.V.G. Sastri, M. Kasturi Bai and J. Vara Prasada Rao): i–xi, Hyderabad.
- Kajale, M.D. 1989. Ancient grains from excavations at Hallur (1976 Season), District Dharwar, Karnataka, *Bulletin of the Deccan College Post-Graduate and Research Institute* 47–8: 123–8.
- Karunaratne, S. 1984. *Epigraphia Zeylanica, Being Lithic and Other Inscriptions of Ceylon* 7, Colombo.
- Kasturi Bai, M. 1986. Sada – a new dynasty discovered at Vaddamanu, Guntur dist., in coastal Andhra Pradesh, *Journal of the Numismatic Society of India* 48: 14–23.
- Kasturi Bai, M. 1987. Coins from Vaddamanu excavations, in *Numismatics and Archaeology* (ed. P.L. Gupta and A.K. Jha): 102–12, Nasik.
- Kelly, G.I.O. 2013. Craft specialization, technology and social change: a study of material culture in Iron Age and Early Historic South India, unpublished PhD thesis, University of Wisconsin, Madison, Wisc.
- Kempers, A.J.B. 1932. Note on an ancient sculpture from Amarāvati, *Acta Orientalia* 10: 364–71.
- Kennedy, K. 2000. *God-Apes and Fossil Men: Paleoanthropology in South Asia*, Ann Arbor, Mich.
- Kern, H. and Nanjio, B. (eds) 1908–12. *Saddharmapundarīka*, St Petersburg (reprinted Delhi, 1992).
- Khan, A.W. 1963. *A Monograph on Yaleswaram Excavations*, Hyderabad.
- Khare, M. D. 1962. Ceylonese monks in Nagarjunakonda, *Mahā Bodhi* 72(11–12): 317–19.
- Knox, R. 1992. *Amaravati: Buddhist Sculpture from the Great Stūpa*, London.
- Koezuka, T. 1994. The Amaravati sculpture, in *Masterpieces of Buddhist and Hindu Sculpture from the British Museum* (exhib. cat.): 21–4, Tokyo.
- Köhn, S. 1996. *Ariadne auf Naxos, Rezeption und Motivgeschichte von Antike bis 1600*, Munich.
- Kottkamp, H. 1992. *Der Stūpa als Repräsentation des buddhistischen Heilsweges – Untersuchungen zur Entstehung und Entwicklung architektonischer Symbolik*, Wiesbaden.
- Krishna Murthy, K. 1977. *Nāgārjunakonda: A Cultural Study*, Delhi.
- Krishna Sastry, V.V. 1983. *The Proto- and Early Historical Cultures of Andhra Pradesh*, Hyderabad.
- Krishna Sastry, V.V. 1998. Indo-Roman trading centers in Andhra Pradesh, in Jha and Garg 1998: II, 475–99.
- Krishna Sastry, V.V. 2003. Megalithic cultures: the Iron Age, in *Pre- and Protohistoric Andhra Pradesh up to 500 BC* (ed. M.L.K. Murthy): 107–38, Hyderabad.
- Krishna Sastry, V.V., Subrahmanyam, B. and Rama Krishna Rao, N. 1992. *Thotlakonda (A Buddhist Site in Andhra Pradesh)*, Andhra Pradesh Government Archaeology Series 68, Hyderabad.
- Krishnamurthy, R. 1998. Imitation Roman gold coins from Tirukoilur hoard, Tamil Nadu, in Jha and Garg 1998: I, 145–9.
- Krishnaswami Aiyangar, S. 1928. *Manimekhalai in its Historical Setting*, London.
- Kudo, N. (ed.) 2004. *The Karmavibhaṅga: Transliterations and Annotations of the Original Sanskrit Manuscripts from Nepal*, Bibliotheca Philologica et Philosophica Buddhica 7, Tokyo.
- Kuraishi, M.H. 1930. Trial excavations at Alluru, Gummadiurru and Nagarjunikonda, in *ARASI* 1926–27: 150–61, Calcutta.
- Kuwayama, S. 1997. A hidden import from imperial Rome manifest in stūpas, in *Gandharan Art in Context: East–West Exchanges at the Crossroads of Asia* (ed. R. Allchin, B. Allchin and N. Kreitman): 119–71, New Delhi.
- Lama Chimpa and Chattopadhyaya, A. (trans.) 1990. *Tāranātha's History of Buddhism in India*, Delhi.
- Lamotte, É. 1958. *Histoire du bouddhisme indien, des origines à l'ère Śāka*, Louvain.
- Leander-Touati, A. 1987. *The Great Trajanic Frieze: The Study of a Monument and the Mechanisms of Message Transmission in Roman Art*, Gothenburg.
- Leshnik, L. 1974. *South Indian 'Megalithic' Burials: The Pandukal Complex*, Wiesbaden.
- Lévi, S. (ed. and trans.) 1932. *Mahākarmavibhaṅga (La grande classification des actes) et Kārmavibhaṅgopadeśa (Discussion sur le Mahā Karmavibhaṅga)*, Paris.
- Liebert, G. 1986. *Iconographic Dictionary of the Indian Religions: Hinduism, Buddhism, Jainism*, Asian Arts and Archaeology Series 5, Delhi.
- LIMC: *Lexicon iconographicum mythologiae classicae*, 1981–2009, Zürich/Munich.
- Linossier, R. 1930. Une légende d'Udena d'Amarāvati, *Révue des Arts Asiatiques* 6: 101–2.
- Lippe, A. de 1978. *Indian Mediaeval Sculpture*, Amsterdam, New York and Oxford.
- Longhurst, A.H. 1931. Excavations at Nāgārjunikonda, in *ARASI* 1927–28: 113–21, Calcutta.
- Longhurst, A.H. 1938. *The Buddhist Antiquities of Nāgārjunakonda, Madras Presidency*, *MASI* 54, Delhi.
- Lüders, H. 1912. A list of brāhmī inscriptions from the earliest times to about AD 400 with the exception of those of Aśoka, Appendix to *EI* 10 (1909–10).
- Lüders, H., Waldschmidt, E. and Mehendale, M.A. 1963. *Bharhut Inscriptions*, Ootacamund.
- McIntosh, J. 1985. Dating the South Indian megaliths, in *South Asian Archaeology 1983* (ed. J. Schotsmans and M. Taddei): 467–93, Naples.
- Mackenzie, C. 1807. Account of extracts of a journal, *Asiatick Researches* 9: 272–8.
- Mackenzie, C. 1823. Ruins of Amurvarty, Depaldina, and Durnakotta, *Asiatic Journal* 15, 464–78.
- Mackintosh, M.C. 1973. Roman influences on the victory reliefs of Shapur I of Persia, *California Studies in Classical Antiquity* 6: 181–203.
- Margabandhu, C. 1985. *Archaeology of the Satavahana Kshatrapa Times*, New Delhi.
- Marshak, B. with Grenet, F. 2006. Une peinture kouchane sur toile, *Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres* 150(2): 947–63, Paris.
- Masefield, P. (trans., assisted by N.A. Jayawickrama) 1989. *Elucidation of the Intrinsic Meaning So Named, The Commentary on the Vimāna Stories (Paramattha-dīpanī nāma Vimānavatthu-aṭṭhakathā)*, Pali Text Soc II, Oxford.
- McNally, S. 1985. Ariadne and others: images of sleep in Greek and early Roman art, *Classical Antiquity* 4(2): 152–92.
- Mehta, R.N. and Chowdhary, S.N. 1966. *Excavation at Devnimori (A Report of the Excavation Conducted from 1960 to 1963)*, Baroda.
- Metzler, D. 1989. Kaiserkult ausserhalb der Reichsgrenzen und römischer Fernhandel, in *Migratio et Commutatio* (ed. H.-J. Drexhage and J. Sünskes): 196–200, St Katharinen.
- Middleton, A.P. 1992. Appendix III. A note on the examination of some surface coatings on the Amarāvati sculptures, in Knox 1992: 232.
- Mirashi, V.V. 1941. A ship-type coin of Yajna Satakarni, *Journal of the Numismatic Society of India* 3, 43–4.
- Misra, B.N. 2000. Some newly discovered *Jatakas* at Nagarjunakonda, in *South Indian Archaeology* (ed. G. Kamalakar, M. Veerender and A. Vijaya Kumar Babu): 100–9, Delhi.
- Mitter, P. 1977. *Much Maligned Monsters: A History of European Reactions to Indian Art*, Oxford.
- Mitterwallner, G. von 1987. The Brussels Buddha from Gandhara of

- the year 5, in *Investigating Indian Art: Proceedings of a Symposium on the Development of Early Buddhist and Hindu Iconography Held at the Museum of Indian Art, Berlin, in May 1986* (ed. M. Yaldiz and W. Lobo): 213–47, Berlin.
- Miyaji, A. 1992. Minami indo Amaravati no setsuwa nehanzu: “shaka saigo no tabi” no setsuwazu (The narrative scene of Parinirvāṇa as represented in Amarāvātī art of South India), in *Nehan to Miroku no zuzogaku* (A. Miyaji): 85–112, Tokyo.
- Moorti, U.S. 1994. *Megalithic Culture of South India: Socio-economic Perspectives*, Varanasi.
- Morrison, K.D. 2009. *Daroji Valley: Landscape History, Place and the Making of a Dryland Reservoir System*, Vijayanagara Research Project Monograph Series 18, Delhi.
- Morrison, K.D., Lycett, M.T. and Trivedi, M. 2016. Megaliths and memory: excavations at Kadebakele and the megaliths of northern Karnataka, in *Proceedings of the 20th Conference of the European Association for South Asian Archaeology and Art, Vienna, 2010*, vol. 2: Contextualizing Material Culture in South and Central Asia in Pre-Modern Times (ed. Widorn, Verena and Ute Franke): 241–52, Turnhout.
- Morrison, K.D., Reddy, S.N. and Kashyap, A. forthcoming. Agrarian transitions in Iron Age Southern India: social and environmental implications, in *South Asian Archaeology 2012* (ed. V. Lefèvre), Paris.
- Mudhol, M.S. 1997. *A Technical Study of Megalithic Metal Objects*, Mysore.
- Mudiyanse, N. 2002. Mahāthūpa (I), in Weeraratne 2002: 481–6.
- Nagar, S.L. 1993. *Jātakas in Indian Art*, Delhi.
- Nagaraja Rao, M.S. 1971. *Protohistoric Cultures of the Tungabhadra Valley*, Delhi.
- Nagaswamy, R. 1981. Roman sites in Tamil Nadu: recent discoveries – Shri M.N. Deshpande festschrift, in *Madhu: Recent Researches in Indian Archaeology and Art History* (ed. M.S. Nagaraja Rao): 337–9, Delhi.
- Nagaswamy, R. 1995. *Roman Karur: A Peep into Tamils’ Past*, Madras (the author also appears under the name Nācakāmi, Irā).
- Nakamura, H. 1980. The Aṣṭamahāsthānacaityastotra and the Chinese and Tibetan versions of a text similar to it, in *Indianisme et bouddhisme: Mélanges offerts à Mgr Étienne Lamotte*, Publications de l’Institut Orientaliste de Louvain 23: 259–65, Louvain-la-Neuve.
- Nakanishi, M. and von Hinüber, O. 2014. *Kanaganahalli Inscriptions, ARIRIAB 17* (2013), Supplement, Tokyo.
- Nilakanta Sastri, K.A. 1966. *A History of South India*, Oxford.
- Okada, A. 2000. *Sculptures indiennes du musée Guimet*, Paris.
- Padma, S. 2008. Material culture and the emergence of urban Buddhism in Andhra, in Padma and Barber 2008: 11–39.
- Padma, S. and Barber, A.W. (eds) 2008. *Buddhism in the Krishna River Valley of Andhra*, Albany, N.Y.
- Padma, S. and Holt, J.C. 2008. Buddhism in Andhra and its influence on Buddhism in Sri Lanka, in Padma and Barber 2008: 105–26.
- Pagel, U. 2007. Stūpa festivals in Buddhist narrative literature, in *Indica et Tibetica. Festschrift für Michael Hahn zum 65. Geburtstag von Freunden und Schülern überreicht* (ed. K. Klaus and J.-U. Hartmann): 369–94, Vienna.
- Paranavitana, S. 1935. Gadaladeniya rock-inscription of Dharmmakīrti Sthavira, *Epigraphia Zeylanica* 4 (1934–41), 90–110.
- Paranavitana, S. 1946. *The Stūpa in Ceylon*, Colombo.
- Paranavitana, S. 1983. *Inscriptions of Ceylon: Vol. 2, Part 1, Containing Rock and Other Inscriptions from the Reign of Kuṭṭakanna Abhaya (41 B.C.–19 B.C.) to Bhātīya II (140–164 A.D.)* [Colombo].
- Paranavitana, S. 2001. *Inscriptions of Ceylon: Vol. 2, Part 2, Containing Rock and Other Inscriptions from the Reign of Kaniṭṭhatissa (164–192 A.D.) to Mahāsena (276–303 A.D.)* [Colombo].
- Parasher-Sen, A. 1991. Social structure and economy of settlements in the central Deccan (200 BC – AD 200), in *The City in Indian History: Urban Demography, Society and Politics* (ed. I. Banga): 19–46, New Delhi.
- Parasher-Sen, A. 2007. Localities, coins and the transition to the early state in the Deccan, *Studies in History* 23(2): 231–69.
- Parimoo, R. 1982. *Life of Buddha in Indian Sculpture: An Iconological Analysis*, New Delhi.
- Parimoo, R. 1995. On re-identification of Āndhra Buddhist jātaka relief sculptures, *Artibus Asiae* 55: 125–54.
- Parimoo, R. 2010. *Life of Buddha in Indian Sculpture (Aṣṭa-Mahā-Pratihārya)*, rev. edn, New Delhi.
- Pearsall, J. 2001. *New Oxford Dictionary of English*, Oxford.
- Peleggi, M. 2012. The unbearable impermanence of things: reflections on Buddhism, cultural memory and heritage conservation, in Winter and Daly 2012: 55–68.
- Pliny, 1942 [2006]. *Natural History*, Books 3–7, English translation by H. Rackham, Cambridge, Mass.
- Pollen, J.H. 1874. *A Description of the Architecture and Monumental Sculpture in the South-east Court of the South Kensington Museum*, London.
- Poonacha, K.P. 2011. *Excavations at Kanaganahalli (Sannati), Taluk Chitapur, Dist. Gulbarga, Karnataka, MASI 106*, New Delhi.
- Prakong Nimanhaemind 2012. Taman Phra Chao Liap Loke (the legend of the Buddha’s travels around the world): Lan Na Monastic Wisdom, in Skilling and McDaniel 2012: II, 109–19.
- Prasad, P.R.K. 1993a. Sada coins in coastal Andhra, *Studies in South Indian Coins* 3: 53–63, Madras.
- Prasad, P.R.K. 1993b. A new coin of Asaka Sada from Amarāvātī, *Journal of the Numismatic Society of India* 55: 44–9.
- Prasad, P.R.K. 1999a. A hoard of miniature copper coins from Amarāvātī, in Shastri 1999: II, 312–26.
- Prasad, P.R.K. 1999b. Pre-Satavahana phase at Amarāvātī – Dharanikota, in Shastri 1999: II, 327–40.
- Price, M. 1981. Paintings as a source of inspiration for ancient die engravers, in *Culture and History in the Ancient World: Numismatic and Other Studies in Honor of Bluma L. Trell* (ed. L. Casson and M. Price): 69–75, Detroit.
- Prinsep, J. 1837. Facsimiles of ancient inscriptions, *Journal of the Asiatic Society of Bengal* 6(1): 218–23.
- Puljal, A. and Reddy, D. Raja 2005. Andhra Janapada coins from Singavaram, *Journal of the Oriental Numismatic Society* 185: 8–18.
- Rajgor, D. 2001. *Punch-marked Coins of Early Historic India*, San José, Calif.
- Rama Rao, M. 1942. A new lead coin from Amaravathi, *Journal of Andhra Historical Culture* 1: 92.
- Rama Rao, M. 1961. *Satavahana Coins in the Andhra Pradesh Government Museum*, Andhra Pradesh Government Series 2, Hyderabad.
- Rama, K. 1995. *Buddhist Art of Nāgārjunakoṇḍa*, Delhi.
- Ramachandra Rao, P.R. 1956. *The Art of Nāgārjunikoṇḍa*, Madras.
- Ramachandra Rao, P.R. 1984. *Andhra Sculpture*, Hyderabad.
- Ramachandra Rao, P.R. 2001. *The Art of Nāgārjunikoṇḍa*, 2nd edn, Hyderabad.
- Ramachandran, T.N. 1929. *Buddhist Sculptures from a Stūpa near Goli Village, Guntur District*, Bulletin of the Madras Government Museum, ns, 1(1), Madras.
- Ramachandran, T.N. 1932. An inscribed pillar-carving from Amarāvātī, *Acta Orientalia* 10, 135–53.
- Ramachandran, T.N. 1953. *Nāgārjunakoṇḍa 1938, MASI 71*, Delhi (reprinted 1999).
- Rao, K.P. 1988. *Deccan Megaliths*, New Delhi.
- Rao, N.K. and Thakur, P. 2010. The astronomical significance of megalithic stone alignments at Vibuthihalli, *Journal of Astronomical History and Heritage* 13(1): 74–82.
- Rapson, E.J. 1908. *Catalogue of Indian Coins in the British Museum: A Catalogue of the Coins of the Andhra Dynasty, the Western Ksatrapas, the Traikutaka Dynasty and the ‘Bodhi’ Dynasty*, London.
- Raschke, M.G. 1975. Papyrological evidence for Ptolemaic and Roman trade with India, in *Proceedings of the XIV International Congress of Papyrologists, Oxford, 24–31 July 1974* (ed. P.J. Parsons): 241–6, London.
- Ray, A. 1965. Sculptures of Nagarjunikonda, *Marg* 18(2): 9–40.
- Ray, A. 1983. *Life and Art of the Early Andhradeśa*, Delhi.
- Ray, H.P. 1988. Early trade in the bay of Bengal, *Indian Historical Review* 14: 79–89.
- Ray, H.P. 1994. *The Winds of Change: Buddhism and the Maritime Links of Early South Asia*, New Delhi.
- Ray, H.P. 1997. Networks of power: maritime history and archaeology of early Andhra, *Proceedings of the Andhra Pradesh History Congress, 21st Session*, 8–16.
- Ray, H.P. 2008. Providing for the Buddha: monastic centres in eastern India, *Arts Asiatiques* 63: 119–38.
- Rea, A. 1894. *South Indian Buddhist Antiquities, Including the Stūpas of Bhattiprōlu, Gudivāda and Ghantasālā and Other Ancient Sites in the Krishna District, Madras Presidency*, Madras.
- Rea, A. 1909. Excavations at Amaravati, *ARASI (1905–6)*, 116–19.

- Rea, A. 1912. Excavations at Amaravati, *ARASI* (1908–9), 88–91.
- Reddy, D.R. and Reddy, P.S. 1985. *Coins of the Megha Vahana Dynasty of Coastal Andhra*, Hyderabad.
- Reddy, P.C., Subrahmanyam, B., Vijaya Kumar, J., Rama Krishna Rao, G.V., Kesava, K.S.B. Phanigiri 2008: *A Buddhist Site in Andhra Pradesh (An Interim Report 2001–2007)*, Hyderabad.
- Rhi, J. 2005. Images, relics, and jewels: the assimilation of images in the Buddhist relic cult of Gandhāra – or vice versa, *Artibus Asiae* 65(2): 169–211.
- Roberts, P., Boivin, N., Petraglia, M., Masser, P., Meece, S., Weisskopf, A., Silva, F., Korisettar, R. and Fuller, D.Q. 2015. Local diversity in settlement, demography and subsistence across the southern Indian Neolithic–Iron Age transition: site growth and abandonment at Sanganakallu-Kupgal, *Archaeological and Anthropological Sciences*: 1–25, doi: 10.1007/s12520-0150240-9.
- Roth, G. 1980. Symbolism of the Buddhist stūpa, in *The Stūpa: Its Religious, Historical, and Architectural Significance* (ed. A.L. Dallapiccola with S. Zingel-Avé Lallemand): 183–209, Wiesbaden.
- Rotman, A. 2008. *Divine Stories: Divyāvadāna: Part I*, Boston, Mass.
- Rowland, B. 1953. *Art and Architecture of India: Buddhist, Hindu, Jain*, rev. 3rd edn, Harmondsworth.
- Roy, A. 1994. *Amarāvati Stūpa, Critical Comparison of Epigraphic, Architectural, and Sculptural Evidence*, 2 vols, Delhi.
- Salomon, R. 1991. Epigraphic remains of Indian traders in Egypt, *Journal of the American Oriental Society* 3(4): 731–6.
- Salomon, R. with Glass, A. 2008. *Two Gāndhārī Manuscripts of the Songs of Lake Anavatapta (Anavatapta-gāthā): British Library Kharoṣṭhī Fragment 1 and Senior Scroll 14*, Gandhāran Buddhist Texts 5, Seattle, Wash.
- Sarkar, H. 1960. Some aspects of Buddhist monuments at Nagarjunakonda, *Ancient India* 16: 65–84.
- Sarkar, H. 1966. *Studies in Early Buddhist Architecture of India*, Delhi.
- Sarkar, H. 1971. Some early inscriptions in the Amaravati museum, *Journal of Ancient Indian History* 4 (1–2), 1–13.
- Sarkar, H. 1987. Emergence of urban centres in Early Historical Andhradesa, in *Archaeology and History*, 2 vols (ed. B.M. Pande and B.D. Chattopadhyaya): 2, 631–42, Delhi.
- Sarkar, H. and Misra, B.N. 1966. *Nagarjunakonda*, New Delhi.
- Sarkar, H. and Misra, B.N. 2006 (reprint). *Nagarjunakonda*, New Delhi.
- Sarkar, S.S. 1972. *Ancient Races of the Deccan*, New Delhi.
- Sarma, I.K. 1975. Some more inscriptions from Amarāvati excavations and the chronology of the mahāstūpa, *Studies in Indian Epigraphy* 1: 60–74.
- Sarma, I.K. 1980a. More Prakrit inscriptions from Amaravati, *Journal of the Epigraphical Society of India* 7: 18–21.
- Sarma, I. K. 1980b. *Coinage of the Satavahana Empire*, Delhi.
- Sarma, I.K. 1985. Early sculptures and epigraphs from south-east India: new evidence from Amarāvati, in *Indian Epigraphy: Its Bearing on the History of Art* (ed. F.M. Asher and G.S. Gai): 15–23, New Delhi.
- Sarma, I.K. 1998. Coins from Amarāvati excavations, *Studies in South Indian Coins* 8: 44–57.
- Sarma, I.K. 2000. *Numismatic Researches: Critical Studies from Excavated Contexts*, Delhi.
- Sasisekaran, B. and Raghunatha Rao, B. 2001. Iron in ancient Tamil Nadu, in *Metallurgy in India: A Retrospective* (ed. R. Rao and N.G. Goswami): 92–103, New Delhi.
- Sastri, T.V.G. 1992. *Excavations of Vaddamanu and Exploration in the Krishna Valley*, Hyderabad.
- Sastri, T.V.G., Kasturi Bai, M. and Vara Prasada Rao, J. 1984. *Veerapuram: A Type Site for Cultural Study in the Krishna Valley*, Hyderabad.
- Sastry, D.L.N. 2000. *Paidigutta Excavations: A Proto-Historic Site in Lower Tungabhadra Valley, Mahaboobnagar District, Andhra Pradesh*, Jaipur.
- Schlingloff, D. 2000. *Ajanta – Handbuch der Malereien: 1, Erzählende Wandmalereien*, 3 vols, Wiesbaden.
- Schlingloff, D. 2013. *Ajanta – Handbook of the Paintings: 1, Narrative Wall-paintings* (English translation), 3 vols, New Delhi.
- Schopen, G. 1988. On the Buddha and his bones: the conception of a relic in the inscriptions of Nāgārjunakoṇḍa, *Journal of the American Oriental Society* 108, 527–37 (also included in G. Schopen, 1997, *Bones, Stones, and Buddhist Monks*: 148–64, Honolulu, Hawaii).
- Schopen, G. 1991 [1997]. An old inscription from Amarāvati and the cult of the local monastic dead in Indian Buddhist monasteries, *Journal of the International Association of Buddhist Studies* 14(2): 281–329 (also included in G. Schopen, 1997, *Bones, Stones, and Buddhist Monks*: 165–203, Honolulu, Hawaii).
- Schopen, G. [1994] 2004. Ritual rites and bones of contention: more on monastic funerals and relics in the Mūlasarvāstivāda-*vinaya*, in G. Schopen, *Buddhist Monks and Business Matters: Still More Papers on Monastic Buddhism in India*: 285–328, Honolulu, Hawaii (originally published in *Journal of Indian Philosophy* 22: 31–80).
- Schopen, G. 1997. On the Buddha and his bones, in G. Schopen, *Bones, Stones, and Buddhist Monks*: 148–64, Honolulu, Hawaii.
- Schopen, G. 2004 [1996]. Immigrant monks and the protohistoric dead: the Buddhist occupation of early burial sites in India, in G. Schopen, *Buddhist Monks and Business Matters: Still More Papers on Monastic Buddhism in India*: 360–81, Honolulu, Hawaii (originally published in *Festschrift Dieter Schlingloff zur Vollendung des 65. Lebensjahres dargebracht von Schülern, Freunden und Kollegen* (ed. F. Wilhelm): 215–38, Reinbeck).
- Schopen, G. 2005. Mahāyāna in Indian inscriptions, in G. Schopen, *Figments and Fragments of Mahāyāna Buddhism in India: More Collected Papers*: Ch. 8, Honolulu, Hawaii (originally published in *Indo-Iranian Journal* 21 (1979): 1–19).
- Schopen, G. 2014. ‘Celebrating odd moments: the biography of the Buddha in some Mūlasarvāstivādin cycles of religious festivals’, in G. Schopen, *Buddhist Nuns, Monks, and Other Worldly Matters: Recent Papers on Monastic Buddhism in India*: 361–89, Honolulu.
- Selvakumar, V. 2000. Investigations into the Iron Age–Early Historic Cultures of the Upper Gundar Basin, Madurai District, Tamil Nadu, India, *Asian Studies* 16: 119–32.
- Senart, E. 1905–6. The inscriptions in the caves at Nasik, *EI* 8: 59–96.
- Sewell, R. 1880. *Report on the Amaravati Tope, and Excavations on its Site in 1877*, London.
- Sewell, R. 1904. Roman coins found in India, *Journal of the Royal Asiatic Society of Great Britain and Ireland*: 591–637.
- Shastri, A.M. 1993. On the Velpuru inscription of Maha Sada, *Journal of the Epigraphical Society of India* 19: 13–18.
- Shastri, A.M. (ed.) 1999. *The Age of the Satavahanas*, 2 vols, New Delhi.
- Shimada, A. 2006. The great railing at Amarāvati: an architectural and archaeological reconstruction, *Artibus Asiae* 66(1), 89–141.
- Shimada, A. 2013. *Early Buddhist Architecture in Context: The Great Stūpa at Amaravati (ca. 300 BCE – 300 CE)*, Leiden and Boston.
- Sidebotham, S.E. 2011. *Berenike and the Ancient Maritime Spice Route*, Berkeley, Calif.
- Silva, K.M. de 2005. *A History of Sri Lanka*, rev. edn, New Delhi.
- Silva, R. 1988. *Religious Architecture in Early and Medieval Sri Lanka: A Study of the Thūpa, Bodhimaṇḍa, Uposathaghara and Paṭimāghara*, Meppel.
- Silva, R. 2007. Architecture of the thūpa, bodhimaṇḍa, uposathaghara and paṭimāghara, in *The Art and Archaeology of Sri Lanka: Vol. 1, Archaeology, Architecture, Sculpture* (ed. L. Prematilleke): 463–526, Colombo.
- Singh, S. 1983. *A Study of the Sphuṭārthā Śrīghanācārasaṅgraha-ṭīkā*, 2nd edn, Tibetan Sanskrit Works Series 24, Patna.
- Singh, U. 2001. The dismembering of the Amaravati stupa, *South Asian Studies* 17: 19–40.
- Singh, U. 2008. *A History of Ancient and Early Medieval India from the Stone Age to the 12th Century*, Delhi.
- Sinopoli, C. M. 2009. Late prehistoric landscapes of the Tungabhadra Corridor: recent excavations at Kadabakele (Koppal District, Karnataka), in *Recent Research Trends in South Asian Archaeology: Proceedings of the Professor H.D. Sankalia Birth Centenary Seminar* (ed. K. Paddayya and H.D. Sankalia): 279–94, Pune.
- Sinopoli, C.M. and Morrison, K.D. 2007. *The Vijayanagara Metropolitan Survey: Vol. I*, Ann Arbor, Mich.
- Sircar, D.C. 1951. The Sātavāhanas and the Chedis, in *The Age of Imperial Unity, The History and Culture of the Indian People*, vol. 2 (ed. R.C. Majumdar): 191–16,
- Sircar, D.C. 1957. Two inscriptions from Guntur District, *EI* 32: 82–90.
- Sircar, D.C. 1961–2. Some Brahmi inscriptions, *EI* 34: 207–11.
- Sircar, D.C. 1965. *Select Inscriptions Bearing on Indian History and Civilization: Vol. 1*, Calcutta.
- Siva Naga Reddy, E. 1998. *Evolution of Building Technology: Early and Medieval Period: Vol. 1*, Delhi.

- Sivaramamurti, C. 1942. *Amaravati Sculptures in the Madras Government Museum*, Bulletin of Madras Government Museum, ns, general section, 4, Madras.
- Sivaramamurti, C. 1976. *The Amaravati Mode of Sculpture*, Bulletin of Madras Government Museum, ns, general section, 11(1), Madras.
- Sivaramamurti, C. 1979. *Early Andhra Art and Iconography*, Mallampalli Somasekhara Sarma Memorial Lectures; Archaeology Series 53, Hyderabad.
- Skilling, P. 1992. The Rakṣā literature of the Śrāvakayāna, *Journal of the Pali Text Society* 16: 109–69.
- Skilling, P. 2003 [2546]. Ideology and law: the three seals code on crimes related to relics, images, and bodhi-trees, in *Sichamai-achan: Phiphit niphon chert chu kiat satsadachan dr. prasert na nakhon — satsadachan wisuth buksayakul nuang nai okat mi ayu 88 pi nai pho. so 2546 [Sichamai-achan: Articles in Honour of Prof. Dr. Prasert Na Nagara and Prof. Visuddh Busyakul on the Occasion of their 84th Birthdays in BE 2546]* (ed. W. Phongsipian): 287–307, Bangkok.
- Skilling, P. 2005. Cutting across categories: the ideology of relics in Buddhism, *ARIRIAB* 8: 269–322.
- Skilling, P. 2008. New discoveries from south India: the life of the Buddha at Phanigiri, Andhra Pradesh, *Arts Asiatiques* 63: 96–118.
- Skilling, P. 2009. Redaction, recitation, and writing: transmission of the Buddha's teachings in India in the early period, in *Buddhist Manuscript Cultures: Knowledge, Ritual, and Art* (ed. S.C. Berkwitz, J. Schober and C. Brown): 53–75, London.
- Skilling, P. 2010a. Scriptural authenticity and the Śrāvaka schools: an essay towards an Indian perspective, *The Eastern Buddhist* 41(2): 1–47.
- Skilling, P. 2010b. Lumbinī: liturgy and devotion, in *The Birth of the Buddha. Proceedings of the Seminar held in Lumbini, Nepal, October 2004* (ed. C. Cüppers, M. Deeg and H. Durt): 345–54 (text); 459–60 (pls 1, 2), Lumbini.
- Skilling, P. 2013. Vaidalya, Mahāyāna, and Bodhisattva in India: an essay towards historical understanding, in *The Bodhisattva Ideal: Essays on the Emergence of the Mahāyāna* (ed. Bhikkhu Nyanatusita): 69–162, Kandy.
- Skilling, P. forthcoming a. Relics: the heart of Buddhist veneration, in *Relics and Relic Worship in the Early Buddhism of India and Burma* (ed. J. Stargardt), London.
- Skilling, P. forthcoming b. The Buddhist cosmopolis: universal welfare, universal outreach, universal message, *Proceedings of the Conference 'L'universalisme bouddhique dans l'histoire des civilisations asiatiques', held at Kyoto, 3–5 October 2014*.
- Skilling, P. and von Hinüber, O. 2011. An epigraphical Buddhist poem from Phanigiri (Andhra Pradesh) from the time of Rudrapuruṣadatta, *ARIRIAB* 14: 7–12.
- Skilling, P. and McDaniel, J. (eds) 2012. *Buddhist Narrative in Asia and Beyond*, 2 vols, Bangkok.
- Skilling, P. and Santi Pakdeekham 2010. Imaginaires of late Ayutthaya pilgrimage: the seven and eight great sites at Wat Ko Kaeo Suttharam, Phetchaburi, *Aséanie* 25: 147–94.
- Skorupski, T. 2001. Two eulogies of the eight great *caityas*, in *The Buddhist Forum VI* (ed. T. Skorupski): 37–55, Tring.
- Sotheby's 1990. *Indian and Southeast Asian Sculpture from the Pan-Asian Collection*, New York.
- Soundara Rajan, K.V. 1981. *Cave Temples of the Deccan*, New Delhi.
- Soundara Rajan, K.V. (ed) 2006. *Nagarjunakonda (1954–1960): Vol. II, The Historical Period, MASI 75*, New Delhi.
- Spink, W.M. 2008. *Ajanta: History and Development of Painting, Sculpture, Architecture: Year by Year*, Leiden.
- Spink, W.M. 1958. On the development of early Buddhist art in India, *Art Bulletin* 40: 95–104.
- Srinivasan, K.R. 1983. Pan-Indian style: south India, c. 200 BC to 400 AD, Andhras, Ikṣvakus and literary sources, in *Encyclopaedia of Indian Temple Architecture: Vol. 1, South India: Part 1, Lower Dravidadesa (200 B.C.–A.D. 1324)* (ed. M. Meister): 3–21, New Delhi.
- Srinivasan, P.R. 1971–3. Some Brahmi inscriptions from Guntupalli, *EI* 39: 247–52.
- Srinivasan, S., Sinopoli, C.M., Morrison, K.D., Gopal, R. and Ranganathan, R. 2009. South Indian iron and higher carbon steel: with reference to Kadabakele and comparative insights from Mel-siruvalur, in *Metallurgy and Civilization: Eurasia and Beyond* (ed. J. Mei and T. Rehren): 116–21, London.
- Stahl, A. 2013. Archaeological insights into aesthetic communities of practice in the Western Volta Basin, *African Arts* 43(3): 54–67.
- Stern, P. and Bénisti, M. 1957. Évolution du stūpa figuré dans les sculptures d'Amarāvātī, *Bulletin de la Société des Études Indochinoises* 27: 375–80.
- Stern, P. and Bénisti, M. 1961. *Évolution du style indien d'Amarāvātī*, Publications du Musée Guimet, Recherches et documents d'art et d'archéologie 7, Paris.
- Stone, E.R. 1985. A dated memorial pillar from Nāgārjunakoṇḍa, in *Indian Epigraphy: Its Bearing on the History of Art* (ed. F. Asher and G.S. Gai): 35–40, New Delhi.
- Stone, E.R. 1994. *The Buddhist Art of Nāgārjunakoṇḍa*, Delhi.
- Stone, E.R. 2004. A Buddhist incense burner from Gandhara, *Metropolitan Museum Journal* 39: 69–99.
- Stone, E.R. 2005. Spatial conventions in the art of Andhra Pradesh: classical influence?, in *Buddhism: Art, Architecture, Literature & Philosophy*, 2 vols (ed. G. Kamalakar): I, 67–72.
- Stone, E.R. 2006. The Amarāvātī master?: spatial conventions in the art of Amarāvātī, in *Hari Smriti: Studies in Art, Archaeology and Indology: Papers Presented in Memory of Dr Haribishnu Sarkar*, 2 vols (ed. A. Banerji): I, 51–60, New Delhi.
- Stone, E.R. 2008. The sculpture of Andhra Pradesh and Roman imperial imagery, in *Krishnabhinandana: Archaeological, Historical and Cultural Studies (Festschrift to Dr V.V. Krishna Sastry)* (ed. P. Chenna Reddy): 100–6, New Delhi.
- Strong, J.S. 2004. *Relics of the Buddha*, Princeton, N.J.
- Sugandhi, N.S. 2013. Conquests of dharma: network models and the study of ancient polities, *Archaeological Papers of the American Anthropological Association* 22(1): 145–63.
- Sugimoto, T. 2001. Jātakas from Amaravati, *Kanazawa-daigaku Bungakubu Ronshū, Kōdō-kagaku-Tetugaku hen [Studies and Essays, Behavioral Sciences and Philosophy, Faculty of Letters, Kanazawa University]* 21: 97–47.
- Sundara, A. 1969–70. A new type of Neolithic burial in Terdal, Mysore State, *Puratattva* 3: 23–33.
- Sundara, A. 1975. *The Early Chamber Tombs of South India: A Study of the Iron Age Megalithic Monuments of Northern Karnataka*, Delhi.
- Takata, O. 1971. (photographs by M. Taeda) *Ajanta*, Tokyo.
- Talbert, R.J.A. 2010. *Rome's World: The Peutinger Map Reconsidered*, Cambridge.
- Taylor, M. 1853. Notices of cromlechs, cairns, and other ancient Scytho-Druidical remains in the principality of Shorapur, *Journal of the Bombay Branch of the Royal Asiatic Society* 17(4): 380–429.
- Taylor, W. 1856. *On the Elliot Marbles, being a Report by the Reverend William Taylor*, Madras.
- Thapar, B.K. 1957. Maski 1954: a chalcolithic site of the southern Deccan, *Ancient India* 13: 4–142.
- Thomas, P.K. 1984. Appendix C: faunal assemblage of Veerapuram, in *Veerapuram: A Type Site for Cultural Study in the Krishna Valley* (ed. T.V.G. Sastri, M. Kasturi Bai and J.V.P. Rao): i–xi, Hyderabad.
- Thomas, P.K. 1992. The faunal background of the Iron Age culture of Maharashtra, *Man and Environment* 17(2): 75–9.
- Tomber, R. 2008. *Indo-Roman Trade: From Pots to Pepper*, London.
- Tomeanko, M. 1999. *Monumental Coins: Buildings and Structures on Ancient Coinage*, Iola, Wis.
- Trainor, K. 1997. *Relics, Ritual, and Representation in Buddhism: Rematerializing the Sri Lankan Theravāda Tradition*, Cambridge.
- Trautmann, T. 1997. *Aryans and British India*, Berkeley, Calif.
- Trautmann, T. 2015. *Elephants and Kings: An Environmental History*, Chicago, Ill.
- Tripe, L. 1859. *Photographs of the Elliot Marbles and of Other Subjects in the Central Government Museum, Madras [Bangalore]*.
- Tseng, V. (ed. and trans.) 2010. *A Unique Collection of Twenty Sūtras in a Sanskrit Manuscript from the Potala*, 2 vols, Vienna and Beijing.
- Tsukamoto, K. 1996. *Indo bukkyo himei no kenkyu [A Comprehensive Study of the Indian Buddhist Inscriptions]*, 2 vols, Kyoto.
- Tsukamoto, K. 2007. *Source Elements of the Lotus Sutra: Buddhist Integration of Religion, Thought, and Culture*, Tokyo.
- Turner, R.L. [1966] 1999. *A Comparative Dictionary of the Indo-Aryan Languages: Vol. I, Text*, reprinted, Delhi.
- Vaidya, P.L. (ed.) 1959. *Avadāna-Kalpalatā of Kṣemendra*, Buddhist Sanskrit Texts, nos 22 and 23, 2 vols, Durbhanga.

- Varadpande, M.L. 1973. Nagarjunakonda amphitheatre, *Sangeet Natak* 30: 26–37.
- Veerender, M. and Kamalakar, G. 2010. Numismatic finds from Garapadu excavations, *Studies in South Indian Coins* 20: 29–32.
- Vogel, J.P. 1926. *Indian Serpent Lore, or the Nagas in Hindu Legend and Art*, London.
- Vogel, J.P. 1930–1. Additional Prakrit Inscriptions from Nagarjunakonda, *EI* 21: 61–71.
- Vogel, J.P. 1955. Een belangrijke aanwinst van het Museum van Aziatische Kunst, *Bulletin van het Rijksmuseum* 3: 51–8.
- von Schroeder, U. 1990. *Buddhist Sculptures of Sri Lanka*, Hong Kong.
- Walburg, R. 2005. The earliest inscribed ‘coins’ from Tissamaharama: why they are not truly coins, in *South Asian Archaeology 2003* (ed. U. Frank-Vogt and H.-J. Weisshaar): 369–78, Aachen.
- Waldschmidt, E. (ed.) 1950–1. *Das Mahāparinirvāṇasūtra: Parts 1–3*, Berlin (reprinted Kyoto, 1986).
- Walimbe, S.R., Gambhir P.B. and Venkatasubbaiah, P.C. 1991. Human skeletal remains from Balijapalle in the Central Pennar Basin, Cuddapah District (A.P.), *Bulletin of Deccan College Post-Graduate and Research Institute* 51–2: 679–84.
- Warmington, E.H. 1928. *The Commerce between the Roman Empire and India*, Cambridge.
- Watson, J.F. 1873. *Vienna Universal Exhibition, 1873. A Classified and Descriptive Catalogue of the Indian Department*, London.
- Weeraratne, W.G. (ed.) 2002. *Encyclopaedia of Buddhism: Vol. 6, Fasc. 3, Lobha–Mahavamsa*, Colombo.
- Wenger, E. 1998. *Communities of Practice: Learning, Meaning and Identity*, Cambridge.
- Wheeler, R.E.M. 1948. Brahmagiri and Chandravalli 1947: megalithic and other cultures in Mysore state, *Ancient India* 4: 180–310.
- Wilcox, K. 2015. New insights on the ritual use of animals in the South Indian Iron Age (1200–300 BCE): faunal analysis at Kadabakele, in *South Asian Archaeology and Art 2012* (ed. V. Lefèvre, A. Didier and B. Mutin): 363–84, Turnhout.
- Willis, M.D. 1997. Sculpture from India, in *A.W. Franks: Nineteenth-century Collecting and the British Museum* (ed. M. Cargill and J.F. Cherry): 250–61, London.
- Willis, M.D. 2000. *Buddhist Reliquaries from Ancient India*, London.
- Wilson, H.H. 1841. *Ariana Antiqua: A Descriptive Account of the Antiques and Coins of Afghanistan, with a Memoir on the Buildings called Topes, by C. Masson*, London (reprinted New Delhi, 1997).
- Winter, T. and Daly, P. (eds) 2012. *Routledge Handbook of Heritage in Asia*, London.
- Wogihara, U. (ed.) 1971. *Bodhisattvabhūmi: A Statement of Whole Course of the Bodhisattva (Being Fifteenth Section of Yogācārabhūmi)*, Tokyo.
- Yule, H. and Burnell, A.C. 1903. *Hobson-Jobson: A Glossary of Colloquial Anglo-Indian Words and Phrases, and of Kindred Terms, Etymological, Historical, Geographical and Discursive*, new edn (ed. W. Crooke), London (reprinted New Delhi, 1984).
- Zin, M. 1998. Der Vidūṣaka jenseits der Bühne, *Indo-Asiatische Zeitschrift* 2: 30–41.
- Zin, M. 2004a. Die altindischen *vīṇās*, in *Studien zur Musikarchäologie IV. Orient-Archäologie* (ed. E. Hickmann and R. Eichmann): 321–62, Bonn.
- Zin, M. 2004b. The Mūkapaṅgu story in the Madras Government Museum: the problem of the textual affiliations of the narrative reliefs in Amaravati and Nagarjunakonda, *Annali dell’ Istituto Universitario Orientale* 64: 157–80.
- Zin, M. 2011. The parable of ‘The man in the well’. Its travels and its pictorial traditions from Amaravati to today, *Art, Myths and Visual Culture of South Asia* (ed. P. Balcerowicz and J. Malinowski): 33–93, Delhi.
- Zin, M. 2012. Māndhātā, the universal monarch, and the meaning of representations of the *cakravartin* in the Amaravati school, and of the kings on the Kanganhalli *stūpa*, in Skilling and McDaniel 2012: I, 149–64.
- Zin, M. 2014. Non-Buddhist narrative scenes at Nagarjunakonda, *Changing Forms and Cultural Identity: Religious and Secular Iconographies. Papers from the 20th Conference of the European Association for South Asian Archaeology and Art held in Vienna, 4–9 July 2010* (ed. D. Klimburg-Salter and L. Lojda): 77–89, Vienna.
- Zin, M. 2015a. Nur Gandhara? Zu Motiven der klassischen Antike in Andhra (einschließlich Kanaganahalli), *Tribus, Jahrbuch des Linden-Museums, Stuttgart* 64: 178–205.
- Zin, M. 2015b. The jester and the vidūṣaka, *In ihrer rechten Hand hielt sie ein silbernes Messer mit Glöckchen. Setubandhinivandanakaumudī, Festschrift für Heidrun Brückner* (ed. A.A. Esposito, H. Oberlin, K.J. Steiner and V. Rai): 379–96, Wiesbaden.
- Zin, M. 2015c. The one who was against the Pavvajjā, *Sanmati, Essays Felicitating Professor Hampa Nagarajaiah on the Occasion of his 80th Birthday* (ed. L. Soni and J. Soni): 437–47, Bengaluru.
- Zin, M. forthcoming a. Gandhara and Andhra: varying traditions of narrative representations (some observations on the arrangement of scenes citing the example of the Bodhisattva crossing the river Nairāñjanā), *Proceedings of the International Conference on the Archaeology of Buddhism in Asia, Archaeological Survey of India, New Delhi, Delhi, 17–19 February 2012* (ed. B.R. Mani), Delhi.
- Zin, M. forthcoming b. Gandhara iconography: dissemination & impact, *Gandhara: De l’Oxus au Ganges. Études en l’honneur de Francine Tissot. Actes du colloque en l’honneur de Francine Tissot organisé par Jessie Pons et Osmund Bopearachchi, à l’Ecole Normale Supérieure, Paris, le 8 juin 2013* (ed. J. Pons avec le concours d’O. Bopearachchi), Turnhout.
- Zin, M. forthcoming c. Heavenly relics – The Bodhisattva’s turban and bowl in the reliefs of Gandhara and Andhra (including Kanaganahalli), *Festschrift for Doris Meth Srinivasan* (ed. G.J.R. Mevissen, A. Banerji and V. K. Gupta), New Delhi.
- Zin, M. forthcoming d. The Buddha’s relics and the nāgas, an attempt to throw light on some depictions in the Amaravati school, in *Proceedings of the 21st Meeting of the European Association of South Asian Archaeology*, Paris.
- Zwalf, W. 1996. *A Catalogue of the Gandhara Sculpture in the British Museum*, 2 vols, London.

Contributors

Nick Barnard is Curator, Asian Department, Victoria and Albert Museum, UK.

Catherine Becker is Associate Professor, Department of Art History, University of Illinois at Chicago, USA.

Shailendra Bhandare is Assistant Keeper, Numismatics, Ashmolean Museum, Oxford University, UK.

Peter G. Johansen is Visiting Assistant Professor, McGill University, Canada.

Akira Shimada is an Associate Professor in the Department of History at the State University of New York, New Paltz, USA.

Peter Skilling is Directeur d'études with l'École française d'Extrême-Orient (Bangkok and Paris) and a Special Lecturer at Chulalongkorn University (Bangkok).

Anna A. Ślaczka is Curator, Department of Asian Art, Rijksmuseum, Amsterdam, Netherlands.

Elizabeth Rosen Stone is an independent scholar from New York, USA.

Harsha D. Vardhan is an artist from New Delhi, India.

Michael Willis is leading *Beyond Boundaries: Religion, Region, Language and the State*, a project funded by the European Research Council that is based in the British Museum, the British Library and the School of Oriental and African Studies.

Monika Zin is Professor, the Saxon Academy of Sciences, University of Leipzig, Germany.

Illustration Credits

Map by Jason Hawkes: 1–2; photograph: author: 3; © The Trustees of the British Museum 2016: 5–8; map by the author: 9; photograph: author: 11; photograph: courtesy of Andrew Bauer: 12; © The British Library Board: 13; Paritta Chalernpow Koanantakool: 16–17; courtesy of Archaeological Survey of India, ASI permission no. F.20/1/2010-Pub: 18; photograph: Maiko Nakanishi, courtesy of Archaeological Survey of India, ASI permission no. F.15/2/2009EE): 19; courtesy of Archaeological Survey of India, ASI permission no. F.20/1/2010-Pub: 20; photograph: Akira Shimada: 21; photograph: Kurt Behrendt: 22; Freer Gallery of Art, Smithsonian Institution, Washington, D.C.: 23; photograph: Christian Luczanits: 24a–b; photograph: Raja Deen Dayal, after Dewan *et al.* 2013, fig. 31: 25c; photograph: Chaibancha Prachong 2015; courtesy of Jom Prachong 1971: 26; photograph: Christian Luczanits: 27; © The Trustees of the British Museum 2016: 28–9; photograph: author: 30; photograph: courtesy of Indian Institute of Research in Numismatic Studies, Nasik: 31; photograph: author: 32; photograph: after Rapson 1908: pl. 5, G.P.4: 33; © The Trustees of the British Museum 2016: 34–5; photograph: author: 36–8; photograph: courtesy of Indian Institute of Research in Numismatic Studies, Nasik: 39–40; © The Trustees of the British Museum 2016: 41–3; photograph: author: 44–5; © The Trustees of the British Museum 2016: 46–51; photograph: Maiko Nakanishi with the permission of the Archaeological Survey of India: 52–3; © The Trustees of the British Museum 2016: 54; © 2016. Photo Scala, Florence: 55; photograph: the author, courtesy of The Trustees of the British Museum 2016: 56; photograph: Wojtek Oczkowski with the permission of the Archaeological Survey of India: 57; photograph: the author, courtesy of The Trustees of the British Museum 2016: 58–60; photograph: Wojtek Oczkowski with the permission of the Archaeological Survey of India: 61; photograph: the author, courtesy of The Trustees of the British Museum 2016: 62; photograph: Wojtek Oczkowski with the permission of the Archaeological Survey of India: 63; photograph: after Stern and Bénisti 1961: pl. 24b: 64; photograph: the author, courtesy of The Trustees of the British Museum 2016: 65; photograph: author: 66; photograph: Wojtek Oczkowski with the permission of the Archaeological Survey of India: 67; photograph: the author, courtesy of The Trustees of the British Museum 2016: 68; photograph: Wojtek Oczkowski: 69; photograph: author: 70; photograph: the author, courtesy of The Trustees of the British Museum 2016: 71–3; photograph: Akira Shimada with the permission of the Archaeological Survey of India: 74; © The Trustees of the British Museum 2016: 75–7; photograph: courtesy of American Numismatic Society: 78; © The Trustees of the British Museum 2016: 79–80; photograph: courtesy of American Numismatic Society: 81; Image courtesy of The Metropolitan Museum of Art (www.metmuseum.org): 82; photograph: courtesy of American Numismatic Society: 83; © The Trustees of the British Museum 2016: 84; photograph: courtesy of American Numismatic Society: 85; © The Trustees of the British Museum 2016: 86; photograph: courtesy of American Numismatic Society: 87; photograph: Christian Luczanits: 88; photograph: courtesy of the Archaeological Survey of India: 89; photograph: courtesy of

Alinari/Art Resource, NY: 90; photograph: courtesy of the Archaeological Survey of India: 91; photograph: courtesy of Eric Lessing/Art Resource, NY: 92; photograph: Akira Shimada with the permission of the Archaeological Survey of India: 93; photograph: John C. Huntington, courtesy of the Huntington photographic archive at Ohio State University: 94–95a; photograph: courtesy of Eric Lessing/Art Resource, NY: 95b; photograph: Akira Shimada with the permission of the Archaeological Survey of India: 95c; photograph: author, with the permission of the Archaeological Survey of India: 96; photograph: François Ory for the Inventory of the Archaeological Museum, Anuradhapura: http://129.199.58.244/fmi/iwp/cgi?-db=Inventaire_Anuradhapura-Yatala&-loadframes: 97; © The Trustees of the British Museum 2016: 98; photograph: author, with the permission of the Archaeological Survey of India: 99; © The Trustees of the British Museum 2016: 100; photograph: author, with the permission of the Government of Andhra Pradesh Department of Archaeology and Museums: 101–4; © Victoria and Albert Museum, London: 105–15; © The Trustees of the British Museum 2016: 116; © Victoria and Albert Museum, London: 117–19; photograph: courtesy of the Rijksmuseum, Amsterdam: 120–2; photograph: courtesy of the Tokyo National Museum: 123; © The Trustees of the British Museum 2016: 125–7; photograph: J.E. van Lohuizen-de Leeuw, courtesy of Leiden University, Digital Special Collections, P-006502: 128; photograph: courtesy of Leiden University, Digital Special Collections, P-038041: 129; after Stone 1994, fig. 124: 130; photograph: courtesy of Leiden University, Digital Special Collections, P-038122: 131; photograph: courtesy of Leiden University, Digital Special Collections, P-042934: 132; © The Trustees of the British Museum 2016: 133–4; © Ashmolean Museum, University of Oxford: 135; © Victoria and Albert Museum, London: 136; photograph: author: 137; photograph: author: 138–43; photograph: author, with the permission of the Archaeological Survey of India: 144; photograph: author: 145–6; photograph: author, with the permission of the Archaeological Survey of India: 147