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edited by

JANINE SCHOTSMANS and MAURIZIO TADDEI

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Defining the South Indian Megalithic

SOUTH ASIAN ARCHAEOLOGY 1983

Volume 2

In 1976, when I began research on the South Indian megaliths, on the advice and under the supervision of Ch. R. Allchin, I hoped to concentrate my studies on the megalithic and megalithic of the Megalithic builders. However, it soon became clear to me that I had been wrong. In my first year (Ch. R. Allchin 1976: 230), that no understanding of the Megalithic culture could be achieved without the first establishment of an internal chronology of the megaliths. Based on the absence of calibrated dates, upon an extensive study of archaeological and archaeological details while the advent of radiocarbon dating has contributed substantially to the understanding of the greater part of Indian prehistory, the absence of chronologically dated material in the Megalithic graves and the paucity of clearly associated megalithic, and the very limited deposits within these megaliths has left the Megalithic culture as an isolated pocket of unplaced megaliths. It is clear that the absence of such graves in the graves that the culture belongs mainly to the Iron Age, which can be dated to the South Indian c. 1000 BC, when the megaliths first appeared in the settlement at Kalan (Kalan 1971), and the advent of the megalithic culture of the Iron millennium BC, in the time when the Early Historic cities of the South emerged. To what portion of this time span the Megalithic graves belong is a matter of some controversy. Dr. Subramanian (1974), in his admirably comprehensive survey of the Megalithic material (1974), assigns it a date after 500 BC and this is now generally accepted. The majority of scholars would place the beginning of the culture in the first half of the 1st millennium BC, but it is clear that further evidence is needed. Very recently, the Director

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JANE R. McINTOSH

Dating the South Indian Megaliths



Introduction

In 1976, when I began research on the South Indian megaliths, on the advice and under the supervision of Dr F.R. Allchin, I hoped to concentrate my studies on the settlement and economy of the Megalith builders. However, it soon became clear to me, as it had been clear to Dr Allchin for many years (B. & F.R. Allchin 1968: 230), that no understanding of aspects of the Megalithic culture could be achieved without the prior establishment of an internal chronology of the megaliths, based, in the absence of radiocarbon dates, upon an intensive study of artefactual and architectural details. While the advent of radiocarbon dating has contributed substantially to the understanding of the greater part of Indian prehistory, the absence of physically datable material in the Megalithic graves and the paucity of clearly associated settlements, (and the very limited deposits within these settlements), has left the Megalithic culture as an isolated pocket of undated mystery. It is clear from the presence of iron artefacts in the graves that the culture belongs firmly to the Iron Age, which can be dated in the South between c. 1100 BC, when iron artefacts first appeared in the settlement at Hallur (Nagaraja Rao 1971) and the closing centuries of the first millennium BC, at the time when the Early Historic cities of the South emerged. To what portion of this time span the Megalithic graves belong is a matter of some controversy. Dr Lawrence Leshnik, in his admirably comprehensive summary of the Megalithic material (1974) assigns it a date after 300 BC but this is not generally accepted. The majority of scholars would place the beginnings of the culture in the first half of the 1st millennium BC, but it is clear that further evidence is needed. Very recently, the Deccan

College team has succeeded in obtaining a series of dates which place the beginnings of Megalithic burial practices, in Maharashtra at least, in the 8th century BC (Deo 1984). Radiocarbon dates within the period of the Megalithic culture are equally few. Two dates from the settlement site of Takalghat, also in Maharashtra, of 545 ± 100 BC (TF-783) and 585 ± 100 BC¹ (TF-784) (Deo 1970), provide a useful basis for two subdivisions, but a further date of 565 ± 100 BC (TF-823) (Rao 1968-69) from Paiyampalli in Tamilnadu provides little help since the associated material is unpublished. In addition, there are also a number of radiocarbon dates for the early stages of several Early Historic cities in the South which related to the final centuries of the Megalithic culture. The continuation of Megalithic burial practices into Early Historic times is supported by references in the *Sangam* literature to urn burial and other Megalithic rites; although these early Tamil texts were not written down until later, they include elements belonging to this period (Srinivasan 1946).

It is therefore clear that any internal subdivision of the Megalithic culture must rely heavily upon more traditional techniques of dating. An attempt in this direction was made by Leshnik (1974) who constructed a detailed typology of artefacts from Megalithic burials and compared them with datable artefacts from other parts of India. The nature of the material presented some difficulties in doing this: in particular, the pottery from the Megaliths in the main forms part of a widespread and long-lived tradition which displays little variation through time, while on the other hand, the bronze and iron artefacts known from Indian sites in the 2nd and 1st millennia BC are not numerous and thus many from the Megalithic graves are unique. Marshall's publication of his excavations at Taxila (1951) provides a large corpus of non-ceramic material unrivalled elsewhere in the subcontinent, and Leshnik understandably relied heavily upon this material in his attempts to date the Megalithic artefacts. However, since this material derives almost entirely from the uppermost levels of the Bhir Mound and Sirkap, dated 3rd century BC and 1st century AD respectively, its extensive use in analogue

¹ All radiocarbon dates quoted use the half-life of 5730 years; other dates quoted have been calibrated using the MASCA tables (Ralph et al. 1973).

dating has resulted in Leshnik assigning to the Megaliths a timespan that is generally considered far too late, as has been noted above. Although comparable artefacts from earlier contexts are much less abundant, they do exist, and Leshnik's failure to consider them must be a major drawback of his work.

In my own attempts to establish a chronology, I initially employed Leshnik's typological classification of the Megalithic material. Finding, however, that for my purposes portions of his typology were insufficiently detailed and, in some instances, surprisingly incomplete, I totally reworked the material, adhering, however, to the framework of Leshnik's typology wherever possible. By considering the published material from all available non-Megalithic sites in 2nd and 1st millennium BC South Asia, I was able to give approximate dates to a number of distinctive Megalithic artefacts, and was then able to use the dates of these in dating associated Megalithic material for which no external analogues were available. As a result, I was able to divide the Megalithic culture into six periods, I, II, III A-C and IV, which by employing the available radiocarbon dates I could date as follows:

I: 1100-800 BC

II: 800-550 BC

III: 550-300 BC

IV: 300-100 BC

(No basis for dating the subdivisions of period III is available at present).

In addition to the artefacts, I studied details of grave morphology, funerary rites and geographical distribution (fig. 1). Taken alone, these produced no clearly distinguishable patterning, but when considered against the six period chronology, patterns of development were clearly visible. As well as the developments in artefacts, burials and distribution which could be seen in the separated periods, an overall separation into two phases, marked by strong contrasts in geographical distribution, and, by implication, in economy, was very apparent. The Early Phase corresponded to periods I to IIIA, and the Later Phase to IIIB to IV, and these could loosely be characterized respectively as phases of conservatism and innovation.

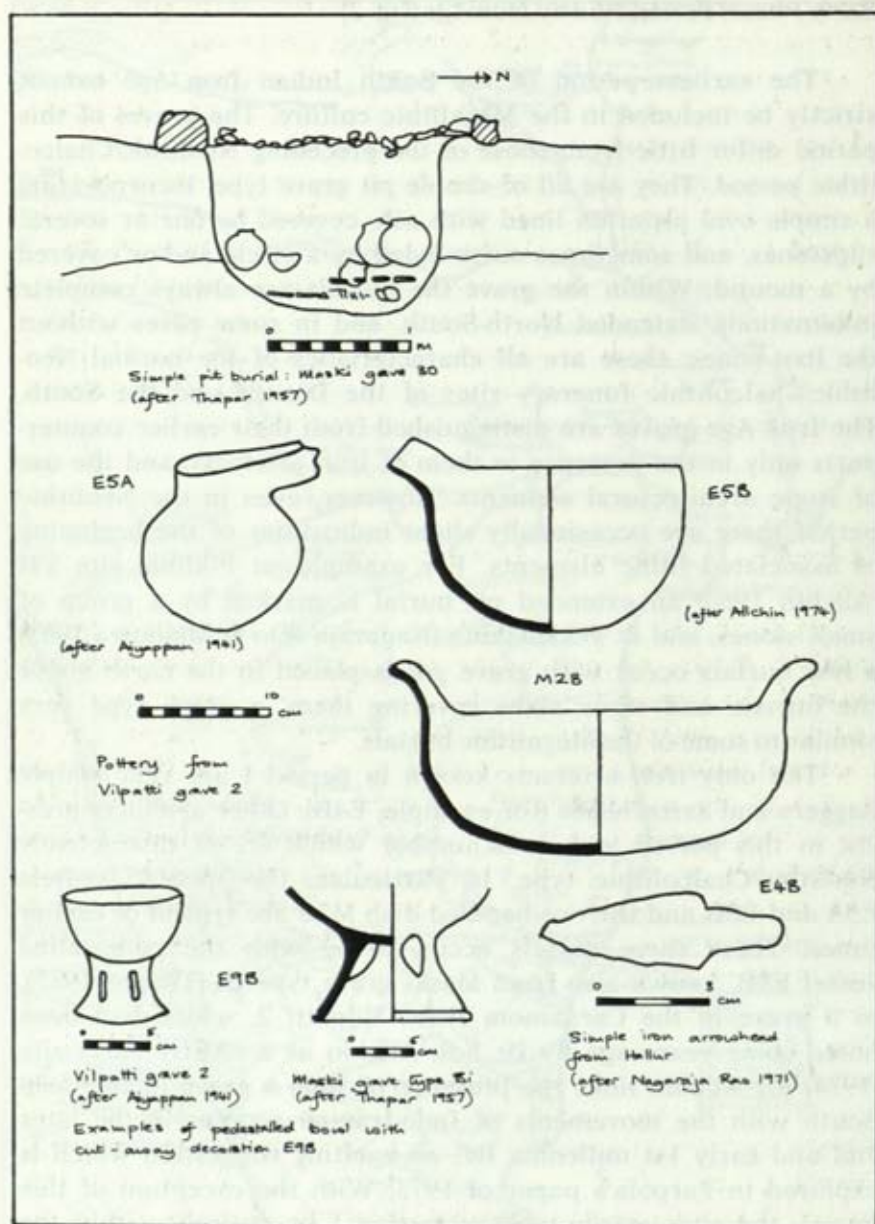
Early Phase: Period I Early Iron Age (fig. 2)

The earliest period of the South Indian Iron Age cannot strictly be included in the Megalithic culture. The graves of this period differ little from those of the preceding Neolithic/Chalcolithic period. They are all of simple pit grave type, incorporating a simple oval pit often lined with ash, covered by one or several capstones, and sometimes surrounded by a circle and/or covered by a mound. Within the grave the burials are always complete inhumations, extended North-South, and in some cases without the foot-bones: these are all characteristics of the normal Neolithic/Chalcolithic funerary rites of the Deccan and the South. The Iron Age graves are distinguished from their earlier counterparts only in the presence in them of iron artefacts, and the use of stone architectural elements. However, even in the Neolithic period there are occasionally slight indications of the beginning of associated lithic elements. For example, at Piklihal site VII (Allchin 1960) an extended pit burial is marked by a group of small stones, and at Tekkalakota (Nagaraja Rao & Malhotra 1965) a few burials occur with grave goods placed in the earth above the burials and stone slabs covering them, a grave type very similar to some of the Megalithic burials.

The only iron artefacts known in period I are very simple daggers and arrowheads (for example, E4B). Other artefacts present in this period include a number which are of distinctively Neolithic/Chalcolithic type. In particular, the spouted vessels E5A and E5B and the two-handled dish M2B are typical of earlier times. These three vessels occur, along with the pedestalled vessel E9B, known also from Maski grave type Bi (Thapar 1957), in a grave in the Cardamom Hills, Vilpatti 2, which had been noted some years ago by Dr F.R. Allchin as a clearly early site (1974). Dr Allchin links the presence of such a grave in the deep South with the movements of Indo-Iranian peoples in the later 2nd and early 1st millennia BC, an exciting suggestion which is explored in Parpola's paper of 1973. With the exception of this burial, the sites attributable to period I lie entirely within the areas previously occupied by Neolithic/Chalcolithic people, in the uplands of Andhra Pradesh, Tamilnadu and Karnataka, the evidence from the latter being the most complete at present. The sites of Maski (Thapar 1957) and Hallur (Nagaraja Rao 1971),



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important settlements of the Neolithic period, have both yielded material belonging to period I, supporting the general impression of continuity. In Maharashtra, however, this period is virtually a blank, the only site with continued occupation being Inamgaon, where the settlement seems to have been in decline (Deo 1984).

This period is dated initially by the series of dates from the Neolithic-Iron Age 'overlap' deposits at Hallur, which cluster around 1100 BC (TF-570: 1105 ± 105 BC; TF-573: 955 ± 100 BC — Nagaraja Rao 1971). The subsequent period II, in which truly Megalithic burials emerge, includes the first Megaliths in Maharashtra, for which dates around 800 BC (672 ± 115 BC, 655 ± 100 BC — Deo 1984) have been obtained from Naikund. Thus period I has an approximate span of some three hundred years.

Early Phase: Period II Early Megalithic (fig. 3)

In period II, a culture clearly related to that of the South emerged in the Nagpur region of Maharashtra. The excellent work of the Deccan College, Pune, in this area has made it the best known part of the Megalithic culture. The Nagpur group employed only one form of grave, a specialized and very simple version of the more common pit grave, the Maharashtra circle grave. This consisted of a stone circle within which burials were made either on the ground surface or in shallow depressions, with the grave goods scattered around them, the whole being covered by a low cairn of earth and stones. Among the most interesting of the offerings in these graves are a number of horse skeletons, which occur in the majority of burials at Mahurjhari (Deo 1973) and Junapani (Rivett-Carnac 1879; Thapar 1964) attributed to this period. These may be very significant in view of the links with the movements of Indo-Iranians postulated by Drs Allchin and Parpola and mentioned above in connection with Vilpatti grave 2. In the subsequent period IIIA, horse skeletons are much less frequent in the burials, although horse trappings are still common, a situation which seems closely to fit the postulated picture of horse-riding nomads gradually settling down and abandoning their horse-riding and horses, to which the climate of southern India is not salubrious.

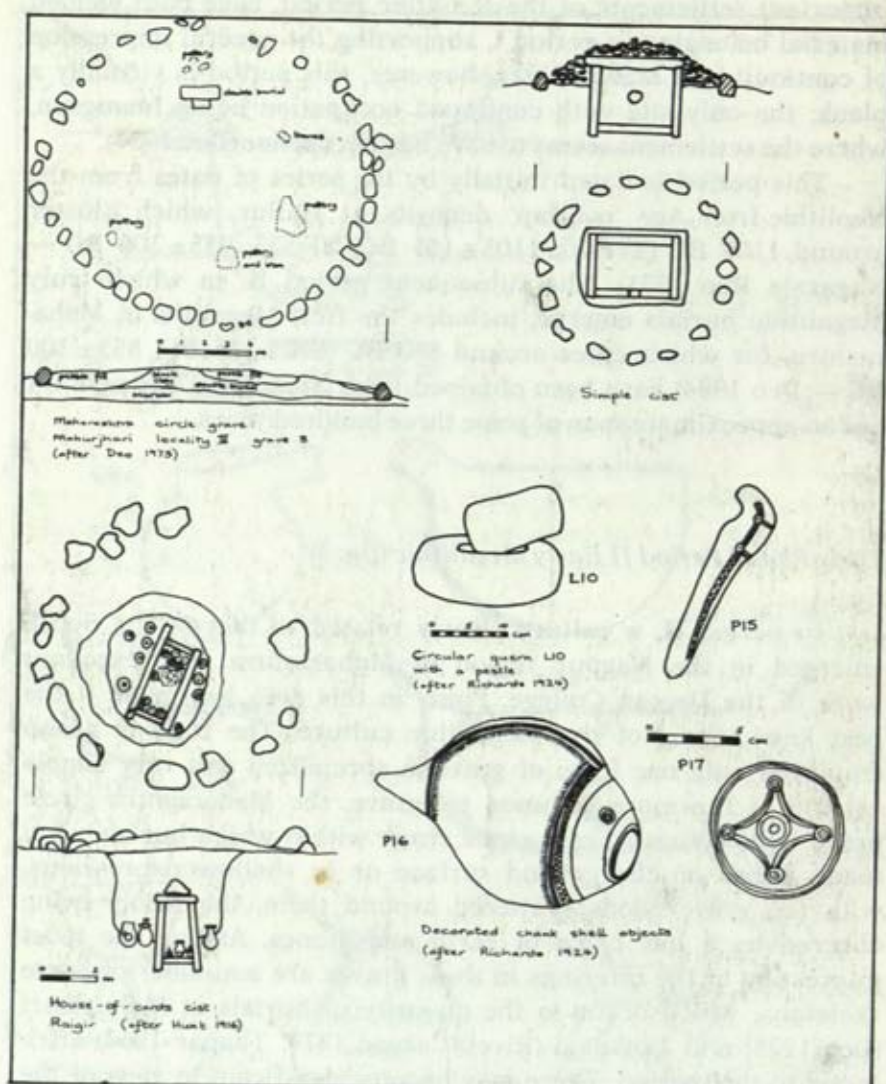


Fig. 3 — Typical graves and artefacts of Period II.

Several major innovations occur in the funerary rites of period II. Although the traditional rites of North-South orientation and complete extended inhumation continue, East-West orientation and fractional inhumation now appear and become equally important. The practice of amputation of the lower legs

only occurs in one burial of period II, Mahurjhari grave III.6 (Deo 1973) and hereafter disappears. The pit graves in vogue in period I still continue, but a developed form with slabs lining some of the sides emerges and thence, the simple cist. The partially slab-lined pit is best exemplified by grave II at Hashmatpet (Nigam 1971). The cists which appeared in period II seem the logical outcome to this development, being simple boxes of four side-slabs, floor slab and capstone, usually with a port-hole in one side-slab. Like the pit graves they are usually surrounded by a stone circle and covered by a stone or earthen cairn. A variant form, the house-of-cards cist, known chiefly from Andhra Pradesh, may also have appeared in period II, but no burials of this type have been published in sufficient detail to allow their secure attribution to this period. Despite the introduction of new rites, which may reflect changes in beliefs, the location of period II cemeteries in similar localities to those of the Neolithic and Early Iron Age periods, and occupation of settlements such as Maski (Thapar 1957), at which earlier habitation had occurred, suggests a considerable degree of continuity.

By period II, iron was in common use for many types of artefact including daggers, knives, arrowheads, spears, sickles, hoes, axes and chisels. A few distinctive artefacts can be isolated in period II. These include the circular quern L10, which was known from Chalcolithic Chandoli (Deo & Ansari 1965) and Early Iron Age Pirak (Jarrige & Santoni 1979), and occurs in a number of Early Megalithic contexts, including Sanur grave 5 (Banerjee & Soundara Rajan 1959) and Odugattur grave 1 (Richards 1924). These two graves share a number of distinctive artefacts, mainly shell ornaments such as P15, P16 and P17.

The first period of the settlement site of Takalghat in Maharashtra (IA) can be attributed to the Early Megalithic period, and the date of 585 ± 100 BC (TF-784 — Deo 1970) for the earliest level of the subsequent period (IB) provides an approximate date for the end of period II.

Early Phase: Period IIIA Middle Megalithic A (fig. 4)

Few innovations occurred in period IIIA, which is distinguished from period II mainly on the basis of artefacts. New

artefacts introduced at this time include the three-legged jars J1A. Three-legged bowls were current in Neolithic/Chalcolithic times, but jars on three legs were previously unknown. Their distribution is relatively limited, being confined almost entirely to Karnataka and adjacent areas of Tamilnadu. Among the other artefacts which appeared in period IIIA, the most spectacular derive from graves in Maharashtra. From the abundance of bronze and gold items in these graves it would seem that the group had prospered greatly and was able to obtain non-ferrous metals in quantities unavailable in the less prosperous groups

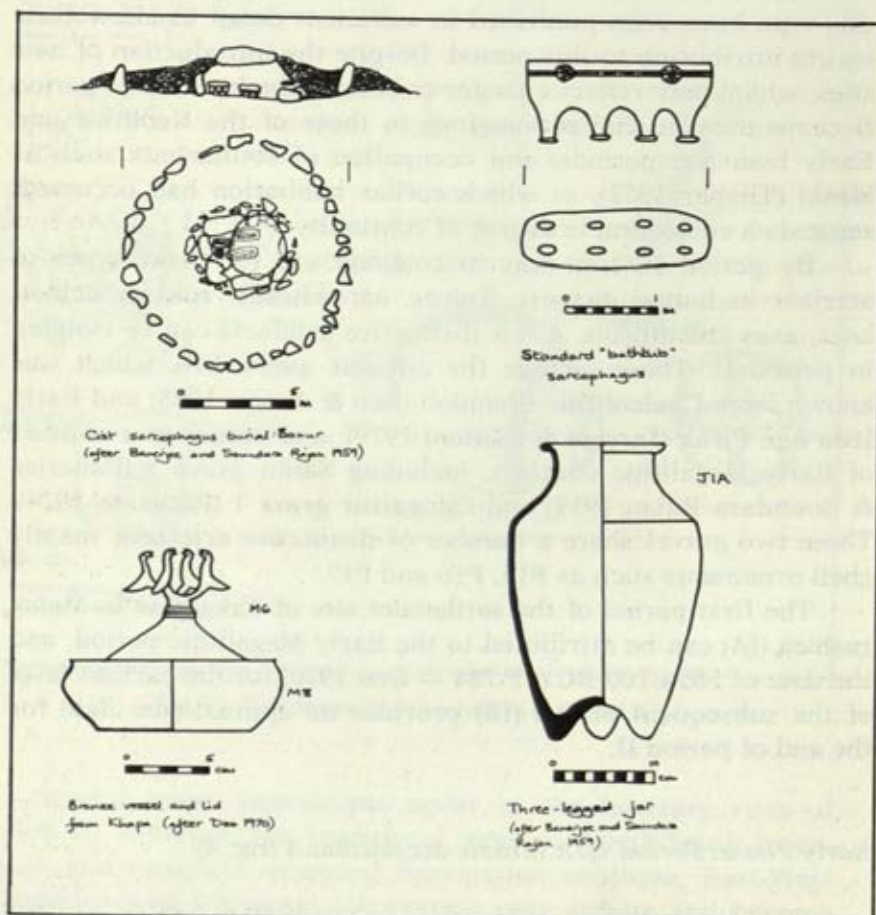


Fig. 4 — Typical grave and artefacts of Period IIIA.

further South. These luxury items included a range of bronze vessels (M8), among which the bronze lids with plant or bird finials (M6), are particularly fine. Other impressive objects from these graves were a range of gold jewellery and several sets of bronze horse trappings. Bronze bells, usually presumed to be part of horse harness, were also abundant, although horse skeletons themselves were not common. The Maharashtra graves enjoyed the further distinction of including some cremation burials, while the earlier rite of complete extended seems to have disappeared here. One may surmise that the introduction of cremation was related to the increasing influence of North India on this area, although archaeological evidence for cremation as the major funerary rite in the North is actually extremely limited.

Outside Maharashtra, the main innovation of this period was the development of the 'bath-tub' sarcophagus, which occurs both in purpose-dug pits and in the extremely simple cists at Sanur, which consist of a series of slabs arranged around and over the sarcophagi. The sarcophagi themselves are large earthenware coffins, usually with a band of relief decoration around the rim, standing on two or more rows of multiple legs. They were particularly popular in the North Tamilnadu region, at sites like Sanur.

Early Phase: Settlement and Economy

The majority of sites which have yielded material belonging to periods I to IIIA are graves, and settlement evidence from this phase is extremely limited, in contrast to the large number of flourishing villages known in the Deccan and South India in the preceding centuries. At Hallur (Nagaraja Rao 1971), later disturbance has virtually removed the levels which followed the initial one to two centuries of the Iron Age. At Maski (Thapar 1957) and Brahmagiri (Wheeler 1948) thin Iron Age deposits lie between the substantial Neolithic and Early Historic levels. At Maski, these Iron Age levels can be dated from at least as early as period II, while at Brahmagiri the evidence is less clear but some slight occupation in the Early Phase seems probable. At other important Neolithic sites of the South, such as Piklihal (Allchin 1960) and Sanganakallu (Subbarao 1948), slight Iron Age occupation is

also indicated, and the picture promises to become fuller with the publication of the recently excavated sites of Appukallu and T. Kallupatti. Thus in the South, the impression is of continued occupation of Neolithic sites, but on a much more sporadic basis.

In Maharashtra, however, such continuity is hard to find. At the major settlement of Inamgaon (Deo 1984), occupation continued until *c.* 700 BC, but seems to have been greatly impoverished compared with the prosperous later 2nd millennium BC village here. At Prakash (Thapar 1967), there is also some indication of continuity, although there is a slight hiatus between the late Chalcolithic and Early Iron Age deposits, the latter seeming, as in the South, to be relatively insubstantial. Elsewhere in the Deccan, the flourishing villages of the Chalcolithic seem to have been abandoned. Dr F.R. Allchin (*pers. comm.*) is of the opinion that this period sees a shift in settlement location rather than a general abandonment of settlement. It is to be hoped that future research will clarify the issue, but at present the Deccan in the period 1100 to 750 BC remains an archaeological void, and it is at least clear that the prosperous villages of the later Chalcolithic had generally ceased to be occupied at this time. In the Nagpur region, settlements of the Megalithic culture began to emerge around 800 BC. Elsewhere in the Deccan, the picture is still unclear, although Megalithic material is said to have appeared at Inamgaon at a similar time (Deo 1984). The excavations at Takalghat (Deo 1970) suggest the existence there of a prospering farming community and this is given support by the large number of wealthy graves in the region. The first period at the Kaundinyapura settlement fits into this picture, although no local burials are known, and the recently excavated site of Nainkund, surrounded by a number of cemeteries, similarly suggests the existence of a substantial and stable farming community.

To summarize, the evidence available at present suggests that the prosperous Deccan Chalcolithic culture declined towards the end of the 2nd millennium BC, and many settlements were abandoned. After a gap of some three to four hundred years, farming communities were re-established, in the Nagpur region at least, and within a few centuries these had become sufficiently prosperous to obtain large quantities of copper, tin and gold and to employ craftsmen to work them into fine jewellery and vessels. The employment of Megalithic burial rites implies strong

links with South India, despite the vast distances involved. In South India, the Neolithic communities of the later 2nd millennium BC could perhaps be said to have been the country cousins of the Deccan Chalcolithic culture: they used many of the same artefacts and lived by a similar mixed farming economy, but their settlements were never as large, their metalwork practically non-existent and their economy heavily reliant upon pastoralism, particularly cattle. When the Deccan sites were abandoned, those of the South continued to be occupied, but on a much less permanent basis, and it seems most probable that the already considerable dependence upon pastoralism increased. Unlike the Deccan, the South did not revert to a mainly agrarian economy in the second quarter of the 1st millennium BC.

What reasons can be adduced for this change in settlement and economy? A number of scholars, for example Dhavalikar (1973), suggest that the late 2nd and early 1st millennia BC saw a climatic change sufficient to upset the established agricultural practices of the region. Evidence of increased aridity at this time is almost non-existent: a soil profile from Kupgal (Mujumdar & Rajaguru 1966) in which decreased humidity is indicated around 2500 BP and a weathered layer of brown soil suggesting a drier climate, succeeding the Chalcolithic deposits at Bahal, Nevasa and Prakash (Dhavalikar 1973). This scanty evidence, however, is given some support by the widely, though not universally, accepted theory of global climatic change at about this time (Brooks 1925, 1949; Lamb 1966, 1977; Goudie 1977). Most of the work on which the conclusions are based has been done in Northern Europe but studies in North America, North Africa, China and the Pacific have tended to confirm the findings of European climatologists and to demonstrate broad synchronisms between climatic events in different parts of the world. Although the Tropics have been little studied in this respect, the indications are of a contraction of the Equatorial rainbelt and the associated monsoon winds, and a consequent increase in aridity. Clearly this evidence is unsatisfactory, but it at least suggests one possible reason for the observed changes in settlement patterns.

Among pastoral groups in southern India, seasonal migrations to other pastures may only occur in arid years when water is inadequate, at present about one year in every five or

six. Often only the adult men move with the animals, leaving the women, children and old people in the settled village. The animals are grazed in forest tracts for a period of about seven months but return to the settled village to graze on and manure the fields after the harvest (Whyte 1975; Bose 1975).

In extremely arid areas where agriculture or settled stock-rearing are impossible, transhumant pastoralism is known. Such groups as the Dhangar occupy arid parts of the Deccan plateau during the rainy season when rainfall is adequate to provide grass for grazing. At the end of the rains, these groups move along traditionally determined routes down to the coast where the sheep are penned in harvested fields, leaving manure which is paid for in grain. This is a period of constant movement between villages, which ends sometime before the rains when the Dhangars return to their upland villages (Sontheimer 1975). Generally these groups raise a few easily-grown crops in their home area where some members of the group may reside during the entire year.

The controlling factor in the stability of South Indian communities is the availability of water. When water becomes scarce some at least of the community will move to other areas in search of water and pasturage for the animals, while a portion of the group, sometimes only one or two individuals, remain behind to guard and tend the crops. Modern nomadic communities often rely upon settled farmers to provide them with grain, but quite frequently they are able to grow all that they require with little effort. Two patterns of nomadic pastoralism exist in modern times, one involving an annual cycle of movement along a traditional route, the other fixed settlement in a region for four or five years until the available resources have been exhausted: the latter has affinities with slash-and-burn agriculture with which it could easily be combined. All this suggests that the probable response to increased aridity in antiquity, as today, would have been an increase in mobility and a decrease in the practice of settled agriculture. The availability of forest food resources would have reduced the need to continue cultivation but it is unlikely that a community of settled farmers would entirely have abandoned agriculture and resorted to gathering. Such settlement evidence as exists for the Earlier Iron Age phase, scanty though it is, suggests at least periodic occupation of the perma-

nently settled village sites of the preceding period, where it is probable that crops were still raised and where family ties still existed.

It may be postulated that the development of different burial practices in South India in the Earlier Iron Age was related to changes in settlement and economy. The notion that pressures on the traditional way of life can result in an increasing emphasis on burial ritual, which symbolizes links with tradition and the past, through the society of the ancestors, is by now quite familiar in the archaeological literature. In particular, it is employed as an explanation for the development of megalithic tombs in Europe. In India the growth of megalithic burial could be viewed as a similar response to different pressures. Here it can be related to the environmental deterioration, which may have necessitated a more mobile way of life and have led to increasing emphasis on the burials as the main link with the traditionally occupied areas. Increased elaboration in the associated architecture can be seen as a means of reaffirming these links. Stone slabs were known occasionally in the pit graves of the Neolithic/Chalcolithic period and became common in the Early Iron Age. During the latter period circles and cairns marking the graves are also known and these continue throughout the Megalithic periods. The only burial types known in Maharashtra, where permanent settlement seems to be common, consists basically of these two elements, circle and cairn. However, elsewhere in period II, the use of slabs within pit graves develops, through partially stone-lined pits such as Hashmatpet II, into four-sided stone boxes with lid and floor-slab, the standard cist. It is the emergence of this tomb type that justifies the use of the term 'Megalithic' for the burials from period II onwards, although many (and in most periods, the majority) of the graves lack substantial stone architecture.

Changes in burial practices in period II also seem to relate to the postulated increase in mobility. In period I, the Neolithic/Chalcolithic practice of complete inhumation was universally employed, but in period II fractional inhumation appears as an alternative. It seems plausible to suppose that the transporting of complete bodies from the place of death to the appropriate burial place would have been undesirable for a nomadic group and the preservation of selected portions of the body, in particular the skull and limb bones, would have come to

be regarded as a convenient substitute for complete conservation of the body. Complete inhumation did not disappear and may have been practised for a variety of reasons, for example, in the case of individuals who died conveniently close to the traditional cemetery, or of important individuals, to whom exceptional rites would have been accorded. In Maharashtra, where settlement seems to have been more permanent, complete inhumation is common, but even here fractional inhumation is also known, emphasizing the unity of the Megalithic culture.

Later Phase: Tombs and Artefacts (figs. 5 and 6)

While the periods of the Early Phase were sufficiently distinctive to merit separate treatment, those of the Later Phase are not, being characterized largely by the geographical spread of innovations and the growth of urban communities.

One of the major developments of this phase is the progressive encroachment and influence of Northern India. In period IIIA, the introduction of cremation to Maharashtra suggested northern influences; by the beginning of period IIIB, the Maharashtra group had been swallowed up by the aggressive expansion of northern militaristic states, followed later by large portions of Andhra Pradesh, until finally in the 3rd century northern expansion reached its maximum extent in Aśoka's empire, affecting areas as far South as Brahmagiri. In the areas mostly strongly affected, Maharashtra and parts of Andhra Pradesh, Megalithic burial practices disappeared as a result of North Indian control. Although it seems probable that the majority of the Nagpur Megalith builders remained under the northern yoke, the appearance in South India, at sites as far apart as Souttoukeny (Casal 1956), Adichanallur (Rea 1915), Nagarjunakonda (Subramanyam 1957-60) and Brahmagiri (Wheeler 1948), of artefacts with a distinctly Maharashtrian flavour, suggests that at least some of the Nagpur group fled southwards. The widespread adoption of cremation as a minor rite offers further support for this. The most spectacular of these Maharashtra inspired artefacts came from Souttoukeny grave I and Adichanallur, in each case within firmly local funerary contexts. Those from Souttoukeny include bronze vessels and gold jewellery of quite un-

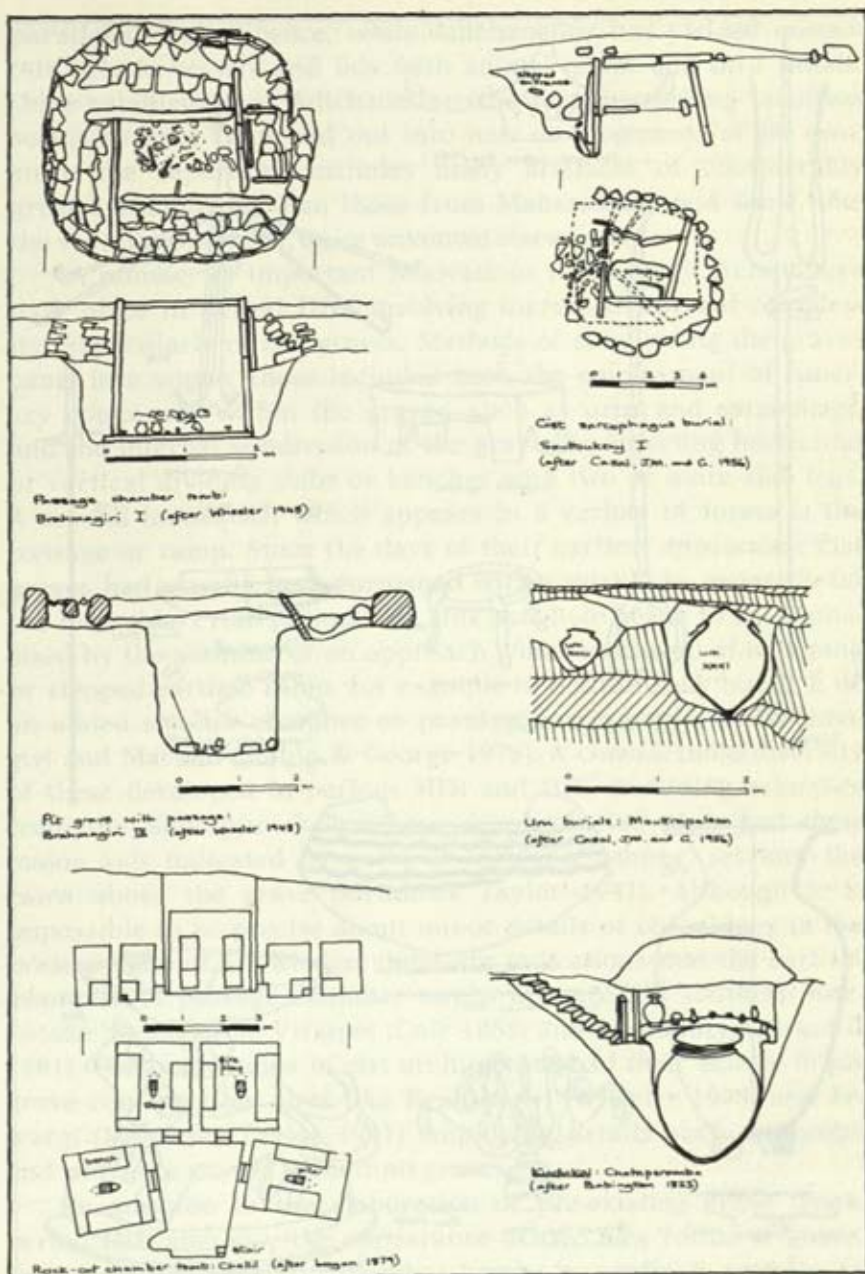


Fig. 5 — Typical graves of the Later Phase.

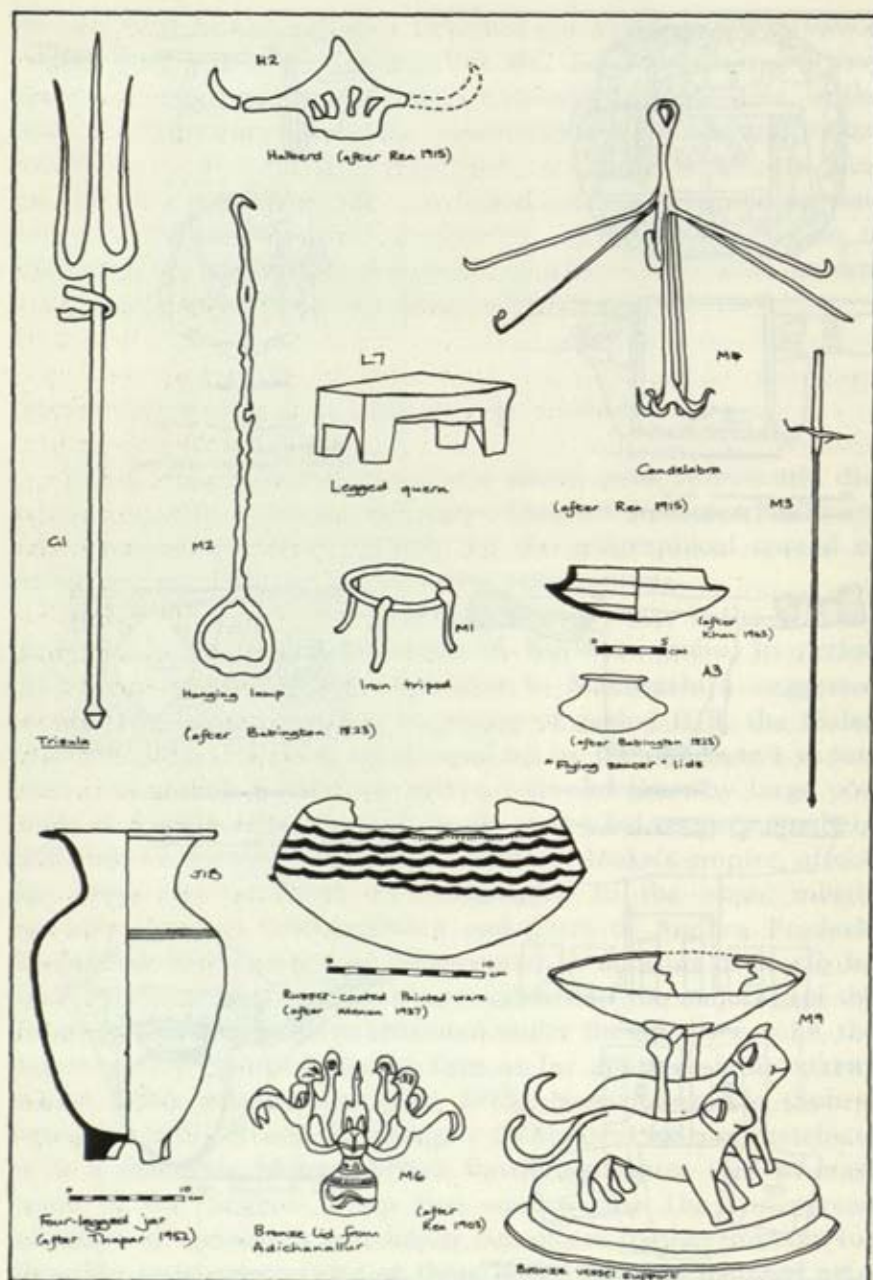


Fig. 6 — Typical artefacts of the Later Phase.

paralleled magnificence, while Adichanallur has yielded numerous bronze vessels and lids with animal, plant and bird finials. Once established at Adichanallur, the bronze working tradition seems to have branched out into new developments of its own, since the repertoire includes many artefacts of considerably greater complexity than those from Maharashtra and some, like the vessel support M9, quite unknown elsewhere.

A number of important innovations in funerary architecture took place in period IIIB, involving increased internal complexity, particularly of cist graves. Methods of subdividing the graves came into vogue: these included both the employment of funerary containers within the graves, such as urns and sarcophagi, and the internal subdivision of the graves by inserting horizontal or vertical dividing slabs or benches with two or more slab legs. A second innovation which appears in a variety of forms is the passage or ramp. Since the days of their earliest appearance cist graves had usually been furnished with a port-hole, generally on the East side. From period IIIB, this port-hole began to be emphasized by the addition of an approach which consisted of a sloping or stepped earthen ramp, for example in Souttoukeny burial I, or an added smaller chamber or passage, for example, at Brahmagiri and Machad (Mehta & George 1978). A considerable diversity of these developed in periods IIIB and IIIC, including examples from the Shorapur doab where deeply buried cists had their major axis indicated by pairs of 'entrance stones' set into the cairn above the grave (Meadows Taylor 1941). Although it is impossible to be precise about minor details of chronology in the present state of knowledge, there are indications that the earliest examples of passage chamber tombs appeared in southern Karnataka, at sites like Virajpet (Cole 1868) and Savandurga (Branfill 1881). The innovations in cist architecture had their echoes in pit grave construction, sites like Brahmagiri (Wheeler 1948) and Jewargi (Meadows Taylor 1941) employing details such as ramps and 'entrance stones' in their pit graves.

In addition to the elaboration of pre-existing grave types, period IIIB also saw the appearance of two new forms of grave. One type, the rock-cut chamber tomb, is confined entirely to Kerala, and in fact only one example, that at Challil (Logan 1879), can be firmly dated to period IIIB on artefactual grounds while the remainder belong to periods IIIC and IV. The considerable

complexity of the Challil tomb, however, suggests that it is unlikely to be the earliest in the sequence of development of such tombs. Although there has been considerable debate whether these tombs are modelled on the architecture of houses or of cist graves, there is no doubt that their appearance in this area relates to the local geology, in which the remarkably easily worked laterite features prominently. The tombs consist of an approach shaft, usually vertical and stepped, and one or more chambers opening from this shaft. Often they contain benches, pillars and stands for funerary offerings, left standing in the parent rock when the tomb was carved out.

The second new grave type began in period IIIB in an even more limited area, but its impact was much more far-reaching. Urn burials appeared initially in the extreme South of the peninsula, at sites like Adichanallur (Rea 1915) and Tiruthu (Rea 1904). In period IIIC, they were becoming common all over the southern half of South India, in Kerala and southern Tamilnadu, possibly as far North as the Pondicherry region, and by period IV urn burial were known as far afield as central Karnataka and Andhra Pradesh, as well as being the most common form of burial in the Tamilnadu plains. Considerable diversity occurs in urn burial architecture as in other forms of megalith, ranging from small unmarked graves containing domestic vessels used as urns, through large graves covered by capstones, with cairn and stone circle, containing urns large enough to accommodate complete contracted inhumations, to the enormous Keralan variant, the *kudukal* or hoodstone, a cross between urn and rock-cut tomb, in which a large urn was placed in a pit approached by a rock-cut stair and covered by an immense capstone. The classic example of this is the period IIIC burial at Chataperamba, ably excavated and admirably well published by Babington in 1823.

As in earlier periods, it is possible to single out a few artefacts particularly characteristic of the periods of the Later Phase. These include 'flying saucer' lids (A3), a type common over much of India in Early Historic times, but which seem to have been manufactured rather earlier in South India, from period IIIB onwards. South India seems to have similar priority in the production of the ceramic known as Russet-coated Painted Ware (RCPW) — Wheeler's 'Andhra ware' (Wheeler 1948) — commonly found in Early Historic sites in peninsular India. This seems first

to occur in tombs in Kerala and adjacent areas of Tamilnadu, datable to period IIIC, and to have become widespread in period IV.

Among the iron artefacts, a great diversity of types were in use by the end of the Early Phase, but it is not until period IIIB that swords first appeared in Megalithic burials. A notable feature of the distribution of swords is that they occur almost exclusively within the coastal plains of Tamilnadu and Kerala, the only exceptions being the sites of Brahmagiri (Wheeler 1948), Yeleswaram (Khan 1963) and Jadigenahalli (Seshadri 1960), where they belong to periods IIIC or IV. Such a distribution is likely to have a cultural significance and it can be no coincidence that these areas are, in the main, important centres of Early Historic development. Several curious objects of iron appeared about this time also, which may have some ritual significance. Drs B. and F.R. Allchin (1982: 339) tentatively link the trident (*triśula*), G1, with the worship of Śiva, and it is probable that the rather more elaborate three-pronged halberd H2, which is known from an Early Phase burial at Mahurjhari (Deo 1984) as well as from later burials further South, is likely to be similarly intended. More mundanely, period IIIC saw the introduction of iron tripod stands (M1) and a variety of hanging lamps and candelabra (M2-M4) made their appearance in periods IIIB and IIIC. In period IV, a number of Megalithic graves contained the distinctive Early Historic legged quern L7, common all over the Indian subcontinent at this time.

Later Phase: Settlement and Economy

Period IIIB is in marked contrast to the Early phase of the Megalithic culture, in the explosive expansion of settlement over hitherto unoccupied (or at most, sparsely settled by hunter-gatherers) areas of the Tamilnadu plains and Kerala. Several possible routes for this expansion can be suggested, and it is probable that all were used. Firstly, there is the possible southward migration of groups from Maharashtra, already discussed. The presence of Maharashtrian style bronzes as far South as Adichanallur (Rea 1915), and of beads in South Keralan sites (e.g. Machad and Pazhayannur: Mehta & George 1978) closely paralleled in Maharashtra but not elsewhere, indicates that this migration

penetrated right to the South of the peninsula. Secondly, it is likely that settlers spread southwards from Karnataka into northern Kerala, and this is supported by the presence of a number of similar artefacts, such as the four-legged vessels J1B, in sites of North Kerala and Coorg. Finally, it is likely that some settlement, of the extreme South at least, was by people from Sri Lanka. Throughout the known history of Sri Lanka, it has been closely involved with South India, groups from the one region frequently interfering in the affairs of the other, and there is no reason to doubt the projection of this situation back into prehistory. It is in fact supported by the existence in Sri Lanka of Megalithic burials identical to those of South India and containing similar artefacts (Kennedy 1975).

Such a massive expansion of settlement must be related in some way to changes or developments in economic practices, and in view of the present-day agrarian potential of the newly colonized areas, it seems most probable that this was mainly in the introduction or invention of irrigation agriculture, particularly of rice. This has long been suggested as one of the economic bases of the Megalithic culture (see Gururaja Rao 1972 for a summary of views). Although the archaeological evidence for this is extremely limited, it is noteworthy that rice grains have been recovered from several graves of the Later Phase, such as the rock-cut tomb at Parambantalli (Aiyappan 1933), Adichanallur (Pate 1917) and Kanarapalaiyam (Sandford 1895), as well as rice grain impressions on the pottery from Mouttrapaleon (Casal 1956). Graves of the Early Phase and from the interior, on the other hand, have yielded only grains of various millets and pulses. By Early Historic times, large settlements on the plains of Tamilnadu clearly owed their growth and existence to the cultivation of wet rice (Maloney 1975).

It is of some interest to determine the source of the technique of irrigation agriculture. Since rice cultivation was well established in the Ganges valley by a date considerably before the period in question (B. & F.R. Allchin 1968), North India may well be the ultimate source of the technique. However, an intriguing possibility is suggested by extending a hypothesis put forward by Maloney (1975). He notes the presence of a number of features of North Indian origin in late 1st millennium South India: Brahmi script, Brahminical deities, ascetic orders, stamped coinage, the use of fired brick and many other features. He argues that these

all reached South India from Sri Lanka, which, as both legend and archaeological evidence indicate, was colonized by people from some part of North India in 5th century BC. Maloney supports his argument by reference to the development of civilization later in the areas North than South of the Kaveri river. He also notes references to Tamil people in early Brāhmī inscriptions in Sri Lanka. Irrigation works of considerable complexity are known in Sri Lanka from at least 3rd century BC (Parker 1909), and simpler techniques are likely to have considerably greater antiquity. Following from this, it may well be postulated that irrigation was introduced to South India from Sri Lanka. Alongside this technique, it seems likely that urn burial was also a Sri Lankan import. Although the evidence is scanty, inurned cremation seems to have been a major mode of disposal in 1st millennium BC North India (Chakravarty 1971) and its practice may have been introduced to Sri Lanka by the North Indian immigrants. The South to North spread of urn burial in South India closely fits this hypothesis of introduction from Sri Lanka. Urn burial is a mode of disposal of the dead well suited to the practice of more intensive agricultural techniques since it occupies much less of the now valuable ground than do any of its Megalithic counterparts. Furthermore, with the development of more settled farming, the original function of large funerary monuments as symbols of concrete affiliation with infrequently visited ancestral lands was no longer relevant. The initial use of urn burial in Sri Lanka and its spread North and West in the peninsula seems plausibly to be related to the spread of irrigation agriculture. By the late centuries BC, fully fledged towns existed on the western littoral of South India. This area enjoys certain natural advantages over other areas, notably an extensive and fertile hinterland, a coastline with a number of natural harbours and easy North-South communication. It is natural, therefore, that this area should have been the first to enjoy a fully urban way of life. The development of urban communities in more conservative areas like Karnataka took place at a rather later date. During the last centuries of the 1st millennium BC, there were profound changes in settlement patterns (Allchin 1963), involving the crystallization of settlement into a single compact area on open ground instead of the scattered settlements on hill terraces of earlier times. During this same phase

(period IV) settlements seem to have increased in size and in number and to have appeared in hitherto uncolonized areas (*ibid.*).

SUMMARY

The Iron Age of South India may usefully be divided into two phases. In the earlier phase the decrease in occupation at most settlement sites seems to reflect an increase in pastoral nomadism consequent upon increased aridity. This was not so in Maharashtra where an initial stage of abandonment was followed by the emergence of new communities of settled farmers. The introduction of irrigation early in the second phase allowed the exploitation of Tamilnadu and Kerala and rapid population growth in these areas. The funerary rites of the two phases seem to reflect the needs of the contemporary people.

ACKNOWLEDGEMENTS

This paper is a brief summary of my doctoral dissertation. I am extremely grateful to Dr F.R. Allchin who supervised my research and who has provided me with many stimulating ideas and encouragement. I also wish to acknowledge my deep gratitude to a host of Indian scholars whose unstinted help and kindness made my fieldwork in India possible, profitable and enjoyable, in particular, Dr Nagaraja Rao, Dr Sundara, Professor Deo, Dr Jamkedhkar, Dr Krishna Sastri, Dr Krishna Murty and Dr Srinivasan, but so many others as well.

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PAUL YULE

**On the Function of the Prehistoric Copper Hoards
of the Indian Subcontinent***

Were it not for the difficulties involved with the study of the second millennium Copper Hoards, I might begin with an apology on the part of my colleagues and myself, for we have made little progress toward illuminating the cultural background of this period. Unfortunately, the 75 odd known Hoards in themselves reflect their cultural milieu in only an indirect way. Yet, in the final analysis, given the lack of excavated associated finds, they still remain the basis for discussions of the prehistoric cultures of Bronze Age India. Students of the problem are essentially only in the beginning stages of determining who the creators of the Hoards were and how they lived. Within the framework of a research project which I have undertaken during the last few years, my purpose here is to provide the reader with brief preliminary comments on the ergology of the Indian metallic artifacts as a partial solution to the aforementioned problem. I shall limit my observations to selected artifact-types, several of which are inadequately known. Lastly, the geographical regions in which finds have been made shall be characterized in terms of their respective assemblages of metal objects.

* The form of the following text is essentially that of the brief oral version and ultimately derives from my study *Metalwork of the Bronze Age in India* ('Prähistorische Bronzefunde' XX, 8, 1985). Designations of artifact types cited here are based on my typology of all prehistoric Indian metal objects. For permission to study and reproduce archaeological finds I am indebted to the following colleagues: H.K. Prasad (State Museum, Patna), Amita Ray (Department of Archaeology, Univ. of Calcutta), Mira Roy (S.C. Roy Collection, Ranchi), Sunil Roy (Indian Museum, Calcutta), Swami Omanand Saraswati (Kanya Gurukul, Narela), R.C. Sharma (State Museum, Lucknow), D.A. Swallow (University Museum of Archaeology and Anthropology, Cambridge).

At the outset, in Haryana, the Ganges-Yamuna doab, eastern Chota Nagpur and the central highlands of Madhya Pradesh, the find circumstances, largely unknown and casually reported by laymen, shed little light on implement function or on the original purpose(s) of the Hoards.

In this regard H.-J. Peuke (1973: 51) has pointed out that the rare excavation evidence gives little basis to presume that Hoards were buried in the settlements; conceivably, in villages built of reeds, it would be nearly impossible to secure precious goods, given ever-present covetous neighbours with their prying eyes. In any case, a lack of information on the ancient geomorphology of the find-spots precludes the determination of whether these so-called *gangaghati*, as their name implies, regularly were deposited by streams or other particular features of landscape for a ritual or some other reason.

The Hoards most familiar in the specialist literature have come to light in the Ganges-Yamuna doab. Less well known are those of Chota Nagpur (Yule & Thiel-Horstmann, in press) and of northern Rajasthan/southern Haryana. Despite the lack of first-hand descriptions of the circumstances surrounding the discovery of the finds, enough is known to enable a general characterization of find distribution. Within each region an assemblage of a limited number of characteristic artifact types consistently reoccurs.

Certain types occur ubiquitously in India, also over several periods (especially bangles). But the distribution on many is limited and the objects of a given site often are recognizable as such. In the doab particularly numerous are so-called type IIIa, IVa and Va axes, type II harpoons, lance heads and swords (see *infra*). Rarer, but still characteristic are anthropomorphs as well as certain types of bangles. Northern Rajasthan/southern Haryana presents a somewhat different picture. Haryana is better known than the area directly to the South, with a large number of axes of several different types, type II bangles and bundles of thin bangles, as well as bars and type III harpoons.

Harpoons found in the doab have always fascinated writers on Indian prehistory, including, to name one, Stuart Piggott (1950: 237-8). His characterization of the Hoard folk as hunter gatherers, dependent on fishing, is a point which must be reconsidered in light of new research. The tangs of most Hoard har-

poons are tapered, in order to enable detachment from the shaft. Near the tang an eyelet or lug serves to secure the head to a line. Except for 'modern' western whaling harpoons, most harpoons have heads designed to detach from the shaft, once inside the game. A large struggling animal could break the shaft or point of a fixed spear, but the detachable head allows the animal to thrash in the water without directly straining the gear while its struggles imbed the barbs deeper into the flesh (Stewart 1982: 65). Perhaps best known are the Eskimo harpoons of the 19th century which often have detachable heads (Mason 1902: pls. 4, 6, 8, 9).

Closer to India in pharaonic Egypt a series of inscriptions and representations further suggest the exclusive use of harpoons for aquatic game (Bates 1917: 232-43, pls. 6-10; cf. Hornell 1929: 204-7). No harpoons in the sense used here are known which are primarily intended for land animals. Thus, the oft-cited cave representation of a lively rhinoceros hunt from the Mirzapur district (Cockburn 1883: 56-64; Lal 1951: 34, fig. G), in any case located outside the area of distribution of harpoons, seems to me not to show our harpoons in use, but rather barbed spears *without* retrieving lines. This representation may well have nothing whatever to do with the Hoards. If harpoons are limited in their distribution to and near the marshlands of the doab and previously those of Haryana (cf. Suraj Bahn 1972: 125-8), an area perhaps not even inhabited by rhinoceros, an association (if only at that time symbolic) with riverine hunting seems even more compelling. But the largest animals to previously inhabit the doab were crocodiles and gavials, which occasionally reach five metres in length and even these could be subdued with harpoons weighing much less than 945 grams and shorter than 45 cm long. The obviously intended monumental appearance of these weapons, the exaggerated weight and size present grounds to cast doubt on their primary function. Further doubts on function are raised by examples with dull barbs (type I; fig. 1.2) and by those the barbs of which turn back parallel with the shaft instead outward (type II; fig. 1.3).

Several reasons also exist to question the serviceability of many of even most so-called axes: e.g., nearly all double axes were fashioned with thick, blunt (not blunted) cutting edges. One from Bhagra Pir, on the other hand, is paper-thin and another

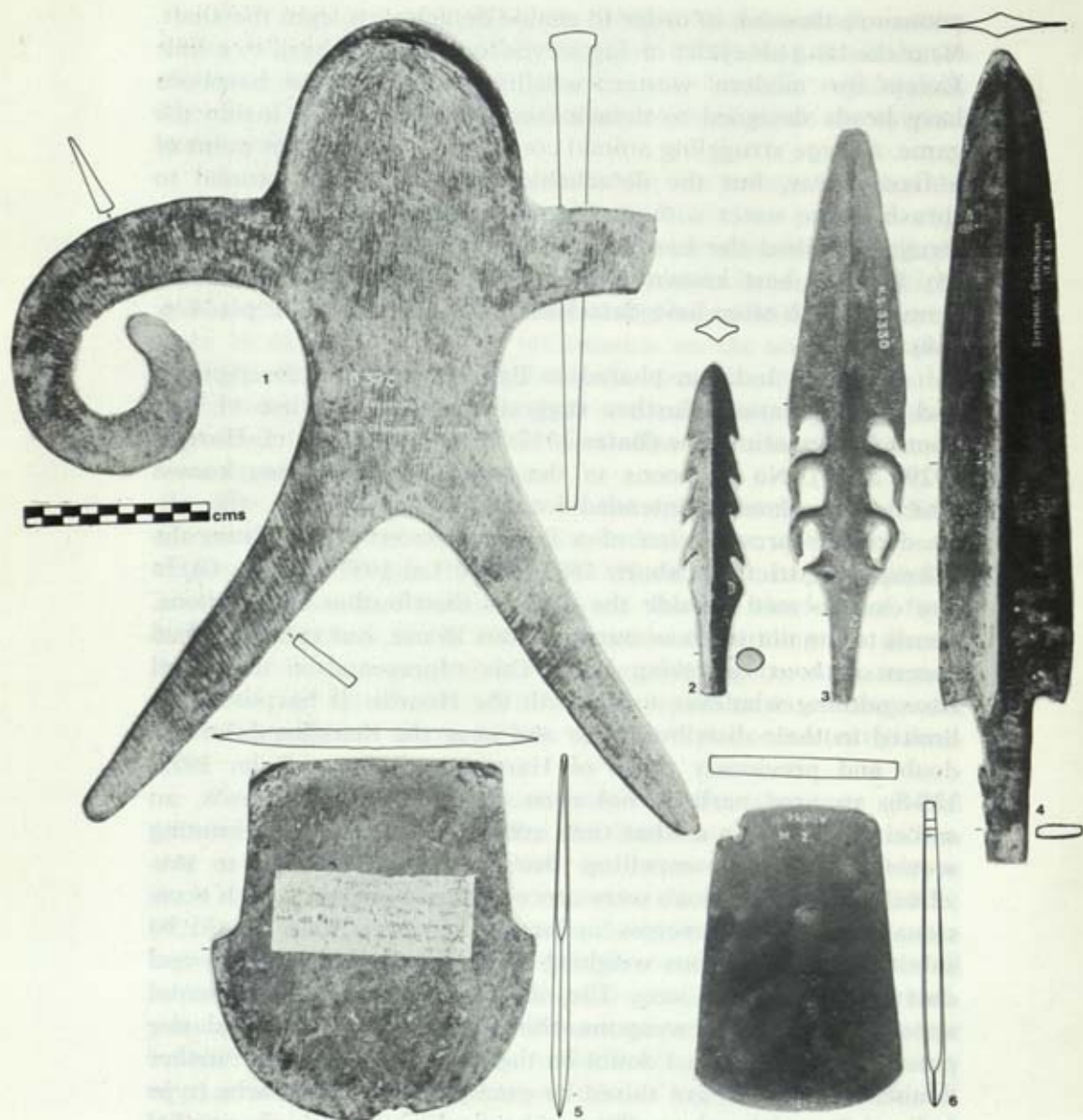


Fig. 1 — Representative metal artifacts from the Ganges-Yamuna doab. 1 Sheorajpur, 2 Province unknown, 3 Rajpur Parsu, 4 Sarthauli, 5 Nakrihiya, 6 Mainpuri. — 1, 2, 4, 5 State Museum, Lucknow; 3, 6 Indian Museum, Calcutta.

unwieldy example from there measures nearly a half metre in length. The blade tips of a blunt-edged double axe from Parihati (fig. 3.2) are ill-positioned with relation to the waist and hinder hafting, if this type was hafted at all. Other axe-like objects, particularly from Rewari in Haryana and Bahadarabad in Uttar Pradesh are fashioned from thin sheet metal. Certain palstaves from Rewari (cf. fig. 2.3), which measure up to 30 cm in length, weigh as much as two kg, and which have blunt edges, would be as difficult to haft as to use. They represent another extreme. Seven main types (I-VII) of palstaves are distinguishable on the basis of the proportions of length to width as well as morphological characteristics. A few short and broad (type II) axes show a difference in the patination which reveals hafting at the butt. At the same time, the few traces of ancient use-wear, again are to be found on some type II and rarely the proportionately slightly longer IIIa axes (fig. 2.1).

Representing the eastern Chota Nagpur area, about 140 copper objects appear at first glance to be axes, but bear only a very general resemblance to known axe-types (cf. fig. 4.1-4, 6). They are often heavy and large, often somewhat planoconvex, with dull and rounded 'cutting' edges (I prefer the term 'lead' edges). An explanation for the vast majority as unfinished blanks is unsatisfactory for no finished axes are known which correspond to them closely in form. Certain of these curious ingot-like objects also are known in and to the West of the Ganges-Yamuna doab. Axe-shaped ingots are well known in several cultures outside of India, particularly in Europe (cf. Mayer 1982: 287-92). This interpretation of artifact function raises, however, the additional question of why only axe-ingots and not axes themselves occur, for very few prehistoric palstaves are known from Chota Nagpur.

As is the case with axe-ingots from this copper-rich area, but for a single example from Bhaktabundh (secondarily used?) of the elongated and in section planoconvex bar celt-ingots (cf. fig. 4.5) none show *clear* traces of ancient wear or mechanical damage. Their artifactual function remains obscure. There is little reason and no good one to see them as ard points or digging sticks, as some experts would have it (Agrawal & Kumar 1982: 131; cf. Šach 1968).

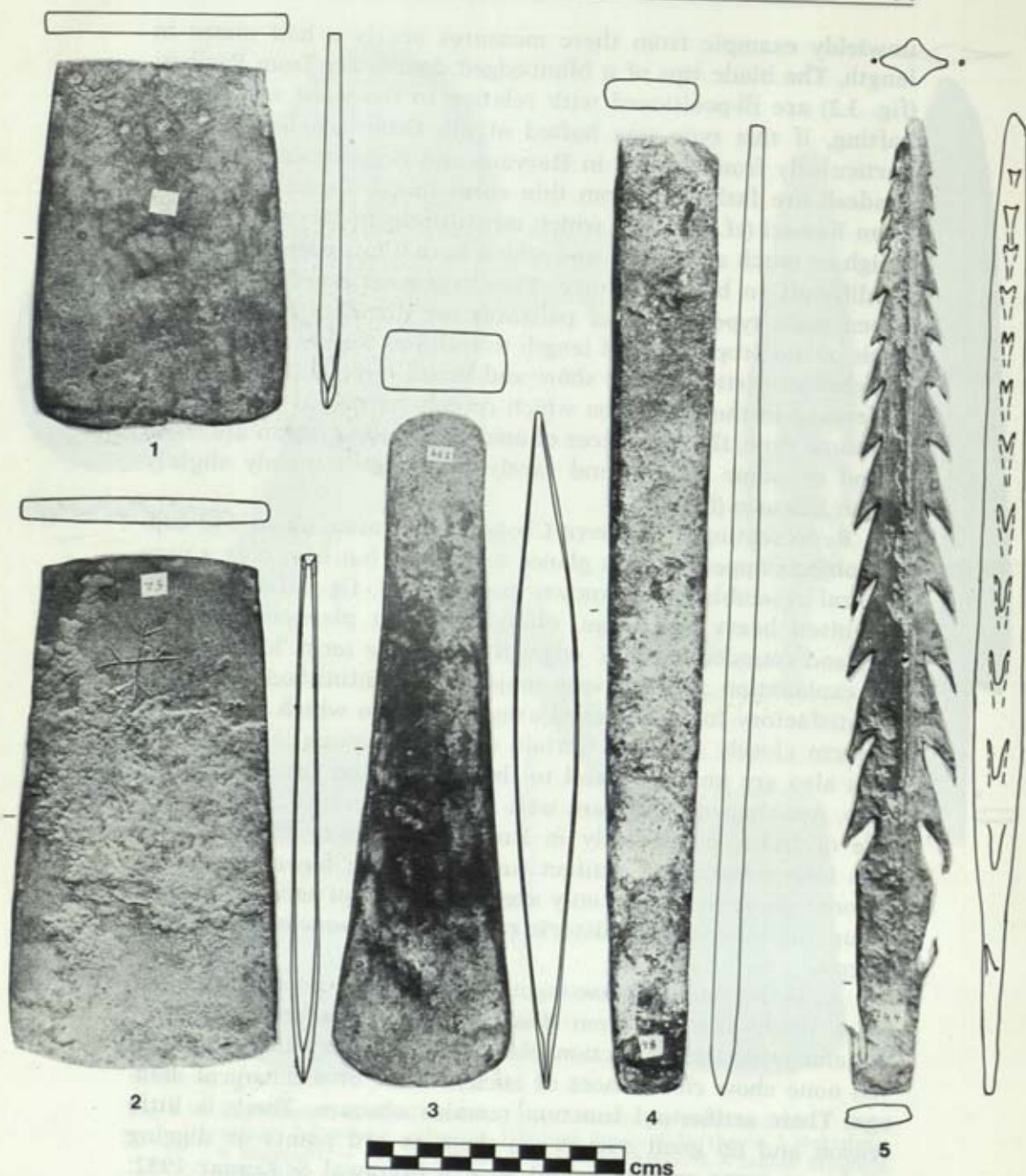


Fig. 2 — Representative metal artifacts from Haryana. 2, 4, 5 Hansi, 1, 3 Rewari.
— Kanya Gurukul, Narela.

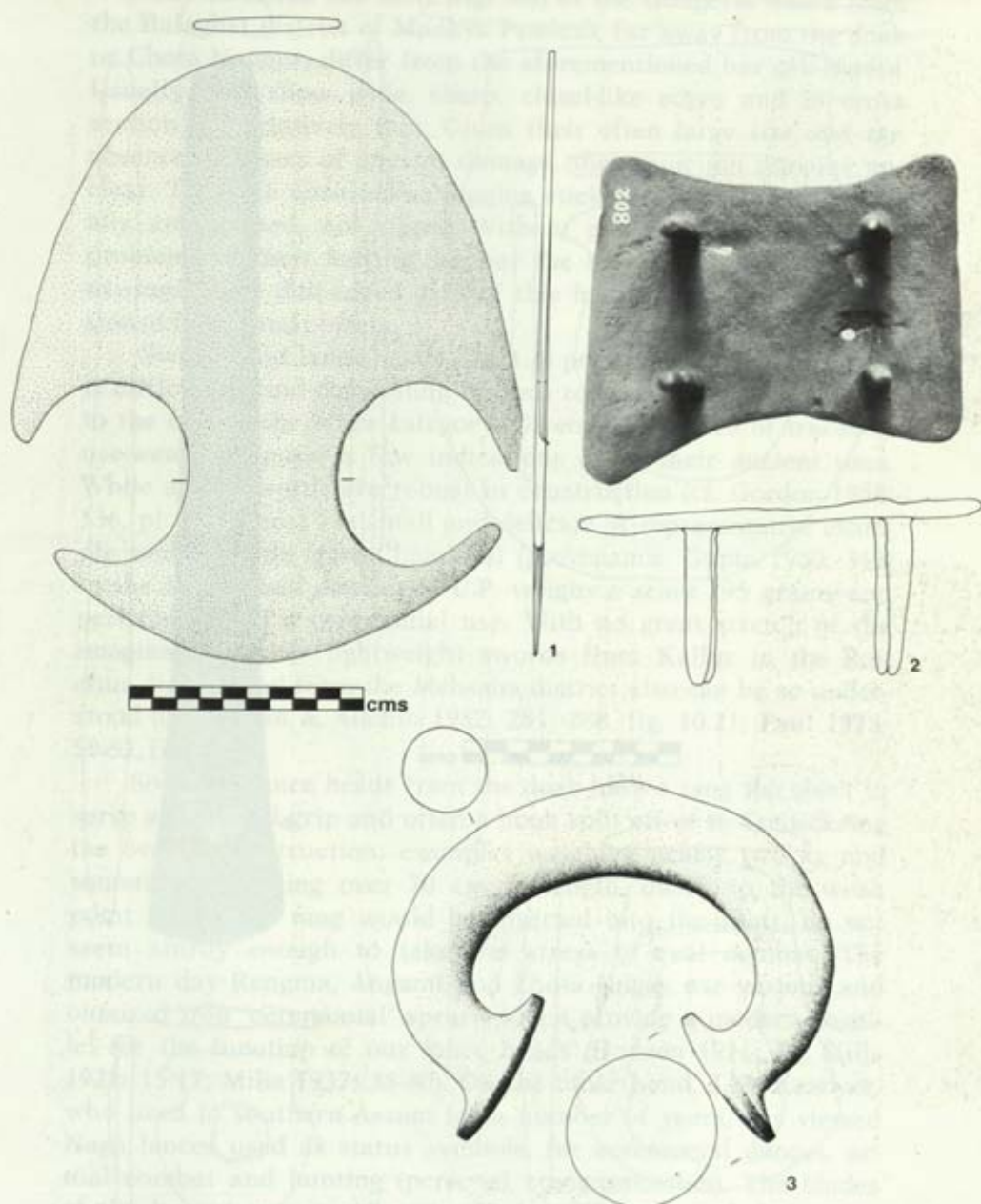


Fig. 3 — Selected metal artifacts from Chota Nagpur. 1 Bhagra Pir, 2 Bartoli, 3 Parihati. — 1, 2 State Museum, Patna, 3 Dept. of Archaeology, University of Calcutta.

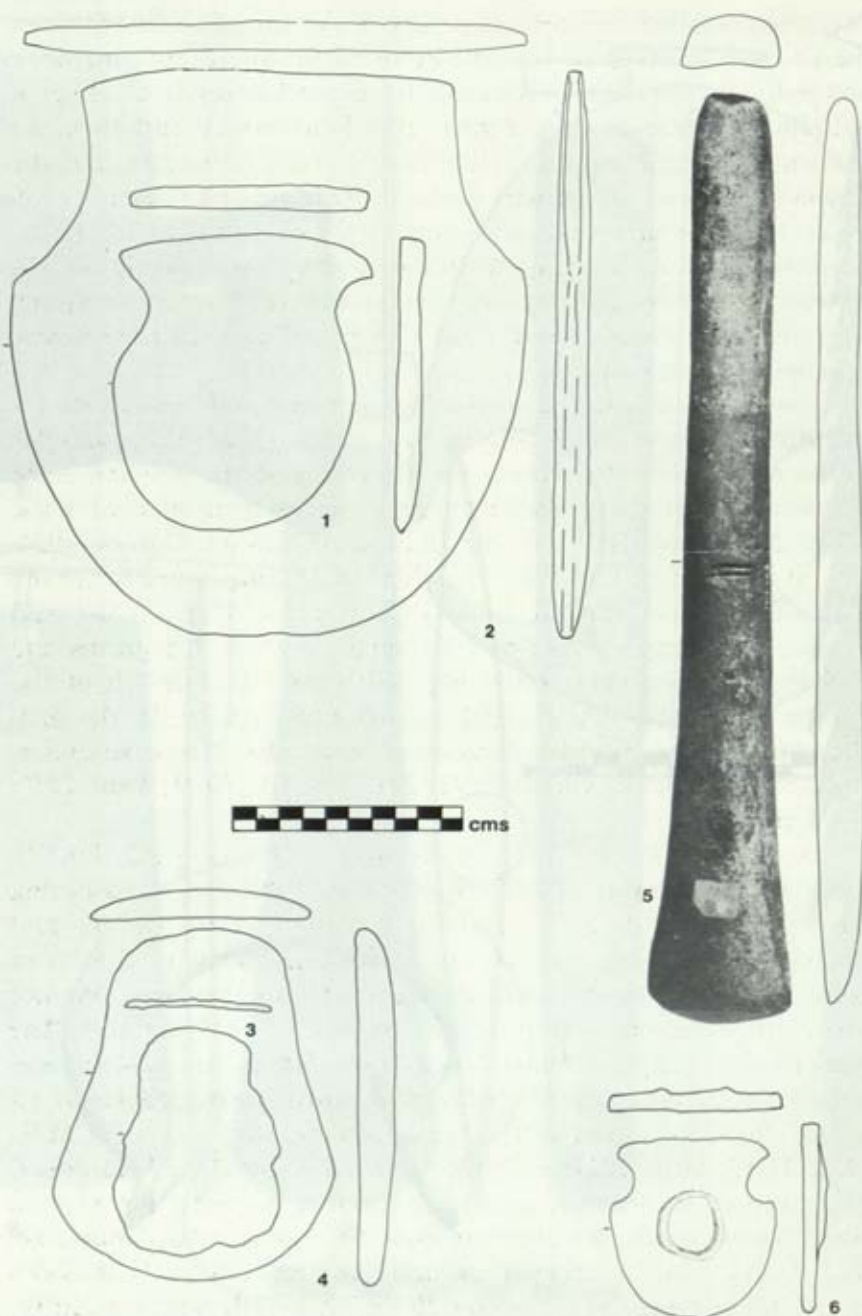


Fig. 4 — Representative metal artifacts from Chota Nagpur. 1, 3 Chota Nagpur, 2 Bassia Thana, 4 Bartola, 5 Hami, 6 Patna. — 1, 4, 5 University Museum of Archaeology, Cambridge, 2, 3 S.C. Roy Collection, Ranchi, 6 State Museum Patna.

The so-called bar celts (fig. 5.3) of the Gungeria hoard from the Balaghat district of Madhya Pradesh, far away from the doab or Chota Nagpur, differ from the aforementioned bar celt-ingots. Usually they show wide, sharp, chisel-like edges and in cross section are relatively thin. Given their often large size and the absence of traces of ancient damage, their function remains unclear. They are unsuited as digging sticks or picks, which generally are pointed, not edged. Without going into detail on the problems of their hafting, neither the bar celts from Gungeria, axe-ingots nor dull-edged axes of this hoard awaken the impression of functional objects.

Swords and lance heads (fig. 1.4) present problems in that it is difficult to find compelling reasons to assign specific examples to the one or the other category. Given the absence of traces of use-wear, we possess few indications as to their ancient uses. While a few swords are robust in construction (cf. Gordon 1958: 136, pl. 27b), most are small and delicate. A representative example said to come from Chandausi (provenance: Gupta 1980: 312) in the Moradabad district of U.P. weighs a scant 295 grams and perhaps served a ceremonial use. With no great stretch of the imagination, other lightweight swords from Kallur in the Raichur district and from the Mehsana district also can be so understood (cf. Allchin & Allchin 1982: 281, 288, fig. 10.21; Pant 1978: 50-52, fig. 102).

So-called lance heads from the doab have a tang too short to serve as a sword grip and often a hook split off of it. Considering the overall construction, examples weighing nearly two kg and sometimes reaching over 70 cm in length, owing to the weak point where the tang would be inserted into the shaft, do not seem sturdy enough to take the stress of real combat. The modern day Rengma, Angami and Lhota Nagas use various and outsized iron 'ceremonial' spears which provide a modern parallel for the function of our lance heads (Hodson 1911: 35; Mills 1922: 15-17; Mills 1937: 38-40). On the other hand, J.M. Kenoyer, who lived in southern Assam for a number of years, has viewed Naga lances used as status symbols, for ceremonial dances, actual combat and hunting (personal communication). The blades of the largest may reach some 20 cm in length and the entire, mostly iron construction, as much as 2 m. As opposed to the aforementioned descriptions of spears used principally as cer-

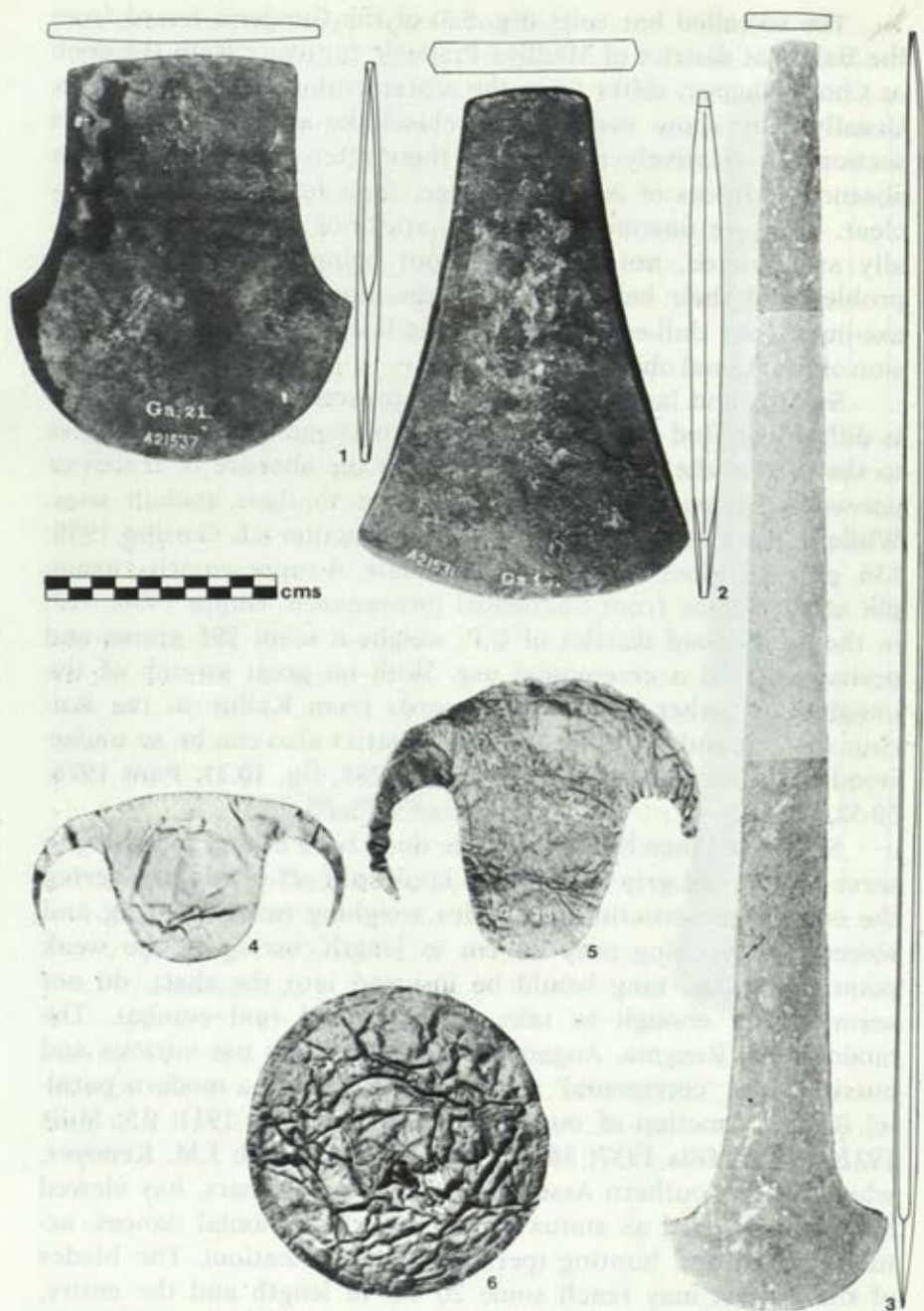


Fig. 5 — Representative metal artifacts from the Gungeria hoard. Indian Museum, Calcutta.

emonial weapons, Kenoyer reports these heavy lances were certainly used against tribal enemies and big game. A further interesting modern parallel for the use of barbed spearheads is to be found with the eastern Angami warriors (Hutton 1969: 34). The shanks of their ceremonial spears are adorned by a series of purely ornamental barbs cut from the solid metal, which are regular, varying according to the martial achievements of the owner, but very rarely exceeding five.

Hoard objects for which a cultic significance is certain include variously shaped anthropomorphs (fig. 1.1), which in fact are poorly suited as weapons, as some writers to the contrary have maintained (Agrawal 1971: 200). A cultic interpretation for them, the delicate sheet silver bucrania and discs (fig. 5.3-5) from Gungeria and the rare cult stand from Bartoli (fig. 3.1) is practically the only one available. This application also lies close at hand for the large copper ring from the Parihati hoard (fig. 3.3). Too large for human adornment, it may have been intended for a divine wearer.

With these artifacts our circle closes. Most Hoard objects seem to have served a non-utilitarian function or one as ingots and several have an obvious cultic significance. Broken 'ingots' (if the breaks reflect the primary use and are truly ancient) could be interpreted as reduced in size in order to ease their melting (cf. Weisgerber 1980: 76-7, fig. 7). This explanation is particularly attractive for the objects from Chota Nagpur. A utilitarian use need not, however, exclude a spiritual meaning. Nor need the Hoards of one region have served the same function as those of another region (e.g. Chota Nagpur and Haryana). The Hoard implements neither show significant traces of ancient use-wear/damage nor do they correspond to the repertoire of implements of daily life from modern or ancient Indian villages (such as arrow-heads, knives etc.). Further surveys and excavations are needed in order to gain insight into the culture of the Hoard folk and unravel the mystery of the Hoards themselves.

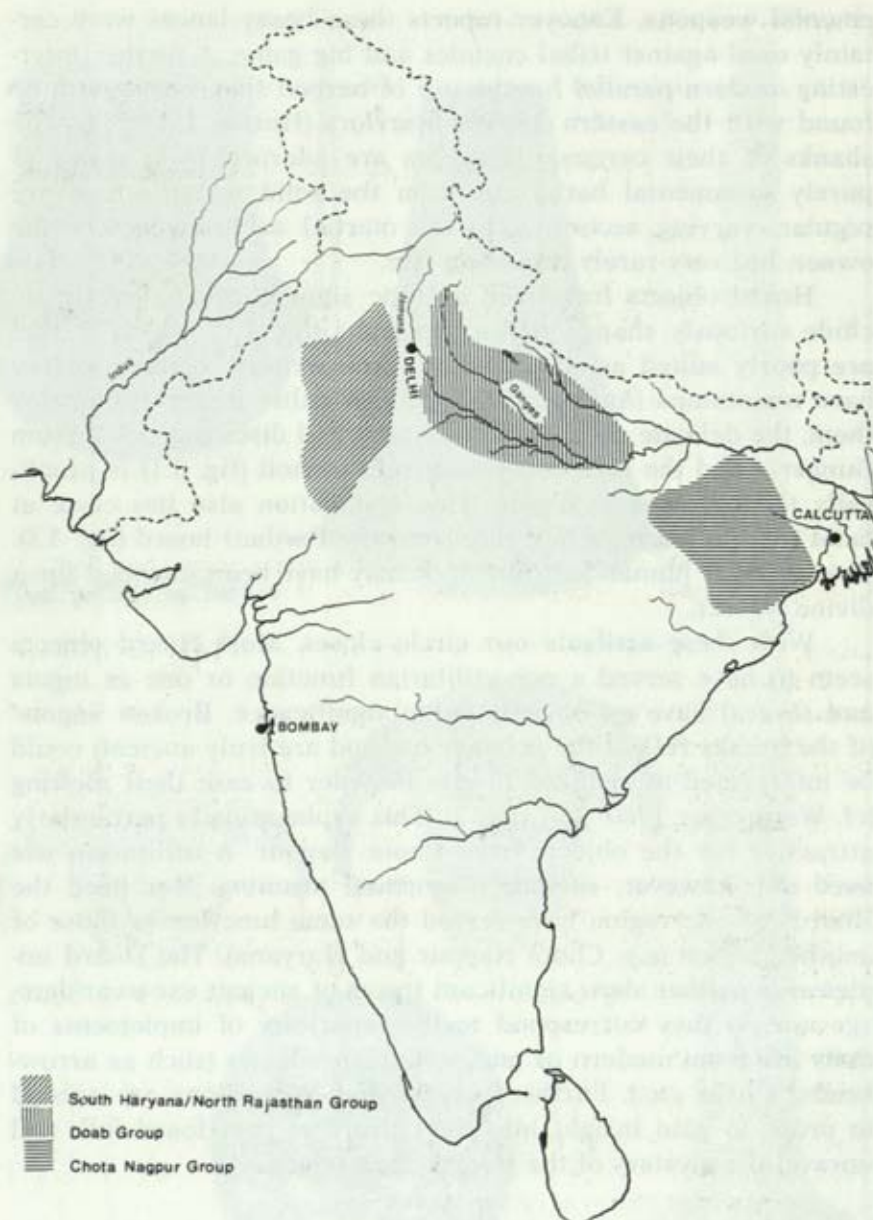


Fig. 6 — The main groups of metal hoards in India.

Type designations and inventory nos. of objects reproduced —

- Fig. 1. — 1 anthropomorph II (0.37c), 2 harpoon I (81.18), 3 harpoon II (A 21512 N.S. 3330), 4 lance head (G.9), 5 axe Va (69.5), 6 axe IIIa (A 21556 M2).
- Fig. 2. — 1 axe IIIa (237), 2 axe IVb (52), 3 axe IVc (234), 4 bar (48), 5 harpoon III (44).
- Fig. 3. — 1 double axe II (238), 2 miniature stand (802), 3 votive ring (821/77).
- Fig. 4. — 1 axe-ingot II (43.166), 2 axe-ingot Ia (51), 3 axe-ingot VI (39), 4 axe-ingot III (2704), 5 bar celt-ingot (1919.58.2), 6 axe-ingot II (832).
- Fig. 5. — 1 axe Va (A 21537), 2 axe VII (A21531), 3 bar celt (A 21535), 4 bucranium I (A 21544), 5 bucranium II (A 21539), 6 disc (A 21547).

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GEORGE ERDOSY

The Economic Organisation of Early Historic States in the Ganges Valley

Introduction

One of the most curious features of South Asian Archaeology has been its neglect of Early Historic urbanisation in the Ganges Valley¹. While in almost all other areas of the field great strides have been made towards the documentation and explanation of cultural processes, not only is fieldwork pertaining to the Early Historic Ganges Valley suffering from limited size and objectives but there is also a grave shortage of explanatory hypotheses without which the study of this period will never advance beyond the construction of culture sequences. The aim of this paper, therefore, is both to summarise the archaeological evidence in its current state and to advance a series of hypotheses explaining the cultural processes evident from it. The value of the hypotheses offered here derives not so much from their ability to explain certain outstanding features in the archaeological record, as from their role in guiding future fieldwork. Accordingly, I shall conclude this paper by suggesting the direction future fieldwork ought to take if it is to contribute to our understanding of a crucial period of India's history.

¹ The only monographs to deal exclusively with this subject on the basis of the archaeological as well as the literary evidence are by Ghosh (1973) and Thakur (1981) and both suffer from the limited amount of archaeological data then available. An important new study, based on settlement patterns though not directly concerned with urbanisation is by M. Lal (1984). My fieldwork regarding urban development in Allahabad district is summarised in Erdosy (1984).

The Archaeological Evidence for Gangetic Urbanisation

Any discussion based on the archaeological record must begin by an evaluation of the nature of the available evidence. As the goal of the excavators of Early Historic sites has primarily been the construction of culture sequences, the evidence consists primarily of lists of traits attributed to various cultural periods and published in a summary manner; evidence for subsistence and settlement patterns and social organisation is almost completely lacking. While such lists, attributed to long periods of time and spread over such an immense area as the Ganges Valley, hold many pitfalls for the investigator, regularities in the changes in these lists over time can be detected and must for now serve as the basis for our reconstruction of events.

At present the cultural development of the Ganges Valley is thought to be reflected in a succession of cultural periods, all distinguished by easily recognisable attributes. Hence Chalcolithic succeeds Neolithic by virtue of the presence of a few copper objects and Iron Age succeeds Chalcolithic for the same reason. Within the Iron Age the earliest period is named after its most conspicuous ceramic, Painted Gray Ware, which gives way to an equally striking pottery, Northern Black Polished Ware, around 500 BC, heralding the advent of yet another culture. At this point historical information enters the stage and the subsequent cultural periods are tagged with dynastic terms — Maurya, Śuṅga, Kushan, Gupta, etc. The fact that NBP Ware overlaps with Painted Gray Ware on the one hand, and is present in the Maurya and Śuṅga periods on the other perhaps best demonstrates the confusion surrounding this periodisation — the accepted framework not only fails to explain cultural change, being essentially descriptive, but is also of dubious chronological value, due to the overlapping of even some of its most distinctive traits. Based as it is on the occurrence of individual traits, the framework also ignores continuities between and discontinuities within its postulated periods, thereby giving a seriously distorted view of cultural development. Consequently, as long as fieldwork is concentrated on establishing the chronological limits of the postulated periods, and on enhancing the list of traits attributed to each of them, research into the Early Historic Ganges Valley will continue to stagnate.

By contrast, freed from the straitjacket of the currently favoured culture sequence the archaeological evidence can yield useful information in spite of its limitations. As this paper deals with the Early Historic period, which may be placed within the 10th to 3rd centuries BC, we may leave the beginnings of settlement in the Ganges Valley aside — the relevant issues are ably discussed by G.R. Sharma in his excavation reports of the most crucial sites (Sharma 1980). Based on current evidence, the succeeding Neolithic, Chalcolithic, and Early Iron/Painted Gray Ware 'cultures' represent a long and stable period of settled life, down to the 6th century BC, which can only be described in the most general terms. A mixed economy — combining agriculture and hunting-gathering with a gradual shift in favour of the former — is indicated both by the range of artefacts and by plant and animal remains. The latter include the presence of rice and of both domesticated and wild animals, the former is represented by microliths (blades, arrowheads, scrapers, etc.), polished stone tools (celts, querns, mullers, rubbers, etc.), and bone arrowheads and points. The introduction first of copper and subsequently of iron had little effect as the former was used chiefly for ornaments and domestic equipment, and the latter for weapons. The range of small objects — mostly ornaments of bone, terracotta, copper, and, more rarely, of precious stones — was limited throughout the period and showed little variation. Although little is known of settlement patterns, huts built from a combination of reeds and mudplaster with floors of rammed earth have been repeatedly encountered. At the only extensively excavated site — Mahagara (Sharma 1980) — 'houses' consisting of two or three such huts and clearly demarcated from one another were found and are assumed by the excavator to belong to families. In spite of variation in the size of houses (22 to 80 sq.m.) no evidence of social stratification emerges — the equipment found in all houses was similar, suggesting an egalitarian society and the absence of craft specialisation.

While horizontal exposure of other sites — and their detailed publication — is urgently needed, the impression of a stable, subsistence economy supporting an essentially egalitarian society is reinforced by the continuity of material assemblages over time and by the general absence of luxury goods. That the seeds of change were nevertheless present is indicated by the dramatic

changes appearing in material culture from the 6th century BC onwards. Most conspicuous of all developments is the appearance of massive fortifications. The earliest of these — at Ujjain, Kauśāmbī, Rājghāt (ancient Kāśī) and Rājgir — can be dated to the 6th-5th centuries BC, others — at Ahicchatra, Champa, Mathurā, Pāṭaliputra, Śrāvastī, Tilaura-kot (possibly ancient Kapilavastu), and Vaiśālī — were built in the 4th-2nd centuries BC. The fortifications consisted of an earthen rampart with a corresponding moat, which was at times reinforced with brick revetments and crowned with parapets. The ramparts measure up to 60 m in width and up to 12 m in height, involving not only considerable feats of engineering but also the organisation of a sizeable labour force, indicating a significant change in the level of social organisation. This view is supported by the massive size of some of the fortified sites, the largest of which, Kauśāmbī, measures almost 300 hectares². These sites are not only far larger than those of the preceding period, but also compare favourably with early cities of other civilisations. The size of the fortified sites would alone suggest an urban character and this impression is reinforced by the presence of baked brick architecture along with elaborate sanitation arrangements, represented by drains, tanks and wells. While no recent excavation is extensive enough to reveal aspects of town-planning, Marshall's dig at Bhīṭa (Marshall 1915) revealed regularly laid-out streets along the city gates which were skirted by large residential structures that were interpreted as merchants' residences. By contrast, the inner quarters of the city were congested and irregularly built, providing at least a crude indication of social stratification. Although the remains of Bhīṭa are considered to be post-Mauryan, similar structures and an equally impressive array of civic amenities were found at the early urban site of Kauśāmbī (Sharma 1969).

Further indications of cultural change which can be summarised briefly include the appearance of coinage by the 5th century BC, extensive use of iron tools in agriculture and the corresponding decline of stone and bone tools from the 6th century BC and

² Surface surveys, however, indicate that not all the fortified area was used for residential occupation. At Kauśāmbī only 150-200 hectares show Early Historic surface remains, although to this must be added areas of occupation just outside the defences (Erdosy 1984).

a considerable increase in the quantity, quality and range of luxury goods. All these are crude, but reliable indicators of increasing output, trade, and social stratification. For the first time there is also some evidence for a considerable increase in population, based on the results of summarily published surveys. By the 3rd century BC we may complete our list with writing, soon to be followed by elaborate architectural and sculptural remains in stone which are familiar to any student of India.

While the simple contrast between rural and urban periods here outlined hardly does justice to the complexity of the subject, it is all the archaeological evidence allows at the moment. Even in its current, limited state, however, it suggests at least the rapid development of cities from the 6th century BC, and a contrast between the few, large urban centres and the overwhelmingly rural character of society. While it is tempting to treat at least the first fact as an artefact of limited fieldwork, it is more productive at the moment to attempt to explain the phenomena as they currently appear. It is true that only new data will help clarify the processes accompanying Early Historic urbanisation, but without some preliminary attempts at explanations, pinpointing crucial aspects of the problem, no clear guidelines can be set for future fieldwork. Here the presence of literary sources to some extent compensates for the limitations of the archaeological evidence, and being a fruitful source of hypotheses must be carefully examined.

Literary Evidence for the Rise of Cities

What the study of literary sources immediately reveals is a striking coincidence between urban development as reflected in material remains, and an intense interstate rivalry as shown by literature. Although the earliest political developments of the Ganges Valley are clouded in legend, by the 7th century BC we can discern the presence of numerous states — traditionally numbering 16 — in North India. Their quarrels are well documented and led gradually to the absorption of smaller states by larger ones. Competition for control of the Ganges Valley was carried to its logical conclusion by the 4th century, when the Magadhan kingdom not only extended over this area but spread

its dominion over most of the rest of the Subcontinent as well. The spirit of the age was succinctly captured by the author of the *Arthaśāstra* in the following statement: 'The king, endowed with personal excellences, and those of his material constituents, the seat of good policy, is the would-be conqueror. Encircling him on all sides with territory immediately next to his is the constituent called the enemy. In the same manner, one with territory separated by one other territory is the constituent called the ally' (*Arthaśāstra* 6.2.13-15).

The link between interstate conflict and urban development is first suggested by chronology; it is much reinforced, however, by an examination of the effects of the political climate on the internal organisation of states. Here we must turn for our evidence to one remarkable document, the *Arthaśāstra*, traditionally attributed to the Mauryan minister Kauṭilya. The text is not without problems — it was composed over a long period of time and it described an idealised situation which cannot be expected to conform to reality in every detail. Throughout the work, however, one consistent message rings clear — in a time of volatile political situation all resources of a state must be controlled by one hand; only thus can the strength of a state be sufficiently concentrated for the pursuit of a foreign policy whose ultimate aim was conquest. This outlook agrees so well with the political situation obtaining in the 7th-4th centuries BC that the conclusion that the *Arthaśāstra* reflects conditions of this period in spite of its late composition is inescapable. It is not the myriads of detail, but the general principles laid down in this work that are important and show a remarkable consistency. By concentrating our attention on them we may gain invaluable insight into the processes accompanying Early Historic urbanisation. Of greatest interest in this regard is the detailed treatment accorded to economic policy and the principal aim of the remainder of this paper is to examine the effects of economics on the origin and character of Gangetic cities.

We must begin our survey of the economic system with agriculture, rightly reckoned to be the basis of a state's wealth and power. Here production was in the hands of private operators, owning their land and providing the bulk of the required labour. Land could be sold and inherited, though the state reserved the right to evict inefficient cultivators and also farmed a

small percentage of the land directly. Capital works were constructed either through communal effort — as in the case of wells and tanks — or by the state through the imposition of a labour tax as in the case of roads and canals. The basic rate of taxation was one-sixth of the produce, paid in kind and augmented by water charges, army provisions and, at times, by emergency levies. Great efforts were made to encourage and expand cultivation — in times of distress taxes could be remitted, while loans of cattle, grain and money were made available in addition to grants of land for the cultivators of virgin lands. The most important result of centralising tendencies was the presence of an army of bureaucrats watching every aspect of rural life and collecting taxes. An important regulation prohibited the sale of primary products at the point of their origin, thereby channelling local trade through a limited number of markets.

Other sources of primary products were forestry — whose importance is reflected in the great variety of goods extracted — and mining. Both these activities were in the state's hands; mining in particular due to its economic and strategic importance, which is shown in the following quote, neatly encapsulating the philosophy of the author: 'The treasury has its source in the mines; from the treasury the army comes into being. With the treasury and the army the earth is obtained with the treasury as its ornament' (*Arthaśāstra* 2.12.37). Unfortunately few details of mining or forestry operations are provided; instead the reader is treated to marathon exercises in classification, which make the *Arthaśāstra* at times very tedious reading. The general pattern, however, was the employment of labourers paid in kind, supervised by foremen paid by money.

While a large share of primary products was directly consumed or — as in the case of precious minerals — hoarded in the treasury, a still impressive share supported the manufacturing sector. Manufacturing was carried out by artisans organised into guilds and by less skilled labourers under their control. Raw materials were provided either by the customer or by middlemen and stiff penalties ensured that a specified quantity and quality of products was returned in a prescribed time. Artisans received wages according to a carefully graded system while labourers received food rations augmented by a meagre wage. While it is not strictly speaking proper to differentiate private and state

sectors, state control of forestry and mines ensured that manufacturing depended on minerals or forest produce was effectively in the hands of the state and was often carried out in the royal storehouses. In addition to regulating wages, quality and prices the state also restricted the locations of workshops to a few centres for ease of supervision and prescribed severe penalties for manufacturing at unauthorised places. It also collected manufacturing charges in addition to a host of taxes more appropriately discussed under trade.

Trading activities were not only an important source of revenue, but also ensured the smooth functioning of the productive sectors through a regular flow of goods. Not surprisingly, state interference was all-pervasive. In addition to fixing prices, collecting excess profits resulting from bidding above the fixed price, and levying sales tax, coining fees, and charges for the standardisation of weights and measures, the state also participated directly in trading activities. In addition, the location of markets was restricted in number, once again to facilitate control. The handsome proceeds generated flowed to the treasury, whose use was already alluded to. Foreign trade was especially encouraged — roads and rivers were kept safe, losses arising out of accidents or banditry were compensated, and a carefully graded system of customs duties ensured the importation of strategic goods. In sum, the state's activities consisted partly of maximising traffic, and partly of channelling trade through a limited number of outlets for better supervision, which yielded vital revenue and protected royal monopolies.

The Effects of Centralisation on Urban Development

Before a detailed examination of the effects of the above-listed policies a brief excursion may be made into the archaeological literature for a few general patterns. Ethnographic studies often form the basis of archaeological interpretation and it is not surprising to see that archaeologists interested in settlement patterns have also turned to ethnography for inspiration. We may limit our survey here to a study of contemporary African societies which searched for contrasts between centralised and decentralised spatial patterns (Hodder 1978). In decentralised societies

settlements showed little variation in size and were randomly dispersed, in contrast to centralised states, where a marked hierarchy of settlements were found. Higher-order sites were larger, had a greater variety of functions and served larger areas than lower order sites, though their distribution in space was complicated by political factors. In some cases larger settlements clustered at the centre of a territory, suggesting diminishing control towards the periphery and strong centralisation, in others they were more dispersed, suggesting widespread control through subsidiary centres as well as potential competition should peripheral centres assert their independence. In all cases hierarchy of individuals paralleled hierarchy of sites, while large-scale flow of goods and central control of at least foreign trade were also regular features. As we shall see, the *Arthaśāstra* attests to the presence of all these characteristics, and affords an opportunity for a deeper analysis of the factors responsible for them.

As already emphasized, the state's desire to closely monitor all economic activities manifested itself in a severe restriction on the number of locations where production and trade could be carried out. Only through such restrictive measures could the administration cope with the task of supervision assigned to it. Different sectors of the economy are, however, susceptible to differing degrees of concentration, and this holds the key to the pattern of settlement. Agriculture, being the cornerstone of the economy, must be discussed first. It is by nature a dispersed activity. The scope for the concentration of population is restricted by economic considerations, whose severity was emphasized by Chisholm, whose studies concluded that agricultural output may decrease by 25% should the distance between house and farm exceed one kilometre, and by as much as 50% should this distance be over 2 kilometres. On the other hand administrative officers were instructed to 'record the number of villages, fixing their boundaries [...], record all grants, sales, favours, and exemptions, keep records of houses by an enumeration of taxpayers and non-taxpayers and record all money, labour, duty and fines arising from them' (*Arthaśāstra* 2.35.3-5). It is easy to see that if people were allowed to disperse, the cost of administration would be prohibitive. To reconcile the claims of administrative and productive efficiency the most sensible solution was to concentrate the population in large villages. This is clear from

the *Arthaśāstra*, where villages of 100 to 500 families were envisaged. It must be added, that in most of the Ganges Valley political insecurity, fertility of land, uniformity of relief and communal cultivation are even today powerful agents of agglomeration, independent of state policy (Ahmad 1952). All these reasons lead one to postulate the nucleated village as the basic settlement type of Early Historic times. Over this base was evidently superimposed a large network of administrative headquarters, whose functions of supervision and tax collection have already been enumerated. Due to the restrictions placed on trading of primary products these settlements can be expected to serve as marketing centres as well. Concentration of population being impractical, dispersion of control was necessary, which is why the *Arthaśāstra* envisages administrative headquarters for every 100, 200, 400, and 800 villages, and also defines the territory served by one revenue officer as 5 to 10 villages.

Examining the effects of central control of manufacturing suggests that two further types of settlements may be added to those enumerated above. Manufacturing activities, unlike agriculture, are susceptible to concentration but once again to differing degrees. Given the repeated injunctions of the *Arthaśāstra* against manufacturing in unauthorised locations and the cost of supervision it is reasonable to expect an attempt at maximum centralisation. Industries essential to the functioning and surviving of the state could be concentrated around the seat of political power, making the capital city of overwhelming importance; a task facilitated by control of mineral resources in the hands of the state. On the other hand, manufacturing dependent on a more widespread resource base, serving a wider market, and having marginal strategic significance may be dispersed into a few subsidiary centres. Assuming that these centres can be conveniently located in some of the administrative headquarters already established in the countryside we may summarise the resultant settlement pattern. Nucleated villages, with few economic functions other than agricultural production will form the base of the pyramid. Over these will lie administrative headquarters; although these will contain agricultural activities, they would in addition be centres of administration — especially of tax-collection — and serve as markets in rural areas. Some of these headquarters will in addition assume manufacturing functions as well, attracting

more extensive trading activity in the process, that would help them acquire urban status. Finally, at the apex of the pyramid would be the capital, which in addition to performing all the above functions — as it is difficult to envisage it completely devoid of agricultural producers — would also contain all manufacturing of strategic importance, would serve as the principal outlet for external trade, and hold the treasury and all administrative centres, in addition to being protected by a large garrison. The overwhelming importance of the capital city is clear from its depiction in the *Arthaśāstra*, and is at least partly reflected by the size of Early Historic fortified sites, all of whom have been identified with the capitals of Early Historic states. Such a pattern of settlement, though obviously a simplified image of reality, finds support from textual and — to a lesser extent — material evidence. It also satisfies an important assumption of central place theory, namely that 'higher order places offer a greater range of goods and services, have more establishments, larger populations, trade areas and do greater volumes of business than lower order settlements' (Garner 1968: 308). Its refinement must be one of the principal goals of future fieldwork, and it is to this issue that we must now turn.

Conclusions

As demonstrated above, an analysis of the literary sources suggests that the rapid and uneven development of urbanisation which manifests itself in the archaeological record from the 6th century BC was the product of the interstate rivalries of the Early Historic period, which forced states to develop a highly centralised economic system, and expand productive capacity in order to increase their wealth and power. An examination of economic policies in detail showed that they could lead to the development of a four-tiered hierarchy of settlement. Although this model can explain in a general way certain aspects of the archaeological record — and perhaps ultimately account for the great contrast between rural and urban sectors which is so characteristic even of contemporary India — it is of greater value as a guide to future fieldwork. It points, above all, to a study of settlement patterns through extensive surface surveys as the best

method of approaching the problem of Gangetic Urbanisation. Such surveys must 1) establish a settlement typology, 2) study the distribution of settlement types, 3) compare the distribution of settlement types with artefact distributions, and 4) examine changes in the above patterns over time. The literary sources further help us in pointing to the territory of an Early Historic state as the best field of investigation, and these territories can themselves be reconstructed from the literature. Finally, they demonstrate that it is by constantly moving back and forth between literary and material records — a luxury not often afforded to investigators of urban origins — that we may best clarify the origin of Early Historic cities. Although surveys must ultimately be augmented by horizontal exposure of Early Historic sites, the data that they are capable of producing will, apart from guiding excavators, throw much needed light on a crucial period of India's cultural development.

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J.R. KNOX

Jewellery from the Nilgiri Hills, a Model of Diversity

One of the most obscure corners of the archaeology of ancient India lies in the mysterious megalithic grave complex of the Nilgiri Hills of South India. The origins, development and the precise date of the culture associated with these graves have been the subject of much discussion since their discovery in the early 19th century. In the 1970's, Leshnik suggested that groups of Iranian horsemen came to the Nilgiris in the early centuries AD and that they were the authors of the graves. Professor Parpola (1983) accepts Leshnik's view but adds, based upon a linguistic argument, that these Iranians mixed with a local population who had brought a megalithic tradition from the plains some time in the second half of the 1st millennium BC. The Todas seem very likely to be the descendants of the Nilgiri megalith builders and there may be truth in the Iranian theory but these are not issues for discussion here.

Although many, if not most, of the major ancient grave sites of the Nilgiri complex have been excavated, the archaeology of the region is still in its infancy. This paper is an attempt to re-examine some of the old excavated material to see if any broad pattern can be detected in it beyond simple typology and goes hand in hand with the hope that controlled excavation and survey in the region will answer the questions posed by it.

The Nilgiri complex was an apparently discrete entity with a very distinctive, well known style existing more or less in contact with the world outside the area. The extent to which this contact was important to the material assemblage varies throughout the range of types of object and technology represented in it. That contact seems important in terms of the only category of Nilgiri material to be dealt with here, the jewellery and other objects of personal adornment. These seem to represent, in their consider-

able diversity, a limited movement of objects and ideas to the Nilgiris or, at any rate, the maintenance of old traditions in the context of a style which seems unique to the region.

The Nilgiri graves were, following their discovery, soon the object of much speculation. Most, however, and probably the richest of these graves were looted by amateurs in the middle to late years of the 19th century. That activity was performed for the most part in an entirely unsystematic manner and to the detriment of future work in the region. The mass of the objects which must have been found in them has, likewise, been lost. Only two sets of published 19th century diggings in the Nilgiris were carried out with any precision, that of Sir Walter Elliot in the 1840's, and whose collection of gold jewellery now at the British Museum forms the basis of this paper, and that of J.W. Brecks whose extensive work in the early 1870's yielded the large collection now divided between London and Madras.

Unfortunately, no settlement has ever been associated with the Nilgiri megaliths. Despite Elliot's remarks about the existence of a site not far from Ootacamund and the 'Fairlawns Cairn' he excavated, in which he suggested there were the outlines of structures (Elliot 1869: 246), no one has been fit to pursue the matter.

Several types of graves are known, ranging from simple earthen barrows and stone cairns to elaborate well-like structures with circular walls of stone, the best known of this group. There are other types as well, including cromlechs built of large flat stones often sculptured with groups of human figures in low relief.

From these graves comes a range of astonishing objects, pottery, terracottas, bronze vessels and iron implements of types not known archaeologically elsewhere in India. Horsemen, human males and females, animals, especially the buffalo, and fabulous creatures are all depicted in terracotta, mounted as ornaments on the lids of the storied, globular vessels that are typical of the assemblage. The Nilgiri bronze bowls, fine and shiny with a high tin content and, sometimes, decorated with stylized lotuses and scrolls are just as unusual in their own way. The fineness of their manufacture has led workers in this area to assume that they are direct imports from abroad, from ancient Iran or, possibly, classical ancient Europe, associating them with

a now lost Roman gold coin found long ago in a plundered grave. The general similarity, however, of their bronze metal to that of the finely decorated Kulu vase of late 1st millennium BC date now at the British Museum (Birdwood 1880: 154)¹ and of their omphalos shapes to the high tin content bronze bowls from Ban Don Ta Phet in Thailand (Glover 1980) leaves the problem of the Nilgiri bronzes wide open from the standpoint of associations and date. Much careful examination of them is now badly needed. The iron tools are in a class of their own as well and in their excellent workmanship and decoration can scarcely bear comparison or, at best, only functionally, with any other early Indian iron assemblage.

If direct relationships between the elements of the Nilgiri assemblage and those of other contemporary archaeological cultures are to be found, they can only immediately or more obviously be seen in the smallest numerically of them, the jewellery. I should like now in a little detail to go through existing categories of Nilgiri jewellery, point to what are obvious and well known parallels between some elements and similar characteristics from outside the region, and show that as a group they have a suggestively diverse character which might be a microcosm of the relation of the whole assemblage to that of its neighbours. An important element in this diverse assemblage are those objects, which in decoration and technique of manufacture, seem to constitute a local and individual Nilgiri 'style'.

Beads from the Nilgiris are all of what might be termed 'universal' types. The etched carnelian types seen here (fig. 1)² and a pair of barrel-shaped specimens (Bruce Foote 1901: pl. XIII) are of types well known in ancient South India and are found in many contexts. Such types as these, in the absence of raw materials in the Nilgiris, can only have been brought up to the Hills from the plains. Beads of metal are also interesting in this context. Plain, round copper beads (Bruce Foote 1901: pl.

¹ I am grateful for this information to the late Professor van Lohuizen - de Leeuw and to Dr F.R. Allchin who pointed out the similarity between human figures on the Kulu vase and those on the Ban Don Ta Phet bronze bowls during discussion at the Berlin session of this Conference in 1979.

² All photographs, copyright the Trustees of the British Museum.

XIV) may be imports from outside and a ribbed bead in gold (fig. 1, top left) made in two halves with openings of different sizes is of a general type known extensively in ancient India from Ariamedu to the Ganges. Whether this bead was brought from elsewhere or, as may be possible, it was made locally is perhaps less important than to see that it is part of a larger tradition of gold bead making. A number of beads made up of small balls of gold luted together (fig. 1, right) are strongly suggestive of connections with coastal Tamilnadu. Soutoukeny is famous for its sumptuous gold jewellery, a striking part of which is a necklace composed of beads just such as these Nilgiri examples (Casal 1956: pl. XXXa). Leshnik has suggested these may simply be a survival of the old type into a much later context (1974: 265). Their date is earlier than the roughly Gupta date he suggests for the Nilgiri graves and, along with the similarly early etched beads, is suggestive of an earlier movement to the Hills, possibly of Parpola's late 1st millennium BC megalithic substratum. However these gold beads may be dated, they are identical to those composing the Soutoukeny necklace. Some connection of a complex character cannot be ruled out.

Plain finger-rings of silver from the Nilgiri graves (fig. 2) could in style have come from any similar deposit outside the area. They are not remarkable in shape or technique of manufacture and are part of a wide Indian tradition. They are part of the stylistically non-local content of the jewellery assemblage, although unusual in being made of silver, they may have local origins.

A pair of tiny earrings made of eight-faceted gold beads (fig. 5, lower) and a flattened gold bracelet (fig. 5, upper), both probably from the grave of a child, are unlike anything else from the assemblage and have no parallels outside the region. A pair of lenticularly shaped gold earrings decorated with rows of large round beads and twisted wire, and a gold finger-ring decorated with raised transverse ribs, all from the Brecks collection (Bruce Foote 1901: pl. XIV) are also exceptions to the general style of the ornament assemblage. The use of a flat plate to which are attached small balls of gold, as in the case of the Brecks earrings, is a characteristic of other such ornaments, here thought to be of local origin.

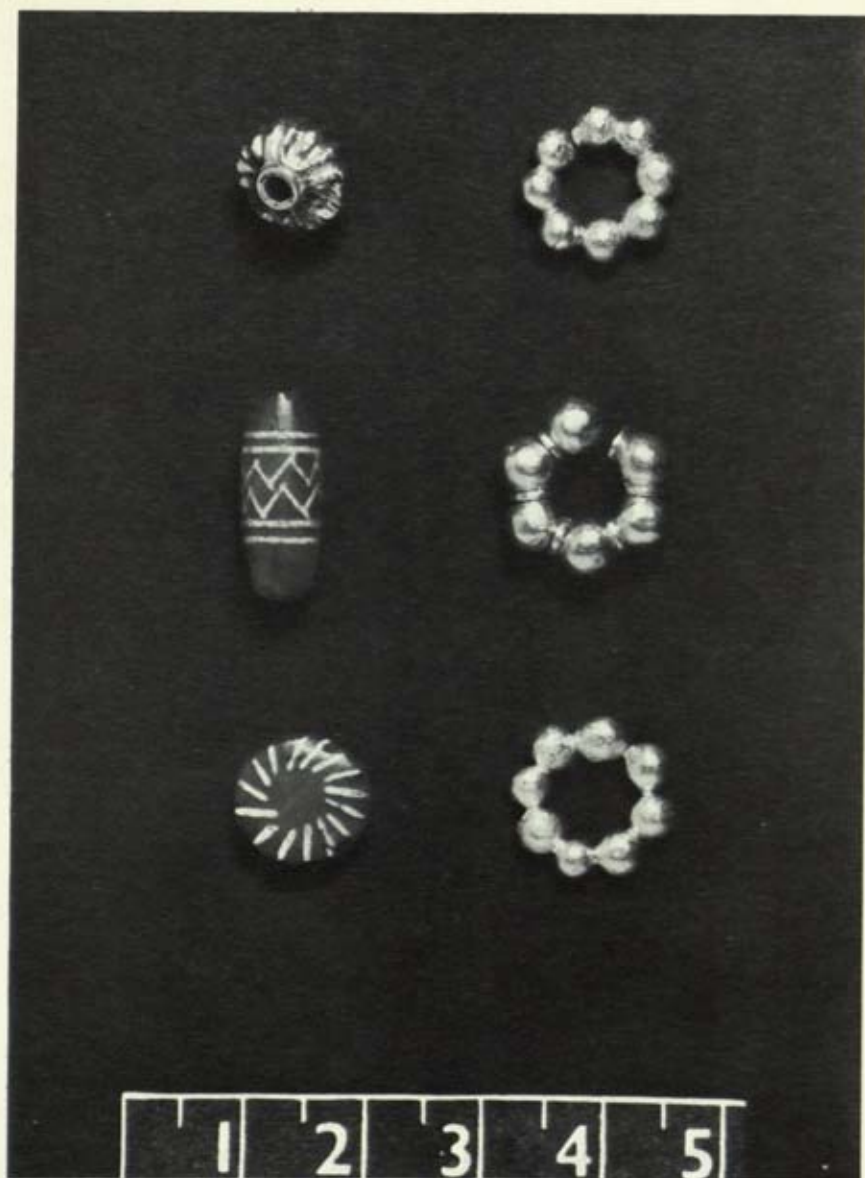


Fig. 1 — Beads of gold (top and right) and etched carnelian (left middle and lower) from the Nilgiri Hills megalithic graves. British Museum.

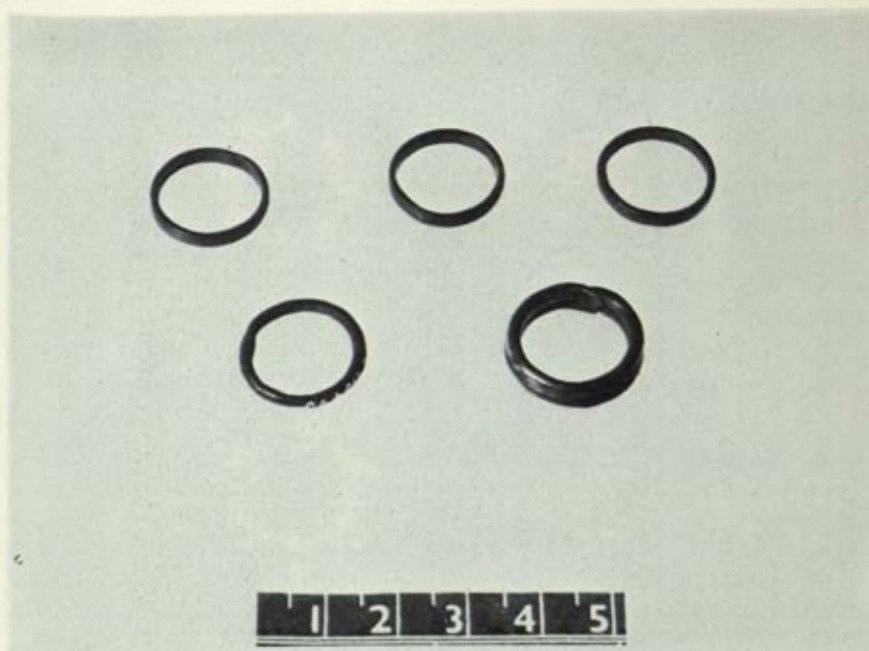


Fig. 2 — Silver finger-rings from the Nilgiri Hills megalithic graves. British Museum.

Gold chains, one made of pairs of circular links (fig. 3, upper) and another of single links doubled back (fig. 3, lower) would not be out of place in the Soutoukeny deposit as a fine example from that site, of similarly made chains with floral pendant terminals, shows (Casal 1956: pl. XXVIII). Whether these small objects were brought from outside the Nilgiri Hills or whether they were made locally is not clear. They are, however, in shape and in the use of the ubiquitous Indian pipal leaf as decorative motif, part of a general tradition of jewellery making that is not local in origin and that reflects a continuing contact between the Nilgiris and the outside.

It is among the earrings and pendants and other small ornaments from the Nilgiri graves that the local style becomes apparent (fig. 4). These are well made objects, probably of local gold, constructed with skill and imagination, neither of which qualities need have been beyond the reach of a people who were

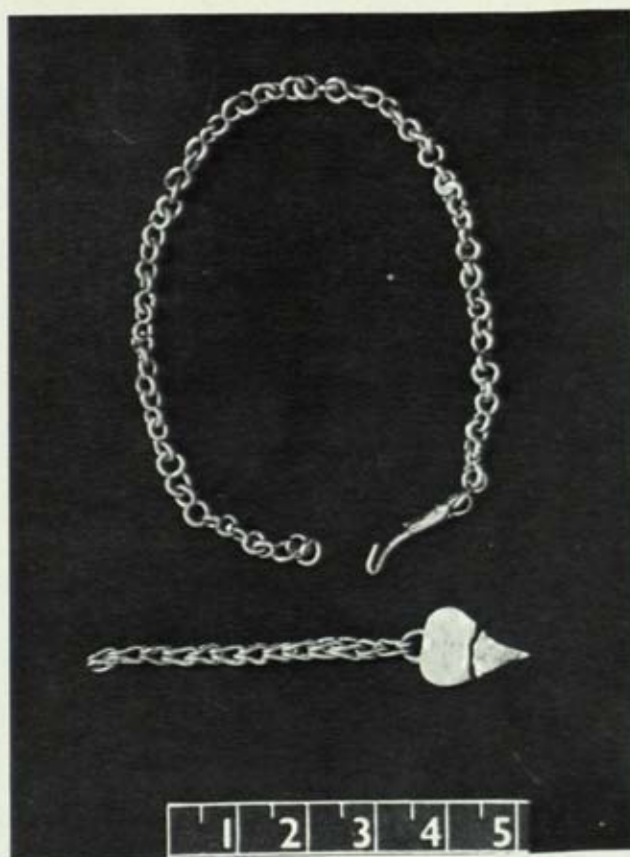


Fig. 3 — Gold chains and pipal-leaf pendant from the Nilgiri Hills megalithic graves. British Museum.

original and talented enough to produce the unique Nilgiri ceramic assemblage, the iron tools and, if our imagination can run to it, even the bronze vessels. These earrings (fig. 4, middle) are in the shape of stylized flowers and are not known elsewhere archaeologically. They are made from granules and pellets of gold along with tiny sheets bent into high relief, all mounted on a thin sheet of gold cut into petal shapes. A pair of sunburst-shaped ornaments (fig. 4, top left and right), are of very distinctive shape and are made from a complex arrangement of granules and thin gold strips mounted around a plain stone cabochon on a flat



Fig. 4 — Gold ornaments from the Nilgiri Hills megalithic graves. British Museum.

top row: left and right, sunbursts; middle, bulla

middle row: flower-shaped ornaments

bottom row: left and middle, pendants with scalloped edges and crescents; right, bell-shaped pendant with scalloping

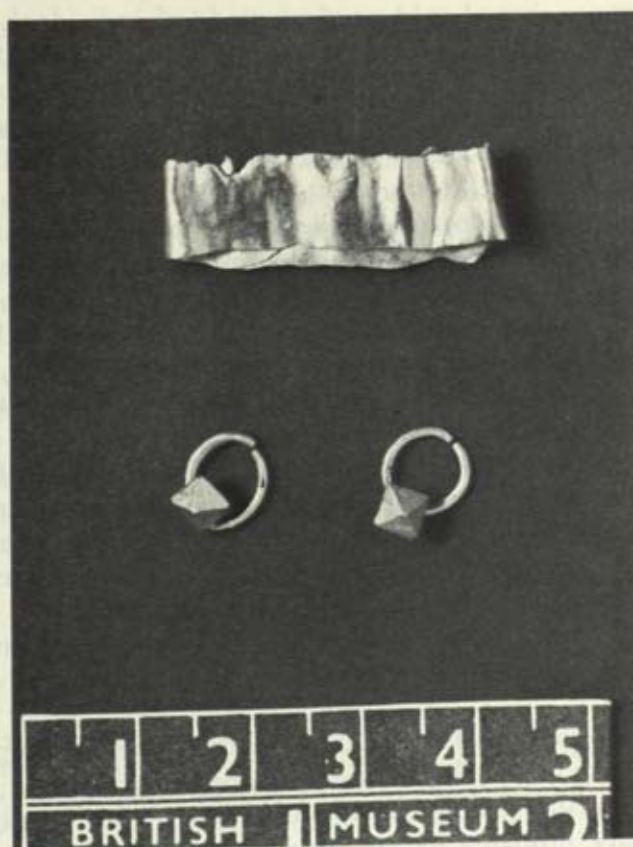


Fig. 5 — Gold ornaments from the Nilgiri Hills megalithic graves. British Museum.
upper: a flattened, gold child's bracelet
lower: a pair of eight-faceted tiny, gold earrings

plate. These are highly distinctive objects but are surely related in decoration, i.e. in the triplets of gold granules attached to tiny circles, to a further most appealing object, the gold bulla from the same collection (fig. 4, top middle), of a general shape well known in ancient times. Bullae made from coins or clay are characteristic of many ancient sites in India, particularly of early historic date. This specimen is distinctive in its uniquely Nilgiri style of decoration and important as a highly original local rendering of a standard form of personal ornament well known in ancient times. The crescent attached to the loop at the top of the disc is a further characteristic of this style.

A lozenge-shaped gold pendant made of individual curls of gold attached to a flat plate (Bruce Foote 1901: pl. XIV), found in the Breeks excavations and now at Madras, is an important example of the use of the curl or crescent in the local style. Its origins in a distinct archaeological context and its similarity in decoration to the Elliot pendants (fig. 4, lower) argue for the popularity of this type of jewellery and, possibly, for its local origin. The curls or crescents are, in the case of the Breeks pendant and the Elliot bulla (fig 4, upper middle), applied to the flat back of the object as thin strips of gold. Sometimes they take the shape of fat repoussé crescents attached to the back plate as in two further examples of pendant types combining both methods (fig. 4, lower left and middle). The crescent motif is found elsewhere in the Nilgiris on some of the sculptured reliefs from the cromlech graves where obviously it is part of a sun-and-moon combination (Breeks 1973: pls. LXXI ff.). Its decorative significance in the context of the jewellery is unknown. The back-plates of these pendants have been scalloped at the edges in a leaf-like pattern, a decorative intention similar to that used in making a tiny bell-like pendant also from the same collection (fig. 4, lower right).

Granulation, applied repoussé elements, and scalloping are characteristic of the Nilgiri style. Crescents, circles and trios of granules are the basic decorative elements in this small sample of what are probably locally produced gold ornaments. These elements are in considerable contrast to the rest of the jewellery collection which is either in inspiration or actually, an import from outside the Nilgiris.

The jewellery described here is a small but functionally discrete portion of the larger material assemblage of the region. Examination of it from a stylistic standpoint yields the suggestion that, in its diverse character, it may act as some indication of the relationship of the whole culture of the ancient Nilgiris to that of the outside. This diversity suggests that the Nilgiri megalith builders developed a unique material assemblage, although to some extent in contact with the world outside the hills. Whether these contacts were contemporary and continuing or whether non-typical material elements in the assemblage stem from an earlier relationship with the plains has to be established. That these contacts were limited is obvious, considering the unique

quality of the rest of the material assemblage. In any case, they must have been much filtered down by facts of a difficult and isolating local geography, if for no other reason.

Whether the diversity seen in the jewellery assemblage may be taken to reflect the broad pattern of life in the ancient Nilgiris or not may be shown only when more systematic archaeological work in the area is completed, particularly in the search for and excavation of ancient settlement and craft centres. House and settlement plans, ritual centres, kiln and smelting sites and so on must be discovered in order that the comparison between the ancient culture of the Nilgiris and that of the rest of ancient South India be continued. Only then may this exotic cultural complex be fitted into what is known broadly of life in ancient India and the simple model of diversity of material origins, seen in the Nilgiri jewellery assemblage, put to the test.

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JOE CRIBB

Dating India's Earliest Coins

Archaeologists working on sites of the early historical period are well aware of the value of coin finds as indicators of the political and economic history of the levels they are excavating. For South Asian archaeologists insight of this nature can be particularly welcome as Indian literary sources are singularly unhelpful in this respect. Coin finds are also a vital tool in the absolute dating of archaeological strata, and again in the context of a South Asian site, they can provide data not otherwise available.

Coins provide this sort of information because of their nature. Unlike most of the debris of former times surviving on archaeological sites, a coin has the potential to be positively identified as being produced for a particular purpose by a particular authority in a particular place and at a particular time. Its purpose was of course as metallic money; the authority was the ruler or state whose mark had been applied to a piece of metal to make it into the coin; the place was the mint where the mark was applied; the time was the period during which this took place. Marks were placed on coins so that the issuing authority could regulate their issue and thereby ensure that their official function could be fulfilled. The marks were designed so that the coin's purpose, issuing authority, mint place and period of issue, could be easily recognised.

This knowledge allowed the coins to be associated with and therefore compared with the standards according to which they were issued. Thereby abuses could be discovered and the persons in charge of the issuing mints during the relevant period of issue could be made responsible for their misdemeanours. Unofficial forgeries could also be detected. The users of the coins could also take advantage of this information.

It is by identifying the significance of these marks that modern scholars are able to provide the information necessary for archaeologists to interpret the full significance of coins found in archaeological excavations.

Unfortunately South Asian archaeologists are often unable to use the evidence of coin finds from their excavations, as the designs of many ancient Indian coins have yet to be fully understood and interpreted. In the case of India's earliest coins the situation is at its most extreme. Over the last hundred years several scholars of high standing have sought to interpret the period of issue of these coins in a variety of ways and the dates which have been suggested for their first appearance vary from c. 1000 BC to c. 400 BC. Any archaeologist faced with such a range of possibilities would be better off ignoring altogether the evidence offered by such coins being found on his site.

The problem posed by the dating and attribution of India's earliest coins is a product of the curious designs used by their issuers to mark them. Archaeologists and numismatists agree that the earliest coins to have been used and issued in South Asia are what are commonly known as Punch Marked Silver Coins. This name is a description of their method of manufacture and metal content. These coins were made of fine silver but by a method totally different to most ancient coins in the Western tradition, including the latter coinages of India.

Western coins were normally made in the following way: a cut or cast and flattened piece of hot metal of a particular weight was placed between two dies bearing engraved designs of approximately the same diameter as the piece of metal and then the metal was pressed between the dies by the application of an external force so that the engraved designs left impressions on both faces of the metal. The lower die was normally fixed into an anvil and the upper die was on the end of a hand held punch. The force was applied by striking the punch die with a hammer. (The English word coin is derived from the French word *coigne* meaning a die). The Punch Marked Coins however, were made in a different manner: a similar cut or cast and flattened piece of metal of a particular weight was placed upon a flat topped anvil and then its upper surface only was stamped with impressions from one or more dies each engraved with a design smaller in diameter than the piece of metal. The dies were each engraved on

the end of an individual punch which was struck with a hammer to make an impression. When the manufacturing process was complete the Punch Marked coin had its upper face marked with impressions from up to five separate punches.

For a Western-style coin all the information necessary for the regulation of the coinage was contained in the design struck onto its two faces, but for an Indian coin this information was shared out between numerous punch designs applied to only one of its faces. We know that this was the purpose of the marks on the Punch Marked Coins from the story of Visuddhimagga in which a money changer is described as being able, by simply looking at a coin, to recognise where it was issued and who was the official responsible for its manufacture (Allen 1936: lxxiii-lxxiv).

Although the significance of the marks on the Punch Marked coins was well understood at their time of issue, it is no longer so. Whereas ancient Western coins were marked with designs, such as inscriptions, portraits, badges etc., which implicitly identified their issuing authority, mint name etc., the designs on the Ancient Indian coins were merely symbols which can no longer be associated with the information they once conveyed. These symbolic designs are mostly stylised depictions of animals, plants and cult objects or geometric and decorative shapes, which can still be recognised as elephants, bulls, trees, sacred hills, solar symbols, crescents etc. It is therefore impossible now to date and attribute these issues simply by examining the coins themselves. In order to make the evidence of India's earliest coins available to archaeologists and historians in a usable form, numismatists have had to seek help elsewhere. The variety of dates which have been proposed for these coins is a consequence of the sources from which that assistance has been sought.

I have recently discussed in detail the methods and results of these attempts which have been made to attribute India's earliest coins (Cribb 1983), so I will here merely summarise their relevance to establishing a date which can be of use to archaeologists.

The most wrong-minded approaches to the dating of the Punch Marked Silver Coins have involved the application of irrelevant information. The earliest dates suggested for this coinage have come from scholars misrepresenting information contained

in literary sources. In the Vedic literature references are to be found to the use of metal in payments. *Niṣka*, *māna* and *śata-māna* are mentioned as amounts of gold and silver paid as gifts, rewards and fees for services. Although there is no reason to doubt that these texts are referring to the use of precious metal as money, it does not follow that these terms are names for coins as has been claimed. There is nowhere in the Vedas a description of anything in any way resembling coinage: those terms refer to weighed amounts of metal or to jewellery. There are clear indications from many other ancient cultures and more recent tribal societies that metal has frequently been used as money by weight or as countable pieces of jewellery, without either the use or the knowledge of coins. From the abuse of this sort of evidence India's coinage has been dated as far back as the late 2nd millennium BC.

A more rational, but equally misleading approach has been made by scholars attempting to date India's earliest coins by their archaeological context. It has well been established that coins first appear in excavated Indian sites at levels immediately above the deepest levels in which Northern Black Polished Ware (NBP) is found. From this it can be simply inferred that coinage was introduced soon after the development of NBP. There is no more absolute evidence for dating NBP than there is for dating the coins. Thermoluminescence dating can give an approximate range of dates, but is still a very imprecise tool for dating archaeological strata. Radio Carbon 14 dating has however been applied with more success. Readings from Indian archaeological sites have shown that NBP first appeared in levels datable by Radio Carbon 14 to the period c. 500-200 BC (the nature of Radio Carbon 14 dating means that it is necessary to express this range as an approximation as there is a margin of error on most dates achieved by this method of about ± 100 years). The misapplication of such a statement has led to the suggestion that coinage first appears c. 500 BC. Unfortunately it seems to have been ignored firstly that a date for the coins is being implied from the date of pottery which is itself deduced from the date of organic materials found in a related, but not necessarily relevant context, and secondly that this tenuous piece of information only provides a date after which, but not at which, coins were introduced. Even if it were accepted that the advent of the pottery

could be dated in this way, the coins do not appear until after the pottery and the information is not yet available to tell how long after.

The most constructive approach to determining the date of the earliest Punch Marked Silver Coins has been that of examining their small variations in designs, weight standards and manufacturing techniques. The numismatists who have adapted this approach have been able to establish an approximate sequence of issue for the many varieties of the Punch Marked coins. They have also recognised that different varieties have different areas of issue and circulation. As a consequence of this analysis of the evidence a relative internal chronology for the Punch Marked coins has been established. This shows that the earliest Punch Marked coins are rare local issues from North India. They are stamped with marks from 1, 2, 4 or 5 punches and are of a wide variety of weight standards. These local issues are succeeded by a national issue, which is found throughout the Indian subcontinent, from Afghanistan to Bangladesh to Sri Lanka. The coins of the national issue were all struck to the same standard and all have 5 punch marks. They appear to have been developed directly from the local issue with five punches. The national coinage was followed by a very limited re-emergence of local issues, but after that the issue of Punch Marked coins ceased.

The evidence of coin hoards has also been used to give the internal chronology a tighter structure. The hoards show that some local coinages are earlier than others; that some local coinages continued to circulate and perhaps be produced into the early part of the period of the national coinage and that the national coinage went through at least six distinguishable phases, the order of which can be determined (Gupta 1963; 1969).

The hard work expended by numismatists on this approach to the problem of dating India's earliest coins has provided a clear relative framework to which any evidence of absolute chronology can be attached. It is fortunate that a small amount of such evidence has been found. Among the hoards of Punch Marked Silver Coins which have been found in the North-Western corner of the subcontinent, there are a handful which can be given approximate absolute dates. The reason for this is that they also contain coins of the Greek world for which approximate absolute dates have already been deduced. The earliest of

these hoards found at Kabul and Taxila both contain coins struck by the Greek rulers who controlled parts of the North-West from *c.* 250 BC-*c.* 50 BC. The earliest hoard, known as the Chaman Hazuri hoard, was found in Kabul (Curiel & Schlumberger 1953). The Punch Marked Coins it contained were all issues of the earliest phase of local coinage. Other find spots of this local type suggest that it was issued only in the North-West of the subcontinent, particularly in the Gandharan area. The Greek and Iranian Coins in this hoard were mostly of the 5th century BC, except one piece which is derivative of an early 4th century BC Athenian coin. This hoard cannot have been deposited until after *c.* 360 BC when the Athenian type coin was first issued. The next hoard was found during excavations at Taxila (Walsh 1939). It contained Punch Marked coins of both the local coinage of the same Gandharan issue and of the earliest phases of the national issue. The Greek coins found with them were an Iranian coin of the 5th or 4th century BC and some Greek coins of the Kings of Macedonia in Iran or Mesopotamia after 323 BC. Another hoard from the same site (Walsh 1939) only contained Punch Marked Coins of the later phases of the national series together with a single Greek coin from Bactria issued after *c.* 250 BC. Late national series issues have also been recorded in several other hoards containing coins of the Greek kings of Gandhāra issued during the 2nd and 1st centuries BC and they have even been found in the company of Roman coins of the 1st century AD in hoards from South India.

The evidence derived from such hoards for the absolute chronology of the Punch Marked Coins has to be used with caution. A hoard of coins presents to the modern scholar a group of coins which can be said to have been deposited at a particular point of time which has to be subsequent to the date of issue of the latest coins in the hoard. However the hoard does not necessarily provide any information about how or why the coins it contained were drawn together. Hoards can consist of coins taken directly from circulation at the time of their deposit or of coins accumulated over a lifetime. The coins hoarded could also represent a selection of coins taken out of circulation as substandard for melting down or as above standard and therefore the best coins to save. They could even have been assembled for use as non-monetary objects — to make jewellery or as a votive

offering. The only definitive statement made by a hoard is that the coins it contained were available for accumulation at a date subsequent to the date of issue of the most recently made coin it contains. This evidence can be enhanced in two ways. The first is by analysing the contents of hoards and comparing different hoards with each other, as statistical evidence can make it clearer why a particular range of coins was selected. The second is the probability that most accumulations of coins have been made for economic reasons.

With this in mind the hoards of Punch Marked Coins containing Greek coins do provide some evidence of their absolute chronology, but of a limited nature. It has been presumed by most scholars using this evidence that the latest Greek coin in each of these hoards is its actual latest coin, but in reality the date of the latest coins in these hoards cannot be correctly determined until the date of issue of the Punch Marked Coins is known. It can only be shown that the hoards must have been deposited later than the latest datable coin, but how much later cannot be determined. The proportion of the Punch Marked Coins to Greek or Iranian coins in the Chaman Hazuri hoard provides statistical evidence that they could both have been in circulation at the time of the deposit of the hoard, and it could therefore be suggested that the date of issue of both is comparable. However, in the case of the two hoards from Taxila, the Greek or Iranian coins are so few in number that such a statement cannot be made. The Greek or Iranian coins could in that context be derived from a source other than circulation — they could have been good luck pieces or even recently found coins from an earlier hoard. These hoards can only be dated on the basis of the Greek and Iranian coins to a period after their issue.

It can therefore be concluded that the Chaman Hazuri hoard and the earlier Taxila deposit seem to show that at least one issue of the local series of Punch Marked Coins was still in use in the Gandharan area after the middle of the 4th century BC and at least as late as the end of it. The later Taxila hoard appears to indicate that the locally issued coins were no longer in use by the second half of the third century BC. These *termini post quos* are complemented with a *terminus ante quem* provided by another hoard from Afghanistan.

A hoard of the latest phase of the nationally issued Punch

Marked Coins has been found during the excavating of the site of a Greek city at Ai Khanum (Audouin & Bernard 1973-74). This hoard has its own datable content in the form of six coins of Agathocles, a Greek king of Bactria and N.W. India. The reign of Agathocles is thought to have occurred *c.* 180 BC. The hoard had to have been deposited after that date, but before the destruction of the city which was reckoned by the excavators of the site to have taken place *c.* 140 BC when it was over-run by barbarian nomads from Inner Asia (probably the Yuezhi). This hoard and its archaeological context therefore show that most of the phases of the national Punch Marked coinage had been issued by *c.* 140 BC.

The conclusions derived from hoards containing evidence of absolute dating indicate that the local series of Punch Marked Coins was in use in the 4th century BC and the national series was issued during the 3rd and 2nd centuries BC and possibly began in the late 4th century. This shows the Punch Marked Coins being issued over a period of between 200 to 300 years beginning before 350 BC and ending *c.* 140 BC. In contrast to this conclusion it is commonly believed that the national series was issued over a period of about 400 years ending in the early 2nd century BC and that the local series was therefore issued *c.* 600 BC (Gupta 1963; 1969). This belief stems from a misinterpretation of the evidence provided by the earlier of the two hoards from Taxila.

The misinterpretation was devised by the Indian scholar Kosambi (1941-42), whose approach to the dating of the national series Punch Marked Coins in this hoard was based on two false premises. Firstly he accepted without question that the hoard was deposited at a date close to the latest possible date of issue of the latest Greek coin in the hoard, *i.e.* *c.* 317 BC. I have pointed out above the flaw in such a conclusion. Secondly he thought that it was possible to estimate the age of the coins in the hoard on the basis of their wear through circulation. To demonstrate this Kosambi carried out a statistical analysis of the weights of the coins in the hoard. These coins are stamped with a varying number of small punch marks additional to the five which were given to them before being issued. Kosambi found that there was a correlation between the number of additional marks and the amount of weight lost by the coin through wear.

Coins with five additional marks had lost about 2% of their weight, with ten about 4% and with twenty about 8%. He assumed that the increasing amount of weight loss through wear was a product of time in circulation and concluded that the additional marks were added at set periods of time during the circulation of the coins. He suggested that at the end of each period the coins were taken from circulation and revalidated with an additional stamp by an official and then re-issued. He guessed that these periods were 12 or more probably 15 years each. He therefore concluded that the oldest Punch Marked Coins in the hoard were $c. 20$ (number of marks) $\times 15$ (length of period between marks) years earlier than the latest coins in the hoard, i.e. their date of issue was $(20 \times 15) + c. 317 \text{ BC} = c. 617 \text{ BC}$.

Although there is no doubt that the statistics presented by Kosambi gave a mathematical proof of his hypothesis, the premises on which he fixed were incorrect. Firstly he ignored the fact that he could not determine how long after its *terminus post quem*, 323 BC, the hoard had been deposited and secondly he presumed that there was a firm correlation between weight loss and wear and between wear and the passage of time. But these factors are not necessarily related.

Coins can be lighter than the standard according to which they are issued because of imprecision in their production as well as because of wear. Weight loss due to wear is a product of the amount and the nature of the wear to which the coin has been submitted. The greater the friction to which a coin is subjected the more it is worn away. The passage of time provides more opportunities for friction to take place, but not all coins are exposed to it to the same degree. It is obvious that a coin 50 years old can exhibit less wear than one 10 years old if the latter has been handled more frequently.

Kosambi saw that the coins with the most additional marks had been the most handled and therefore the most worn, but because he believed the additional marks to be official and periodic he confirmed to himself his correlation between weight loss and the passage of time. However there is no evidence for believing that the additional marks were either official or periodic. It would be more sensible to explain them as private merchants' marks put on when they checked the coins passing through their

hands for weight and fineness. The more handling a coin received the more worn it became and the more times it would return to a merchant and receive more additional marks. The loss of weight and number of additional marks therefore provides no evidence of the age of the coins in the Taxila hoard, but only of how much they had been used. This hoard does not show that Punch Marked Coins were issued as early as c. 617 BC, but as said above it only shows that they were still in use at whatever date subsequent to c. 323 BC they were deposited in the hoard.

In spite of the flaws of perception in Kosambi's dating of the national series Punch Marked Coins, his results have found wide acceptance and, in the hands of some scholars, support from the application of a third false premise, which has lent a misplaced sense of appropriateness to his conclusions.

The existence of a national series of coins during the period c. 600 BC-c. 180 BC has tempted some to attribute them to the Empire which grew out of the state of Magadha and came to dominate Northern India during that period. It is argued that the earliest 5 punch coins, which are a local series found in modern Bihar, are the issues of the state of Magadha before it rose to establish its imperial might over the states of Northern India in the 5th century BC. The 5 punch coin design is said to have been introduced to the territories drawn into the Magadhan Empire as it expanded. Once the state had become nationwide, the 5 punch coinage was no longer local but became a national coinage. The end of the national coinage in the 2nd century BC, it is proposed, was a consequence of the overthrow by the Śuṅgas of the last ruler of the unified Imperial state in 184 BC.

The logic of this argument has also been used to explain the early local series as the issues, according to where they have been found, of the local kingdoms and republics which existed alongside the state of Magadha, before it started its drive to imperial power. These local coins, it is argued, preceded or were issued at the same time as Magadhan 5 punch coinage until their issues fell under the Magadhan sway during the course of the 5th and 4th century BC. The earlier Taxila hoard is accordingly interpreted as deposited after the addition of Gandhāra to the Imperial domain. The mixture of local and national coins in it are seen as representing the survival of an independent Gandharan issue lasting up to the point at which Gandhāra fell to the Em-

pire. The latest national coins in the hoard are seen as issues of Candragupta Maurya, the Emperor who brought Gandhāra into the Empire c. 310 BC.

In spite of the neatness of this explanation, it is not only based on false chronological interpretation, but it presumes a knowledge of the organisation of the coinage system of the Magadhan-Mauryan Empire which does not exist. No surviving literary or archaeological evidence shows whether the early Magadhan rulers issued coins or not and even if they did whether they would have insisted on introducing a unified coinage system into the states they conquered. From the little that is now known it would be just as easy to explain the early local series as provincial issues of the Empire as it would be to explain them in terms of the argument outlined above. Without the establishment of a firmer chronological relationship between the coins and the political history, it would be a mistake to suggest that either interpretation was the more plausible.

It is also claimed that literary references which are contemporary to the coins confirm this early chronology. Pāṇini the grammarian refers to the fixing of values in named units of silver and these are held to be references to coins. However he also uses similar units when referring to values in gold. Since there are no gold coins to which these expressions can apply, it seems mistaken to insist on the silver values being considered as references to coins. Pāṇini's later Indian commentators interpret them as referring to coins, but only because coins were by then the normal form in which metal was used as money. In Pāṇini's words that implication was not actually expressed. Furthermore, Pāṇini's witness to the use of coins is called upon in support of the early chronology, because it is commonly held that he lived and composed his work on grammar in the 6th century, but in reality his precise dates are not known. Modern scholarship (Scharfe 1977) shows that his date can only be determined by that of his earliest commentator, the 3rd century BC grammarian Kātyāyana whom he must precede.

The earliest certain mentions of coins are to be found in the *Arthaśāstra*, an ancient Indian work on state craft, which refers to coin makers, coin forgers and coin denominations. This work is attributed in its text to Kauṭilya, the minister of the late 4th century BC ruler Candragupta Maurya referred to above. If this

attribution were certain, these references would be of vital use in dating the coins, but unfortunately, although the text probably contains material of the 4th century BC, it has also been shown to include details of political life from the 1st and 2nd century AD which cast doubt upon the precise date of all its contents. Its references to four different denominations of silver coins, the unit, and its half, quarter and eighth, certainly does not describe the national coinage attributed by those following Kosambi's chronology to Candragupta Maurya. The national series Punch Marked Silver Coins are only known in two denominations, the unit and its sixteenth. The four denominations could however fit more closely the local series in which several issues are known to have units, halves, quarters and eighths.

The earliest firmly datable reference to Punch Marked Silver Coins is preserved in the work of a Roman historian Quintus Curtius, who in his life of Alexander the Great records the tradition that the king of Taxila offered Alexander c. 325 BC 80 talents of marked silver (*argenti signati*). This reference only preserves the knowledge already available in the Chaman Hazuri and the earlier Taxila hoards that Punch Marked Coins already existed in the mid-4th century BC.

The evidence for dating the earliest coins in the Indian sub-continent therefore comes back to the *terminus post quem* provided for the Chaman Hazuri hoard by the Greek coin of the mid-4th century it contains. This is not a very conclusive result unless some relationship can be shown between the local Punch Marked Coins in this hoard and the other early local series coins from elsewhere in the sub-continent. Are they earlier or later than the others? Were the earliest Indian coins issued before or after those in this datable hoard?

The local Punch Marked Coins issued before the national series of 5 punch coins can be arranged to show some indications of technological development. One local issue also bears five punches and because of the similar designs of its punch marks can be placed as the immediate precursor of the national series. Coins of this issue are distinguished in their appearance from the national series coins by the shape of the pieces of metal used to make them. These early five punch coins already have irregular oval flans but they are much thinner and broader than the later ones. Similar broad thin irregular flans are used for several

other issues of the local series, but these are all struck with four instead of five punches. Some of the four punch coins also share punch designs with the five punch series and could be considered as their immediate forerunners, although other four punch coins seem on the basis of hoard evidence to have been their contemporaries. The four punch coins with the same flan shapes as the early five punch coins show another stage of development. Some have two of their punch marks stamped from a single punch and so have four marks stamped from only three punches. This seems to be an earlier stage of development as this method of marking is found on issues with a different and apparently earlier flan shape. These earlier coins are also made from thin broad pieces of metal, but the pieces are regularly oval in shape instead of irregular. Their flans are also markedly curved into a dish or cup shape, so that the upper face of the coin, where the marks are placed, is concave. This four punch cup shaped issue also has fractional denominations which are also struck on curved flans, but have only one or two punch marks. A few of the early local issues are only known as lower denominations with a single punch mostly on curved flans. There are other indications of development in the local series, but they can all be fitted within the framework outlined above. The curved flan stage can be shown to provide the prototype for all the other steps of development discernible. Among the early curved flan issues, those found in the region of Varanasi appear to exhibit all the features which gave rise to the later developments.

The local Punch Marked Coins in the Chaman Hazuri hoard seem to be part of the curved flan stage. They are all struck on curved round ended bars of silver, but unlike the full units issued near Varanasi they have only two punch marks, both from the same punch. The disposition and design of the punches does however point to a close relationship between these and the Varanasi issues. Both the Gandharan and Varanasi local Punch Marked Coins are struck with circular punches engraved with wheel-shaped designs, which in both cases are struck at the narrower ends of their curved flans (the Varanasi pieces also have two smaller circular design marks punched on their flans between the two larger Punch Marks). One of the smaller denominations of the Varanasi issues, its eighth, is in fact constructed in the same way as the Gandharan issue struck with only two

circular punch marks at the ends of a short bar of metal which is curved and has rounded ends. The other fractions of both the Gandharan (quarters and eighths) and the Varanasi (halves and sixteenths) issues are all struck with a single circular punch on a round cup-shaped flan. These affinities between the local Punch Marked Coins in the Chaman Hazuri hoard and the earliest issues of the local Punch Marked Coins from the heart of North India suggest that the date of this hoard is of considerable consequence for the dating of India's earliest coins.

The Chaman Hazuri hoard provides another important indicator of the chronology and development of the Punch Marked Coins. Apart from the Greek and Iranian coins and the Punch Marked Coins, it also contains a number of locally made silver coins which provide a link between them. These local issues are not Punch Marked Coins but are made in the same way as Greek coins. They are struck on thick round or oval cast flans, many of which are cup-shaped, between two dies. The anvil dies however are weakly engraved and the impressions of them are barely discernible so that several of them appear to have a design only on their upper side. Some of the designs are stylised animals but many of them are wheel-shaped designs like those on the local Punch Marked Coins. The appearance of the pieces struck with the wheel-shaped designs on the cup-shaped flans are therefore identical to those of the small denominations of the local Punch Marked Coins.

The association in the Chaman Hazuri hoard of Greek and Iranian coins with these Greek-style local coins and with Gandharan Punch Marked Coins shows that there is a chronological relationship between the three series. The same association could also be used to suggest a causal relationship. The Greek-style local coins seem to be derived from the Greek and Iranian coins which the hoard shows were circulating in the area. If the local rulers and people responded to an introduction to Greek coinage in the same way that other cultures at other times have reacted to a first contact with coins, then the production of these local derivatives could be explained as the product of a frustrated desire to use an inadequate supply of the introduced coins as a medium of currency. Following this contact the local rulers of the Kabul area would have felt obliged to make their own versions of Greek coins as a supplement to the imported Greek

coins. The same technology was used, but marks of authority were specific to the area. The same phenomenon was observed further to the West where the rulers of late Achaemenid Iran supplemented the supply of Greek coins circulating in their territories with local imitations of the commonest of the Greek coins. The Iranian imitations were close copies of silver tetradrachms of Athens; the latest Greek coin of the Chaman Hazuri hoard is an example of these Iranian copies of an Athenian coin.

The Punch Marked Coins in the Chaman Hazuri hoard can also be explained as an extension of the attempt to supplement the supply of Greek coins. There is evidence that unmarked weighed bars of silver were used as a means of storing and possibly transferring wealth in Iran during the Achaemenid period (Bivar 1971).

The Punch Marked Coins in the hoard appear to be an application of part of the technology developed for the local imitations of Greek coins to the use of such bars. These Punch Marked Coins are bars of a particular weight which have been stamped at each end with a punch die closely resembling some of those used to strike the local Greek-style imitations. The anvil on which they were struck was blank. Perhaps the application of two marks to one side of the coin was thought to negate the necessity of marking both sides.

This hypothesis suggests that the Punch Marked coinage was developed as a response in the North-West corner of South Asia to the knowledge and use of Greek coins. It is further supported by the excavation in a late 4th century context at Kosambi (Mukherjee 1979) of imitations of local Punch Marked Coins of the type found in the Chaman Hazuri hoard. The discovery of this material shows that the Punch Marked Coins developed in the North-West were available in the Ganges plain as prototypes for the earliest coins of that area, the curved plain 4 punch coins from the Varanasi region. The fractional denominations of the Varanasi issues are directly copied in their technology and design from the North-Western issues. The unit has two extra punch marks, a further technological innovation and a step forward towards the five punch coinage which would soon replace it.

The relationship between the Varanasi and Gandhāra Punch Marked Coins, the local Greek-style coins from Kabul and their

Greek and Iranian prototypes is further confirmed by the close similarity of the weight standards by which they were struck. The Iranian silver coins in the Chaman Hazuri hoard are sigloi weighing c. 5.5 gm; the local Kabul coins and the Gandharan Punch Marked Coins have a full unit of approximately double that, c. 11 gm, and their fractions are of corresponding weights; the Varanasi full unit is c. 5.8 gm, a slightly heavier but related standard and its fractions correspond to that standard.

The evidence for the dating of India's earliest coins can therefore be summarised as follows:

1. The earliest coins in India are Punch Marked Silver Coins.

2. The sequence of issue of the Punch Marked Coins shows that a series of local coins preceded a series of national coins issued in six phases.

3. The technological developments discernible in the local Punch Marked Coins show that the earliest of them were struck on curved round-ended flans with punches bearing circular designs.

4. The earliest local Punch Marked Coins in the Ganges plain were issued in the area of Varanasi.

5. The Varanasi issues derived their technology and designs from local Punch Marked Coins issued in the Gandhāra area.

6. The Gandharan Punch Marked Coins were themselves derived from Greek-style coins used and issued in the Kabul area.

7. Hoard evidence shows that the Gandharan Punch Marked Coins were in circulation at a date in the mid 4th century BC.

8. The issue of the Gandharan Punch Marked Coins probably took place in the early 4th century BC.

9. India's earliest coins should therefore be dated to the early 4th century BC.

10. Coinage in India was not an independent invention, but was initially derived from the Graeco-Iranian world.

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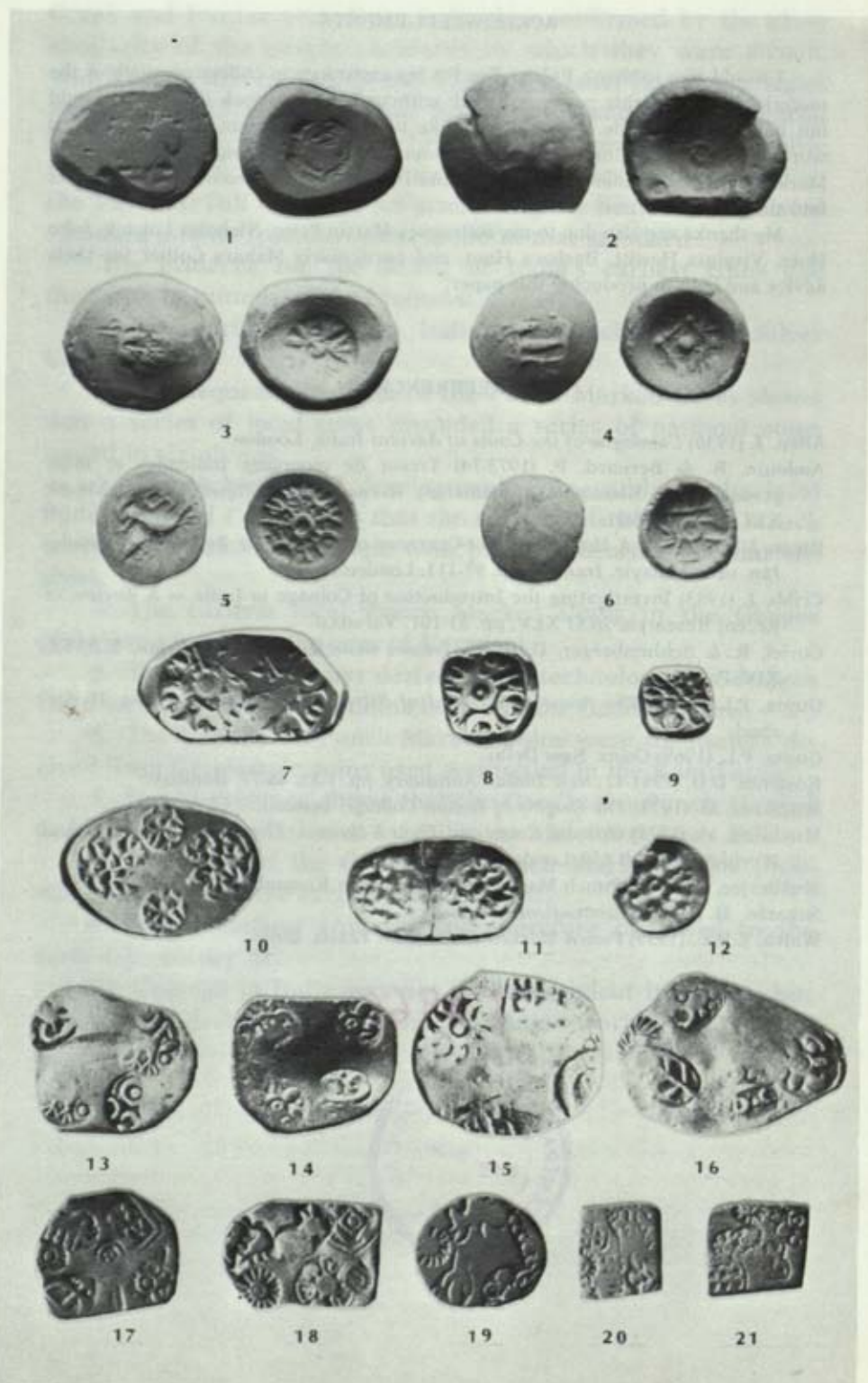
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KEY TO ILLUSTRATIONS (Fig. 1)

CHAMAN HAZURI LOCAL GREEK-STYLE SILVER COINS (from plaster casts in the British Museum)

1. Unit 11.50 grams
obverse (anvil die side): showing reclining animal facing right
reverse (punch die side): showing stylised animal with head turned back running to left.
2. Unit 10.25 gm
obverse: faint traces of arrow-head design
reverse: wheel-shaped design.
3. Unit 9.05 gm
obverse: stylised goat facing left with head turned back
reverse: wheel-shaped design.
4. Half unit 4.75 gm
obverse: as 3
reverse: wheel-shaped design with square interior.
5. Quarter unit 2.80 gm
obverse: cockerel facing left, S-shaped motif above
reverse: wheel-shaped design.
6. Quarter unit 2.15 gm
obverse: as 2
reverse: as 2.

LOCAL PUNCH MARKED SILVER COINS (all coins in British Museum Collection)

Gandhara region

7. Unit 11.50 gm (coins of this type were found in the Chaman Hazuri hoard) stamped twice by a single-wheel design punch.
8. Quarter unit 2.81 gm
stamped once by wheel-design punch.
9. Eighth unit 1.31 gm
stamped once by wheel-design punch.

Varanasi region

10. Unit 5.94 gm
stamped four times by wheel-design punches. The two smaller stamps are made by the same punch.
11. Eighth unit 1.08 gm (weight increased by adhesive used to stick this broken coin back together, should be c. 0.85 gm)
stamped twice by wheel-design punch.
12. Sixteenth unit 0.44 gm
stamped once by wheel-design punch.

Allahabad region

13. Unit 3.41 grm
stamped four times, twice by the same bird-design punch, and once each by two punches bearing symbols.
14. Unit 3.34 grm
stamped four times, twice by wheel-design punch and once each by two punches bearing symbols.

Varanasi region

15. Unit 4.14 grm
stamped four times, once each by four punches featuring a wheel design, a crescent, a tree and a square design.

Patna region (Magadha)

16. Unit 3.50 grm (This is phase I of the five-punch series)
stamped five times, once each by five punches featuring two-wheel designs, a leaf, a beetle and a symbolic design.

NATIONAL FIVE PUNCH SERIES (all coins in British Museum Collection)

17. Unit 3.24 grm (phase II)
stamped five times by punches featuring two-wheel designs, an elephant, a bow and a square design and once by an additional punch with a small circular design and by an additional punch with a small circular design containing three dots.
18. Unit 3.36 grm (phase III)
stamped five times by punches featuring two-wheel designs, a bull, an elephant (accidentally stamped twice) and a square design and once by an additional punch with a small wheel design.
19. Unit 3.17 grm (phase IV)
stamped five times with punches featuring two-wheel designs, a bull, a branch (?) and a symbolic design.
20. Unit 3.11 grm (phase V)
stamped five times with punches featuring two-wheel designs, an elephant, a tree and a symbolic design.
21. Unit 3.45 grm (phase VI)
stamped five times with punches featuring three-wheel designs, a sacred hill and a symbolic design.

(All photographs by author)

DAVID W. MacDOWALL

The Successors of the Indo-Greeks at Begram

The old dispute whether or not the Indo-Scythian empire of the house of Azes controlled Kapisene and its capital Begram after the fall of the Indo-Greeks can now be settled by the evidence of a collection of coins made at the site of Begram by the Afghan guardian of the site in 1971 and 1972 for the Directorate of Archaeology¹, and by the re-examination of the excavation coins now preserved in the Kabul Museum, from the 1941, 1942 and 1946 excavations at Begram² which heavily reinforce the evidence of Charles Masson's finds published in the 1830s.

The site of the important ancient town at Begram about 80 km North of Kabul in the Kohistan and 8 km East of the modern town of Charikar at the confluence of the Ghorband and Panjshir rivers was first noticed by the British explorer Charles Masson in 1833. In his communication to the Asiatic Society of Bengal (Masson 1834) he describes his journey to explore the districts North of Kabul at the base of the Hindu Kush mountains to identify the site of Alexandria ad Caucasum. 'I was recompensed by the discovery of numerous interesting objects, among them of the site of an ancient city of immense extent on the plain now called Beghram. I soon learned that large numbers of coins were continually found on the plain of Beghram'. A. Foucher (1942-47) identified it with Kapiśa, the capital of several Indo-Greek kings and the summer residence of the Kushan emperors. The Délégation Archéologique Française en Afghanistan carried out limited excavations there between 1936 and 1946 (Hackin 1939-40, Hackin et

¹ I am indebted to Dr Ch. Mustamindy, then Afghan Director of Archaeology, for making these arrangements and allowing me to study the collection made.

² I am indebted to the late Prof. R. Ghirshman for giving me permission to study the coins from his excavations and to Dr A.A. Motamedi, then Director of the Kabul Museum, for showing them to me.

al. 1954), and the excavations of R. Ghirshman in 1941 and 1942 (Ghirshman 1946) established three major occupation periods —

- I 2nd cent. BC-2nd cent. AD: the later Indo-Greek rulers and the period equated with the Indo-Parthian levels at Taxila.
- II 2nd cent. AD-3rd cent. AD: Kushan period to the probable destruction by the Sasanian Shapur I in 241.
- III 3rd cent. AD-5th cent. AD: up to the Hephthalite invasion.

Early in his researches in 1833 Masson proposed to the Government of Bombay through the resident in Cutch, Col. Pottinger, to transfer his present and future collections to the East India Company on condition that they defrayed the cost of his operations (Masson 1842: III, 366). The offer was accepted and Masson's collections were eventually sent to England and deposited in the Company's Museum. Masson describes many of his finds, with good line drawings in three memoirs published in the *Journal of the Asiatic Society of Bengal* (Masson 1834, 1836a, 1836b), and the collection was more generally described in H. H. Wilson's *Ariana Antiqua* (1841).

Masson (1834: 154) tells us that prior to 1833 the copper coins collected here by Afghan shepherds had been sold by weight at a very low price to itinerant coppersmiths, who melted them down themselves or sold them at a small profit to the officers of the Kabul mint. Masson mostly confined his collecting to Begram. He explicitly tells us that his object was not merely the amassing of coins but the prospect of obtaining a collection from a known spot. In 1835 his aim was to secure every coin of every description picked up from the Dasht of Begram. Masson himself writes 'It is presumed that coins constantly found and in number in any known spot afford proof of their having been current there and that the princes whom they commemorate, whether as paramount or tributary sovereigns, held also authority at that spot. The numbers in which coins may be found may perhaps furnish a criterion upon which we may calculate, first generally the character of the dynasties denoted by the various types of coin; and next particularly that of the reign of each individual prince'. He recognises that the number found in any year may not be precise enough and he is therefore careful to give the total number he had collected from Begram in 1833,

1834 and 1835. Out of a total of nearly 7,000 coins in all, collected by the end of 1835, Masson found none of Azes. He comments 'It is a remarkable fact and illustrative of the value attaching to collections of coins from a known spot that no moneys of the genuine Azes Kings have been discovered at Begram'. He adds that Azes coins are seldom found beyond Jelalabad and there scantily, while at Peshawar and North and East of Peshawar they are among the most numerous of the types of coin encountered. From this, the numismatic evidence seemed conclusive. The Indus provinces and in particular Taxila and Gandhara were central provinces of the Azes dynasty; but from the clear evidence of the finds of Masson, Begram, Kapisene and the territories West of Jelalabad never formed part of the Indo-Scythian empire of the house of Azes. Cunningham and Rapson were both convinced by Masson's evidence.

However R.B. Whitehead (1947-50) seriously challenged Masson's conclusions and argued that while the Indo-Scythian rulers Maues and Azes reigned over the Punjab they were equally strong in the Kabul valley. His arguments are —

- 1 Whitehead does not see how failure in so short a time as three years to secure the money of any particular King or dynasty can have any real historical value. The huge number of coins recovered by Masson from Begram (17,739 copper coins in all over 5 years from Begram) 'must have included a lot of junk. They show that as the fame of his operations spread Masson must have had brought to him coins from all the sites and moneychangers' stores far and wide, so in this respect Begram includes Kabul, Istalif and so on'.
- 2 Prinsep in 1835 in an account of recent discoveries, with emphasis on those of Masson, illustrates coins of 'Azos' which he calls a series of coins exceedingly numerous. He adds that 'it was from a coin presented by Munchi Mohan Lal that I first recognised the name of this sovereign many of whose coins had passed through my hands before in Lt. Burnes' collection and in Masson's plates'. Whitehead points out that in Masson's first memoir, his pl. X 31, 33 and pl. XI 45, 47 are coins of Azes.
- 3 Whitehead points out that coins brought from Begram by Hackin (who excavated at Begram for the Délégation Ar-

chéologique Française, 1936-1940) on view at the Musée Guimet in Paris during the Oriental Congress of 1948 included 11 large silver Azes, four of type Zeus Nikephorus, 6 Pallas to right, and one Poseidon to right.

- 4 A.K. Narain (1957: 163-4) adds that Hackin's map showing the geographical distribution of coins attests the presence of coins of Azes at Kabul, and this 'is also the experience of Bivar who has spent two seasons in Afghanistan'. Citing this evidence, but noting that coins of Azes are not so common and plentiful in the Kabul valley as in Arachosia and Gandhāra, Narain concludes that Azes I did not rule as long in the Paropamisadae and only conquered the province after the death of Hermaeus in c. 55 BC and during the last years of his own reign.

After discussions with Dr Mustamindy, then Afghan Director of Archaeology, about the problems raised about the interpretation of Masson's finds, the Afghan custodian of the site of Begram was asked to collect all the coins washed out by the spring rains of 1971 and 1972. Although the number was small, the copper coins he collected for the Directorate of Archaeology³ from Gondophares through the Kushans and late Kushans to the Kushano-Sasanians reflected the general pattern of Masson's finds for these periods.

		1971 and 1972 site finds	1833 finds at Masson
Su Hermaeus	} Heracles	3	136
Kujula			
Indo-Scythian	Azes	0	0
Indo-Parthian	Gondophares etc.	1	21
Soter Megas		2	171
Vima, Kanishka, Huvishka		5	221
Shiva and bull types		11	254
Ardoxsho		9	119
Kushano-Sasanian altar		16	161

³ The collection consisted of 1 silver punch marked coin of Ancient India and some 70 copper coins — many very worn. In addition to those listed in the summary table, there were some 10 thin late very small Kushan coins.

Indeed the commoner coins were found in much the same proportions as in Masson's finds. I therefore went on to examine the coins in the Kabul Museum from the Begram excavations of 1941, 1942 and 1946. These again reflected the general pattern of Masson's finds in 1833 (Table 1).

A careful reexamination of this material shows four billon or copper coins in all of Azes II found at Begram. In the 1941-1946 excavation coins there are two billon drachms (probably posthumous copies) of Azes II Zeus Nikephorus type:

Obv. Mounted king to r., holding whip.
 Rev. Zeus Nikephorus standing l.
 as *PMC* 126 but in billon, not silver.

In the line drawings and descriptions of Masson's finds in 1833 (Masson 1834) there are two billon drachms of the same type (Masson's Plate X fig. 31 and fig. 33)

Whitehead (1947: 40) refers to two further coins of Azes in plate XI of Masson's first memoir:

Fig. 45. Obv. King mounted on horse right holding whip
 Rev. Pallas standing to right
 — a silver tetradrachm of Azes II as *PMC* 158

and

Fig. 47. Obv. King mounted on horse right holding whip
 Rev. Demeter standing to left, holding a cornucopiae
 — a billon tetradrachm of Azes II with the title *dhramikasa*
 as *PMC* 222

but these are clearly described by Masson (1834: 172) as 'procured at Jelalabad by M. Martin'.

The billon drachms of Azes II were part of his later currency at Taxila, where they are found in enormous numbers — there were 1284 from Marshall's Taxila excavations (Marshall 1951: 769-85). At Begram these billon drachms of Azes II are by contrast very rare. Among the copper coins of the period between the end of Indo-Greek rule and the unification of the currency by the Kushan nameless King Soter Megas (MacDowall 1968), there were only 2 billon drachms of Azes II out of 136 copper coins of

TABLE 1

		BEGRAM EXCAVATIONS				MASSON FINDS*	
		1941	1942	1946	Total	1833	
INDO-GREEK							
Eucratides		2	14	—	16	70	
Others (excl. Hermaeus)		3	7	2	12	86	
						28	156
INDO-GREEK DERIVATIVES							
Imitation Heliocles		PMC 142	—	3	—	3	6
Hermaeus/Zeus enthroned		PMC 666	} 8	11	2	21	34
Su Hermaeus/Zeus enthroned		PMC 676					10
						24	50
INDO-SCYTHIAN							
Azes II		1	1	—	2	2*	
Azilises		—	—	—	—	1	
						2	3
INDO-PARTHIAN							
Spalirises		—	—	—	—	2	
Gondophares etc./Nike type AE Tetradr.		6	19	—	25	19	
						25	21
EARLY KUSHAN							
Su Hermaeus/Kujula		Heracles PMC 1	} 12	69	4	85	136
Kujula alone		Heracles PMC 8					
						85	136
SOTER MEGAS		AE Didr.	4	13	2	19	55
		AE Hemidr.	2	8	1	11	115
		other	—	—	—	—	2
						30	172
MAIN KUSHANS							
Vima Kadphises		AE Tetradr.	4	16	4	24	8
		AE Dr.	1	2	1	4	29
						28	37
Kanishka		AE Tetradr.	10	23	5	38	28
		AE Didr.	2	5	2	9	21
		AE Dr.	1	1	1	3	16
						50	65

* Unidentified coins from Begram attributed to Azes II by the author.

* The analysis of Masson's material is restricted to the 1833 finds because in the first memoir Masson gives line engravings of most coin types and a fairly full description in the text which discusses provenance. I have used this to give modern identifications of the coins found.

the same time span in Masson's 1833 finds. Indeed they do not form part of the standard monetary system of Kapisene. At Taxila, the silver tetradrachms and drachms of the Indo-Greeks were succeeded by silver tetradrachms and drachms of Maues, Azes I, Azilises and Azes II (Marshall 1951: *loc. cit.*) and then, in the great debasement, by billon tetradrachms and drachms of dumpier fabric struck in the name of Azes II (Marshall 1951: 773) and his Indo-Parthian successors. In Kapisene, however, we see from our analysis of finds that the silver tetradrachms and drachms of the Indo-Greek King Hermaeus were succeeded by five series of copper tetradrachms —

- 1 AE Tetr. of Hermaeus '
 - Obv. Diademed bust r.
 - ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΕΡΜΑΙΟΥ
 - Rev. Zeus seated l. on throne
 - Maharajasa tratarasa Heramayasa
 - as *PMC* p. 83 no. 666.
- 2 AE Tetr. of Su Hermaeus
 - Obv. Diademed bust r.
 - ΒΑΣΙΛΕΩΣ ΣΤΗΡΟΣ ΣΥ ΕΡΜΑΙΟΥ
 - Rev. Zeus seated l. on throne
 - Maharajasa mahatasa Heramayasa
 - as *PMC* p. 84 no. 676.
- 3 AE Tetr. of Gondophares Nike type
 - Obv. Diademed bust r. of Gondophares
 - ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΝΔΟΦΕΡΡΟΥ
 - Rev. Winged Nike r. holding wreath and palm
 - Maharajasa Gondopharnasa tratarasa
 - as *PMC* p. 152 no. 47.
- 4 AE Tetr. Joint coinage Su Hermaeus and Kujula
 - Obv. Diademed bust r.
 - ΒΑΣΙΛΕΩΣ ΣΤΗΡΟΣ ΣΥ ΕΡΜΑΙΟΥ
 - Rev. Heracles standing, facing, holding club in r. hand
 - Kujula Kasasa Kušana yavugasa dhramathidasa
 - as *PMC* p. 178 no. 1.

5 AE Tetr. of Kujula alone

Obv. Diademed bust r. of Hermaeus

KOZOYΛOY KADΦIZOY KOPCANOY

Rev. Heracles standing facing, holding club in r. hand

Kujula Kasasa Kusana Yavugasa dhramathidasa

as *PMC* p. 179 no. 8.

Although many of the coins from the Begram excavations are in poor condition and are sometimes of crude execution and in some cases unofficial copies, their weights when plotted in a frequency table show them to be the same basic denomination derived from the earlier tetradrachms and drachms of Hermaeus in silver.

TABLE 2.

wt gm.	Series 1 and 2 Enthroned Zeus types <i>PMC</i> , pp.83-4, nos. 666 and 676	Series 3 Gondophares Nike type <i>PMC</i> , p.152, no.47	Series 4 and 5 Kujula, Heracles type <i>PMC</i> , pp.178-9, nos. 1 and 8
10			
9	x		
8	xx	x	
7	xxxxxxx	xxxxxxxxxxxxx	xxxxx
6	xxxxxxxxx	xxxxx	xxxxx
5	x	xxxx	xx
4		xxx	xx
3			xxxxx
2			xxxxx
1			xxxx

The sequence of series 1, 2, 4 and 5 is reasonably clear from the type development. Series 1 retains the obverse and reverse types and legends of the silver drachms of Hermaeus, but is struck in copper. Series 2 changes the obverse legend from ΣΩΤΗΡΟΣ to ΣΤΗΡΟΣ ΣΥ, and the reverse legend from *tratarasa* to *mahatasa*, but otherwise retains types and legends unchanged. Series 4 retains the obverse type and legend of series 2, but introduces the new reverse type of Heracles and the new reverse Kharoṣṭhī legend of Kujula. Series 5 replaces the Greek obverse legend of Hermaeus with one of Kujula Kadphises the Kushan — but retains the reverse legend and type of series 4. Series 3, the Nike type copper tetradrachms of Gondophares, are clearly the same denomination and represent a sharp change in type and

portrait marking the presence in Kapisene of Gondophares who seems to have extended his rule here from Kandahar and Ghazni. The evidence of overstrikes suggests that the coinage of Gondophares came after that of Su Hermaeus with the reverse type of the seated Zeus of series 2 and before the Kujula issues with the reverse type of the standing Heracles of series 4 and 5, because one coin of Gondophares/Nike type in Mitchiner's collection is overstruck on a coin of the Su Hermaeus/Zeus type (Mitchiner 1977: no. 1086a), and another coin of Gondophares/Nike type is overstruck by a copper tetradrachm of the Kujula/Heracles type (Mitchiner 1977: no. 1086b).

This new evidence enables us to reassess the weight of the arguments advanced by Whitehead and Narain —

- 1 The 1941, 1942 and 1946 excavation coins from Begram fully substantiate Masson's general conclusions about the currency of Begram. The coinages of Azes and his dynasty have no place in the sequence of issues, although his 1833 finds do include two billon drachms of Azes II, strays from the different monetary system of the neighbouring provinces of Taxila and Gandhāra, where this billon coinage is found in enormous quantities (Marshall 1951).
- 2 Although Prinsep (1835: 343) commented that he had only recognised the name of Azes after many coins of Azes had passed through his hands unrecognised in Lt. Burnes' Collection and in Masson's plates, he still commented in 1836 in an editor's note on Masson's enumeration of coins collected from Begram in the three preceding years 'it is a most remarkable circumstance that none of the coins of Azos which were so numerous in the Ventura Collection from the Panjab should have been met with at Begram' (*JASB* 1836, p. 547). The reason for this is clear. Burnes collected a substantial number of ancient coins at Manikyala and in the Punjab, none at Kabul but many more at Balkh, some at Bokhara and more at Khojouban, 25 miles Northwest of Bokhara; i.e. none from Kapisene⁵.

⁵ See Burnes 1834: I, 67 for the 70 coins acquired at Manikyala. I, 241-2 for coins at Bokhara and I, 320 for coins from Khojouban. In I, 148 Burnes says explicitly 'While at Cabool, I made every attempt to procure coins, but without success, excepting a Cufic coin of Bokhara'.

- 3 The eleven silver coins of Azes brought by Hackin from Begram are a hoard of Azes silver tetradrachms, four from the mint of Taxila and seven from the mint in Gandhāra (Jenkins 1955). A hoard represents a single find and a hoard of silver coins (valued for their metal content and used in trade) is poor evidence for the currency of a province compared with large quantities of copper coins, that rarely travel outside their own province.
- 4 Narain and Bivar are correct that coins of the Azes dynasty are offered for sale in Kabul, but the material in the bazaar comes from different localities and sometimes from Pakistan. Two hoards of copper coins of Azes II offered for sale in recent years in the Kabul Bazaar actually came from Khost and from Gardez close to the Pakistan border and not from Kapisene. It should be recalled that Whitehead himself (1947: 41) had commented that the remarks of Masson and Prinsep about the absence of coins of Azes from Begram were inexplicable, in view of what they had both written in other places, — unless a sharp distinction was being made between the finds at Begram, Kabul and Jelalabad. That is exactly what we must do. The finds at Begram show that Kapisene had a currency of copper tetradrachms and drachms of Hermaeus, Su Hermaeus, Gondophares and Kujula. Jelalabad had closer affinities with the coinages of the house of Azes — the currency of Taxila and Gandhāra, while coins from Kabul even in the 1830s may have reached the capital from various sources.

One is still left with the problem of the identity of the issuers of the copper tetradrachms of Hermaeus and Su Hermaeus at Begram before Kujula Kadphises the Kushan King. The *Hou Han Shu* (History of the Later Han) says the Kushans captured Kaoçu (Kabul) from the Ansi — the Parthians (*Hou-Han Shu* 118.9a). This led Narain and others (Rapson 1922: 506-7) to regard the Su Hermaeus issues as Parthian. But from the Begram finds it was the copper tetradrachms of Gondophares that circulated there before the Kushans, i.e. Begram seems to have been under Indo-Parthian control and it was the defeat of the Indo-Parthians in Kapisene, as at Taxila, that led to the establishment of the Kushan empire. The evidence from Begram in fact seems to

explain a curious conflict of statements about the Kushans between the *Han Shu* and the *Hou-Han Shu*.

The *Han Shu* (History of the Former Han 206 BC-AD 25), completed about AD 80, lists Kaofu (Kabul) as one of the five Yagbu (headquarters) of the Kushans (96A.14b). The *Hou-Han Shu* (History of the later Han) based on a report of Pan Yung c. 125 AD, corrects this and says 'the allegiance of Kaofu has never been constant. The three countries of Tien chu (India), Chipin (Gandhāra or Kashmir) and Ansi (Parthia or Indo-Parthia) have possessed it when strong but lost it when weak. The history of the Former Han treats this as one of the five Yagbu of the Kushans, but this was not its actual state. It lastly belonged to Ansi, and the Yue-Chi (Kushans) only obtained it after they had defeated the Ansi (Indo-Parthians)' (118.9a).

The conclusions of Masson that the Azes dynasty did not rule at Begram seem to be fully vindicated by this additional numismatic evidence; and as a result we can understand better the references to Kao fu (Kabul) in the *Han Shu* and *Hou-Han Shu*. This in turn means that we can use the evidence of the Masson finds more confidently for the interpretation of the Indo-Greek, Kushan and Later Kushan rulers of Begram.

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FRANCINE TISSOT

The Site of Sahrī-Bāhlol in Gandhāra

Sahrī-Bāhlol is situated in the central part of Gandhāra, about 2½ miles South of the crest of Takht-i-bahai, and approximately 7 miles North-West of Mardan (Foucher 1905-51). Gandhāra, formerly part of India, now part of West Pakistan, is often mentioned in books, before 1947, as a part of the North-West Frontier Province, or even as Yusufzai in the old reports of the end of the 19th century. It lies between the Indus valley eastwards and the Hindu-Kush mountains to the North and West; the Khyber Pass allows transit to Afghanistan westwards; to the South, the Great Trunk Road leads through the hills to Taxila and the Punjab.

When I first went to Peshawar, the main modern town of Gandhāra, in 1962, I met Mr Shakoar, the Curator of Peshawar Museum, who, as a young man, had worked with the most famous pioneers of archaeology in the country. Inquiring about the origin of the pieces of sculpture, fixed on the walls and in the cases with big metal grooves, or lying on the floor of the upper galleries, he told me, with an emphatic gesture: 'on the left side, they come from Takht-i-bahai, on the right side, they come from Sahrī-Bāhlol...'. This rather amazing classification was the original one, from the time when the pieces of sculpture came from the sites in bullock-carts, or even on the back of camels, caravan-like.

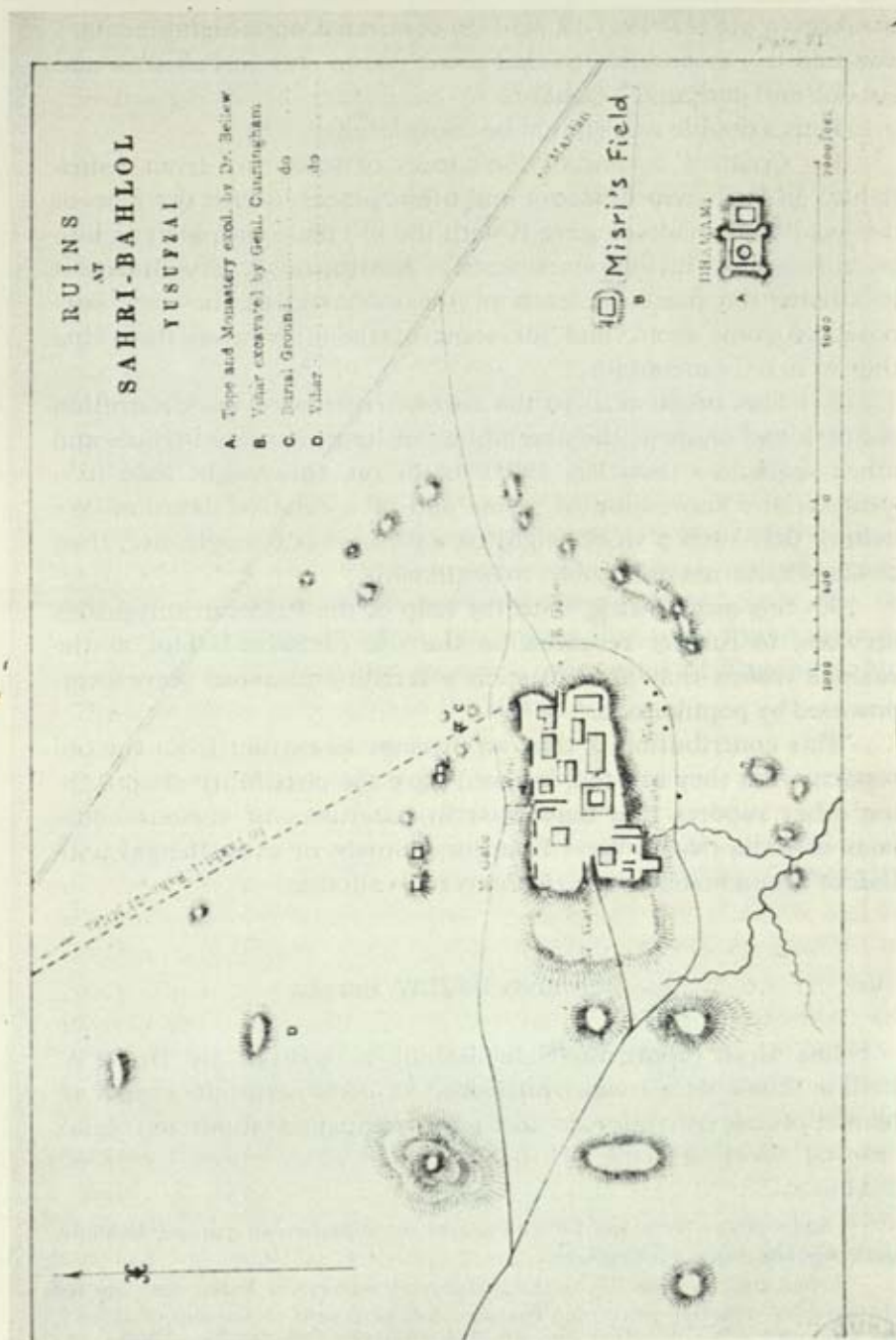
I soon came to know of the first 'catalogue' by D.B. Spooner, published in 1910 (See Preface, p.i), that is not a real catalogue, but, as he himself writes, a popular guide-book for the visitors of the museum. A second 'hand-book' was published by H. Hargreaves some 20 years later (Hargreaves 1930).

After a quick survey of the works coming from Sahrī-Bāhlol, on the 'right' side of the museum, it appeared to me to what

enormous amount they reached: several hundreds of statues and reliefs, some in an incredibly perfect state, some broken in an aggregate of fragments, most of all the pieces displaying a fascinating quality of carving.

This bulk of sculptures had been numbered, as Spooner writes: 'all the sculptures in the museum, furthermore, had been numbered consecutively, beginning in the right-hand gallery upstairs...' (Spooner 1910: Preface, p. iii). It is to the precision of this numbering that I first hurt myself. When looking out for specific pieces from Sahrī-Bāhlol, Hargreaves' *Hand-book* is the most helpful: he lists in his appendix (Hargreaves 1930: Appendix, p. 109) the numbers of the cases that shelter pieces from the site and the dates of the diggings. Thus, in cases 1 to 11 and table-case A, we have the results of the excavations by D.B. Spooner in 1907; in cases 49 to 54 and table case N, we have the results of the excavations of Spooner in 1909-10; in cases 56 to 76, we see the results of the excavations of Sir Aurel Stein during the campaigns of 1911-12. But big Buddhas and *bodhisattva* and other big statues could not take place in the cases; thus in the entrance hall, the central hall, in the galleries, these pieces are mixed up from the very beginning, and Hargreaves (1930: 48-60) gives the origin of but quite a few of them. This is a first problem. The second problem was exposed to me lately in Peshawar: the old numbers slowly disappear and the staffs of the museums receive mission to give new numbers to the pieces and establish a new catalogue. The work has been started lately in Peshawar and Lahore. Let us pray that a thorough investigation will permit to note the old numbers on the pieces and avoid a general disappearance of the old precious signs, and we know they are often so dim, as to reveal only through photography with special grazing light.

There is another way of nearing the problem of the origin of the sculptures: it is to turn to the old reports and photographic material. Dealing with Sahrī-Bāhlol, the first report by H.W. Bellew (1864: 137-43) had no plan nor photographic documentation. The report by A. Cunningham (1875: 36-46, pl. XI) had a plan (fig. 1) that is useful to understand both Bellew's and his own report, and it has a few lithographic documents. D.B. Spooner, as we shall see later, was the first to publish plans and photographic material (ASIAR 1906-7: 102-18; 1909-10: 46-62).



aurel Stein (ASIAR 1911-12: 95-119) continued on a higher scale. I was told it was possible to find some documents in Pakistan and London and perhaps elsewhere.

Thus a double work might be considered:

1. - Create a *corpus* of the pieces of sculpture from Sahrī-Bāhlol, in Peshawar Museum and other places¹, with the help of the local staffs and compare it with the old photographic stock to be 'discovered' in various scientific institutions². Try the most to situate the pieces in each of the monasteries they are supposed to come from, and for some of them, even on the *stāpa* they were once meant for.

2. - This might lead to the reconstruction of the decoration of *stāpa* and chapels, the assembling of long separated triads and other sequences (Foucher 1903). Later on, this might lead to a study of the succession of styles and of a relative datation. We believe that such a work might be easier on one single site, than on Gandharan art as a whole, to begin with.

3. - this might bring, with the help of the Pakistan antiquities services, to further research on the site of Sahrī-Bāhlol, if the various trends that prevent such a fertile endeavour were overpowered by popular will.

This contribution is thus an attempt to extract from the old reports what they can tell, before I have the possibility of consulting other reports that may exist in gazetteers of various countries of India (North-West Frontier, Punjab, or even Bengal with Calcutta) and manuscripts that may be available.

I — REPORT BY DR H.W. BELLEW

The first report on Sahrī-Bāhlol is written by Dr H.W. Bellew (1864: 4-6); it was published in 1864 without a map or plan. But we can refer to the map, published about ten years

¹ Some pieces from Sahrī-Bāhlol are in the museums of Lahore, Calcutta, and Patna, and probably elsewhere.

² I was told in New Delhi (Archaeological Survey of India) that all the photographic material concerning Pakistan, had been sent to Karachi or Lahore. But later on I understood that a *Frontier book* might be found in New Delhi, and perhaps in the India Office in London. This research is planned for 1984.

later by A. Cunningham (1875: pl. XI), to understand the situation of the ruins, including a small town, large wells or granaries, numerous tumuli, and a monastery and tope (*stāpa*) (fig. 1).

The Town

Dr Bellew describes a small town built on a low mound some sixty feet high in the center. The buildings are protected by a wall, rising straight up from the level of the plain and built 'with surprising neatness and accuracy, of slabs of the mica schist of the neighbouring Takhti Bahi hill'. This very first digging of Bellew is important as it is the first description of the walls made of rubble described later by Sir John Marshall in Taxila. Four gateways open in the wall on each of the four faces. 'The buildings on this mound, are arranged in quadrangles with small chambers opening from each side on to a central courtyard, on one side of which is an entrance gateway'. It is easy to recognise, in this description, the houses that were found later in Taxila, Shaikhān-dherī and so many other sites of Gandhāra. No sculptures were to be seen in the town.

The Wells

The wells are an ordinary feature of these ruins, all over the plain and hills. Bellew is at once occupied by one of them, and is brought to several interesting conclusions: the well he empties is built with stone down to 18 feet with a slate pavement; and with the help of neighbouring peasants, he recognises a granary or *khāon* used to keep the grain crops safe; under the slate pavement is a small 'idol representing Budh in a sitting posture': this find does not seem to interest the digger, but it is the first known piece of sculpture from Sahrī-Bahlol. Bellew continues his digging of the well to 45 feet below the surface, through compact earth mixed with fragments of red pottery and stone: a new possibility of digging one of these wells might provide interesting data.

The Tumuli

The central mound is 'encircled at 100 or 150 yards, or more, by a ring of low detached tumuli'. Unlike his preceding description of the town, Bellew mentions at once that 'the surface [of these tumuli] is strewn with fragments of red pottery, idols and other sculptures, but the traces of former walls and edifices, if they exist, are hidden under the surface'. It is rather easy to explain what happened on the plain of Sahrī-Bāhlol in ancient times: the town was occupied over and over again and the town people, who were forgetting the Buddhist faith, especially after the Moslem invasions, took away the materials of the nearby tumuli to build new houses or the wall of the city, as Alfred Foucher (1905: 150-1) mentions very wittedly, when he writes that not only the stones were taken away, but also the big bricks made of clay, while the fine clay-powder remaining at the end was an excellent dung to be spread on the fields.

The town and village people did not pay any attention to the bits of carved stone, except when they were big enough to be included in a wall, and this accounts for the pieces of sculpture scattered on the soil of the tumuli. It is only when studies on the art of Gandhāra began, and when importance was given by the first diggers to the presence of works of art in the various tumuli of the North-West Frontier, that petty dealers or squires, eager to please the 'sahibs', began a private search and made a bargain of discovering *Buts* or *Budhs*.

Monastery and Tope

Bellew had to choose among so many promising sites, and he therefore turned to a rather large tumulus situated 800 yards to the South of the town³. This mound, oblong in shape, is 'just traceable on the ground', but the presence of round towers at each angle is at once remarkable. These towers may very well

³ Later on, Cunningham (1875) remarks that Bellew got very often mistaken with the directions. This mound, called Dhamāmi on the plan (Cunningham 1875: pl. XI), is situated to the East of the town and not to the South. It is reproduced in Foucher 1905: fig. 61, with two more round towers.

have been part of the original building since round towers are well known in Kushan architecture (Marshall 1951: 217-8) or they may be a later addition, giving the place, if it was inhabited by some local owner, the aspect of one of those modern *kala* to be frequently seen in the countryside.

Bellew, in the best tradition of Charles Masson⁴, cut through to the core of what had been a *stūpa* (*stāpa*), as he at once understood. This digging must have been fatal to the building and nothing can be seen of it nowadays. The finds in the center of the *stūpa*, at level ground and higher are puzzling: the diggers came to 'an oblong cavity lying north and south', and containing, under stones fallen in, 'a quantity of ashes, fine dust that gave out a musty odour of the grave, and small bits of charcoal'. Then were discovered 'a quantity of human and other bones' and 'an idol' (Bellew 1864: 140).

The skeleton and other bones included rib-bones of cow or horse, birds whose skulls were recognised as those of 'common fowl, kite, sand-grouse, and owl', as well as those of the common rat and a bigger rat. We see here the particular reaction of an entomologist in the field, what Bellew had been before becoming an archaeologist. He signals also the presence of another human skeleton, 'imbedded in a hard layer of clay', about three feet above the grave just described.

The interpretation of these burials, if they are burials, may be discussed. One may remember that John Irwin in his study about the origin of the *stūpa* (Irwin 1979: 815, fig. 10) describes a find of animal bones under the presumed wooden shaft of the *stūpa* of Gotihawa. Alfred Foucher (1905: 48) recognised the funerary destination of the *stūpa* though he insisted on the fact that the bones deposited inside a *stūpa* were the result of the cremation of an important person's body (bones in a fragmentary state and ashes). The bones discovered by Bellew in the *stūpa* near Sahrī-Bahlol do not look like any of these possibilities; the recent excavations at Ai Khānum and Hadda in Afghanistan may, on the contrary, bring some explanation with regard to this parti-

⁴ Charles Masson, traveller and 'scientist' of the 19th century, dug into a large quantity of *stūpa* in Afghanistan and the North-West Frontier, in search of coins, his main interest. See the chapter by C. Masson, 'Mémorial on the Topes and Sepulchral Monuments of Afghanistan', in Wilson 1841: 55-118.

cular point. At Ai Khānum, a late cemetery or, better to say, a deposit of corpses was actually found on part of the precinct of the theater, partly excavated, and built on the slope of the nearby hill, overlooking the town. This deposit is said by the discoverer to belong to some late occupation of the site, and perhaps by populations who were of Mazdean faith. At Hadda, in the monastery of Tapa-i Šotor, Dr Tarzi discovered in grotto B, close to and about one yard higher than the painted grotto A, the skeleton of a man having in his mouth a coin, dated 620 AD. The opinion of the discoverer is that later Mazdean populations, probably of Central Asian origin, used to throw away their deads in old monuments that offered some deep hole or pit, where they were safe to corrupt in peace. But more wealthy people were sometimes embedded in clay and attached to the wall of the pit, at different heights⁵. These details explain Bellew's description: the first broken skeleton was just thrown in a pit, later on obstructed by stones and so on; the second skeleton was neatly pasted on the wall of the pit. And this brings us to remember one of Foucher's remarks about the *stāpa*: he says that some of the *stāpa* had not only a central and narrow pit that ran deep into the core of the tumulus and held the central post, but also a tunnel, crossing the building to the very center where the relics were deposited (Foucher 1905: 86) and taken out for religious feasts. The presence of this tunnel might have allowed the late inhabitants of the villages around, to bury safely their deads.

The mound in the plain was built high in a marshy country, subject to floods, especially before the building of the so-called Swāt canal, coming from Malakand pass, and flowing now through the eastern portion of the district, along the ancient road. These floods were undoubtedly responsible for the 'petrifications' Bellew (1864: 139) mentions: 'They are coarse, friable deposits of sulphate and carbonate of lime on bundles of twigs, whisps of straw, and small branches of some tree with a pithy centre'. The waters must have brought, inside the *stāpa*, a disor-

⁵ Z. Tarzi, oral communication, 1984. Dr Tarzi knows about examples that he will publish with his thesis about the excavations at Tapa-i Šotor, Hadda, and others from Afghan western Bactria that will be published by I.A. Kruglikova from Moscow.

ganisation of the construction itself, and a mixing up of various items, including wood, straw and the small animals also mentioned (see *supra*); or may be some of the stucco modelling that presumably decorated the *stūpa* in its glorious period.

The presence of some rib bones of a horse is perhaps a mere accident, or this mount was the favorite one of the inhabitant of the tomb, and thus buried with him, following some foreign custom of the steppe; the toads hopping about are usual inhabitants of such pits, apparently interpenetrated by frequent flood waters.

The most surprising feature is the 'idol' (see *supra*): Bellew gives quite an accurate description of this piece of sculpture, and therefore A. Cunningham was able to find it in the Lahore Museum where it was brought to and where it is still on show, under number 135. It is a very beautiful *bodhisattva*, carved in a black schist, 'twenty inches high', and supposed to represent Siddhārtha (fig. 2). Had it been placed in the tomb with the body of the dead *mān*, who might have been a Buddhist, or was it hidden there in modern times by one of the villagers, nobody can tell, but this superb statue is number 2 in the list of sculptures from Sahrī-Bāhlol ⁶.

The monastery was a complete quadrangle of rooms, opening on a central courtyard and surrounded by a wall, with circular platforms at the corners to allow passage. Bellew rapidly collected various items in the rooms, including 'a small urn of red pottery full of cinerised human bones', water vessels, lamps, clay figures (bullocks and horse and rider) ⁷, beads, small jewels, and a remarkable copper-plate (Bellew 1864: 142).

In a room on the North face, he found an 'idol figure, nearly eight feet high, and carved out of a single slab of blue slate [...]'. This wonderful statue has been lately recognised as the one bearing number 1 in the Lahore Museum. Is it one of the Pandu kings as Bellew calls it, or is it the *bodhisattva* Maitreya,

⁶ Number 1 might be the small Buddha recovered from the well, and not yet found.

⁷ These clay figures are now very well known, but their datation is difficult when they are separated from their contexts.



Fig. 2 — Statue of a *bodhisattva* discovered by Bellew in the *stāpa* of the site of Dhamāmi. Lahore Museum, no. 135. (Photo F. Tissot).

as mentioned in the museum? it is also one of the most beautiful and biggest of Gandharan pieces of sculpture (fig. 3) ⁸.

⁸ Mrs Elisabeth Errington, London, told me that, going through Cunningham's files in the Lahore Museum, she had the proof that Cunningham first attributed the great Pandu king (Lahore Museum, no. 1) to Takht-i-Bahai, then recognized his mistake and gave it back to Sahrī-Bāhlol. It is to be remarked that those great figures were first called 'kings, or important lay donors', and not *bodhisattva* (Rowland 1961).

II — REPORT BY ALEXANDER CUNNINGHAM

The next report on Sahrī-Bāhlol comes eight years later, (Cunningham 1875: 36-46) and is the result of an archaeological tour by Alexander Cunningham. The famous pioneer of researches on the North-West Frontier had been appointed two years before (1870) a Director to the newly founded Archaeological Survey of India. His attention had long been drawn to Gandhāra and, therefore one of his very first surveys happened to be on the site of Sahrī-Bāhlol.

He completed, as minutely as possible, the statements by Bellew, and even repeated long sentences of Bellew's report. He precisely estimated the surface of the town to be 1,000,000 square feet⁹, and big enough to shelter 'a population of about 3,000 in time of peace, and of double that number in time of war', the mounds sheltering 1,000 people more.

Cunningham gave supplementary data about the height of the mound carrying the town, above the surrounding plain, and tried a datation; he supported it on the growth of the rubbish in the well, excavated by Bellew: one and a half foot of rubbish per century being the approximate rate ascertained elsewhere, and thus he brought the foundation of the town to as early as 2,000 years BC...

Cunningham returned to Dhamāmi mound, now locating it rightly on the plan, East of the town (see Plan, letter A; our fig. 1)¹⁰; after quoting Bellew's description of the area, he mentioned the two statues of 'Kings or laymen of rank', and proposed a datation to 500 or 600 AD, for the re-use of them in a late restoration of the building after the irruption of the Huna hordes.

Turning to another mound, '700 feet from Dr. Bellew's tope, and a little to the west of north', called '« Misri's field » from the name of the present owner', and 'ploughed over annually' (see Plan, letter B; our fig. 1), he began a digging, with the result of bringing to light ten statues of Buddha, seated or standing, two

⁹ This means approximately 10 hectares — a little more than Place de la Concorde in Paris, that covers 9 hectares.

¹⁰ Our fig. 1 is pl. XI in Cunningham 1875.



Fig. 3 — *Bodhisattva Maitreya* (one of the 'Pandu kings'), discovered by Bellew in the monastery precinct at Dhamāmi. Lahore Museum, no. 1. (Photo F. Tissot).

of them colossal, the others life-size or half life-size. They were placed along a wall and on a basement, and it was obvious that they had been exposed in chapels, in a row 84 feet long, each chapel being about 8 feet square, with an interval of 1 1/2 foot between them. He also discovered two *alto-relievos*, one of them being 3 feet high, that he judged very big indeed, and a piece of an inscribed bowl.

Another mound, North of the town (see Plan, letter D; our fig. 1), gave light to some broken figures and another *alto-relievo*. The other mounds gave but fragments, pottery, a broken *linga* (Cunningham 1875: pl. X) and some coins of the Indo-Scythians, and of the so-called Shahi kings: Syāpati Deva and Sāmanta Deva (9th or 10th century AD).

It was 33 years before another European member of the Archaeological Survey came again to Sahrī-Bāhlol. This long period was entirely beneficial to the local antique dealers and their European customers, who became conscious of the interest of these unexpected works of art, so easy to pick up or dig up, and so highly admired by collectors... This state of affairs, true for the whole of the Indian sub-continent, prompted the government of Lord Curzon to introduce, in October 1903, to the Imperial Legislative Council, a bill for the preservation of ancient monuments, that became a law of the land on the 18th of March 1904 (Foucher 1905: 16, fn. 1).

In the spirit of the bill, the Archaeological Survey began to conduct proper excavations, and to build museums in the large towns, as well as well defended depots in the district towns, to collect and protect what might be saved from the ruins.

The modern idea of keeping the finds on their own sites and restore them on their own ancient places, has proved recently as dangerous as the transportation of pieces to far away museums, at the beginning of our century ¹¹.

¹¹ The transportation of sculptures or fragments to big towns, usually quite far from the sites, tends to mixing up the pieces and loosing their identity. Museum in small towns are, alas, easy to rob. Site museums are vulnerable to the social and political climate of the country in which they are built.

III — FIRST REPORT BY D.B. SPOONER

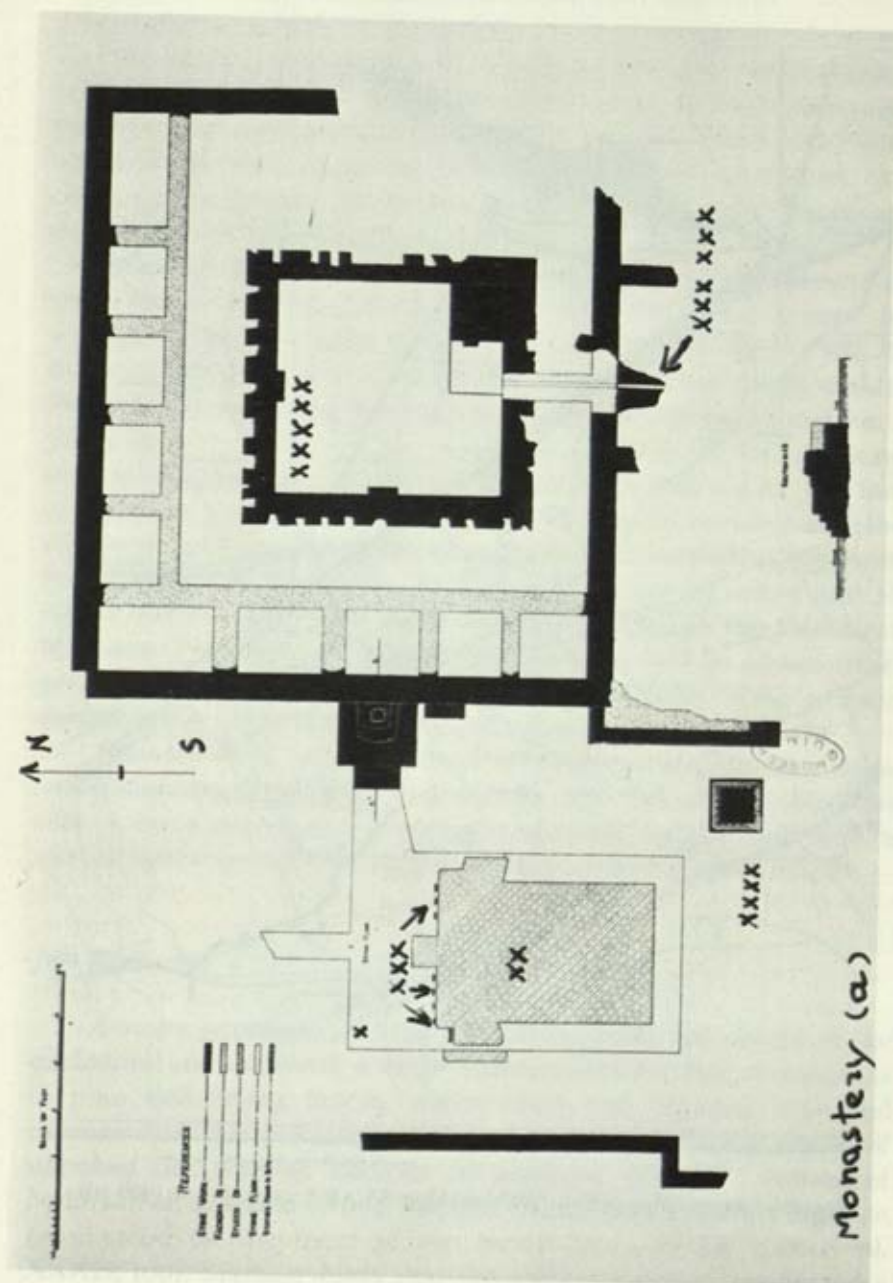
Owing to this new state of research, specialists of Gandhāra started excavations in this province at once. A short campaign took place in Charsadda, conducted by John Marshall and Philip Vogel (1902-1903), than Dr D.B. Spooner, Superintendent, Archaeological Survey of India, Frontier Circle, was appointed director of the Peshawar Museum.

Spooner started his campaigns in Gandhāra with the site of Sahri-Bahlol (ASIAR 1906-7: 102-18; 1909-10: 46-62) where he worked from the 12th of February to the 20th of April 1907, at the cost of 685 rupees, 11 shillings, 5 pence. After going rapidly through the preceding diggings, he chose, for his own purpose, a small mound, South of the town (ASIAR 1909-10: 46-7, general map of the plain; our fig. 4: the monastery is marked *a*), 125 feet in diameter and only 6 feet high. The barbarous initiatives of the village people were to be seen everywhere, nevertheless. Spooner found there 300 fragments, including 83 pieces of schist and 15 stucco heads, that came to 12 mahogany cases in the Peshawar Museum. They are still now in the museum and go-downs (Hargreaves 1930: 109; Spooner in ASIAR 1906-7: 106). Their artistic quality is one of the best to be found in Gandhāra.

Spooner drew a good plan of monastery *a* (fig. 5), that helps understanding, but brings in problems. One can see: on the West side, a large enclosure for *stūpa* or temples, on the East side, a quadrangle and rooms for the private use of the Buddhist monks.

The Enclosure

A stone pavement or 'floor' (fig. 5, x), holds the centre of the enclosure and supports a large stucco platform (xx) rectangular in plan and facing North, where there can be seen a frontal extension of the platform itself. A small set of stairs, made of unbaked clay (*kacha*), leads to the platform. Six stone statues of *bodhisattva*, and one sitting Buddha (xxx), 4 feet 6 inches high, *en gros*, stood on the front of the North face (ASIAR 1906-7: pl. XXXII, top). Spooner hints that the stucco platform supported a *stūpa*: but, up to now, no *stūpa* built entirely of stucco has been found; all the *stūpa* are made of stone (slits of schist or pebbles,



etc.), and they are only covered with layers of stucco and a stucco decoration. The stucco platform is therefore a problem and the shape of it being quaint too, we cannot be sure that a *stūpa* was built there, no more than we can suggest that some temple or a light wooden structure was raised on the southern part of the platform.

A stone *stūpa* base (xxxx) appears on the plan (fig. 5), on the Southeast side of the enclosure. It is highly probable that this *stūpa* was the one mentioned by Spooner, and described as being adorned, on its second base, by stucco atlantes and elephants, the first base being decorated with a line of stucco sitting Buddhas. Large parts of the decoration of this *stūpa* were stolen from the diggers, even during the diggings; Spooner's text has to be interpreted and I leave this to later times.

The Monastery

It is a quadrangle with small cells on the North and West sides (fig. 5). The absence of cells on the East side is probably due to destruction, made easy by the fact that those cells were built of dried clay (*kacha*).

A curious structure (xxxxx) appears in the centre of the quadrangle; this may have been a light pavilion, sustained with wooden posts, maintained in the cavities, to be seen in the remaining square base; a so-called 'bath-room' is situated in the south-eastern portion, with a pipe for evacuation of dirty water (xxxxxx). A similar structure has been found in the monastery of Tapa-i Šotor, Hadda (Tarzi 1977: fig. 1, no. 11), and is not yet explained by the excavator. Three large rooms lay on the South side of the quadrangle.

The Finds

The finds of this campaign of 1907 in Sahrī-Bāhlol are housed in the Peshawar Museum, as has already been mentioned. The pieces of which we can be sure, are those pictured in the report by Spooner (ASIAR 1906-7: pls. XXXI-XXXV), nine of which have been published in Ingholt's book later on (Ingholt



Fig. 6 — *Bodhisattva*. Peshawar Museum, no. 184. (After *ASIAR* 1906-7: pl. XXXIIIb).



Fig. 7 — A detail of fig. 6. (Photo F. Tissot).



Fig. 8 — Kubera and Hariti. Peshawar Museum, no. 241. After *ASIAR* 1906-7: pl. XXXII, bottom right).



Fig. 9 — A detail of fig. 8. (Photo F. Tissot).



Fig. 10 — *Bodhisattva*. Peshawar Museum, no. 200. (After *ASIAR* 1906-7: pl. XXXIIIa).

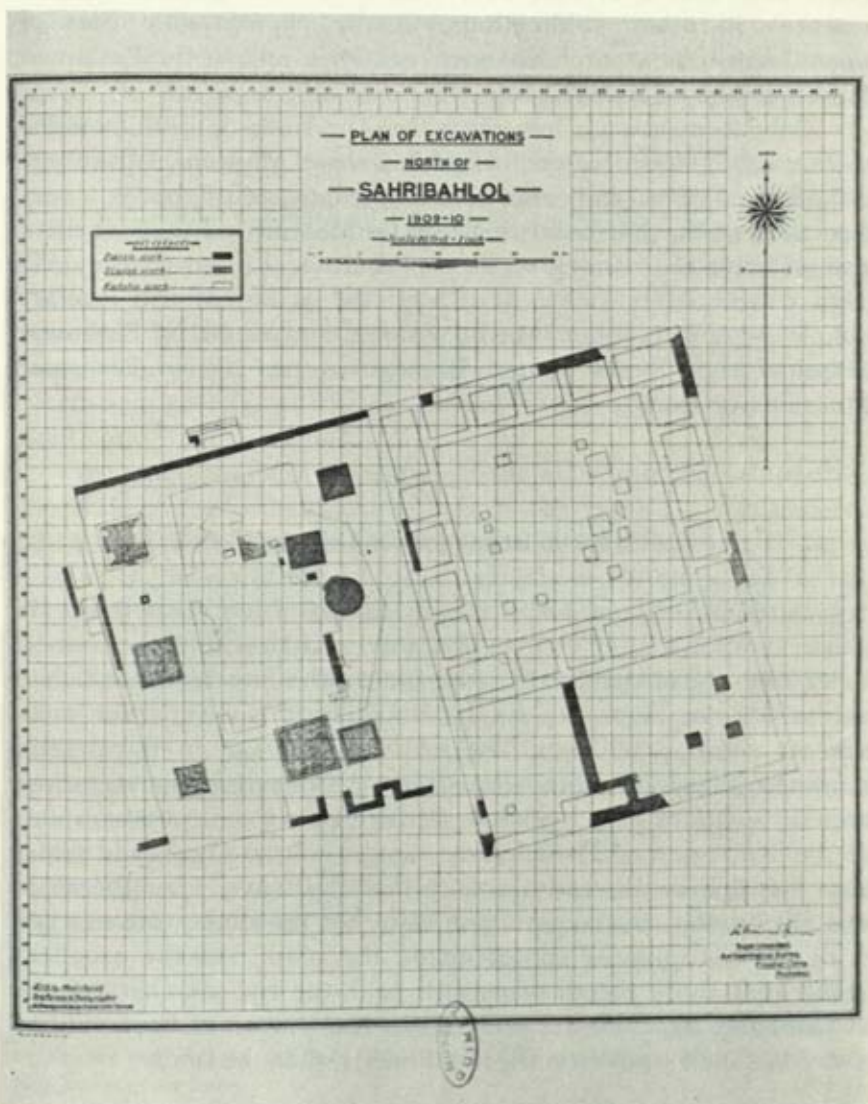


Fig. 11 — Ground plan of site *b* (1066), excavated by D.B. Spooner in 1909-10.

1957: nos. 165, 313, 306, 311, 248, 212, 561, 13, and 138). A research in other publications, in the photographic files of several libraries or archaeological sections, and in the Peshawar Museum must be undertaken.

Only to mention a few examples, the finds of 1907 included the superb *bodhisattva* no. 184 of Peshawar Museum, whose *mudrā* (*dharma-cakra*) indicates probably a late period, but is a very fine work of the artist showing that Gandhāra produced excellent statues after the coming of the Ephthalites (4th-5th century AD) (figs. 6 and 7). It included as well the group of the tutelary couple, alias Kubera and Hārītī with babies, no. 241 of Peshawar Museum (figs. 8 and 9) and *bodhisattva* no. 200 of Peshawar Museum (fig. 10).

IV — SECOND REPORT BY DR D.B. SPOONER

De Spooner came back to Sahrī-Bāhlol three years later. He chose another mound¹², over 250 feet in diameter and about 10 to 12 feet above the level of the plain. The site was untouched except for two deep pits on the North face. No walls nor monuments were to be seen. The excavation began in the drastic method of those far away times, but Spooner had the priceless idea of having a plan made by the 'draftsman and photographer of the team', named Moolchand, who drew it on chequered paper (fig. 11); this detail, and the fact that the *stūpa* were therefore exactly situated on the plan, and also that the finds were marked with the co-ordinates appearing on the plan, had the excellent result that those pieces often still bear the two numbers of the co-ordinates (figs. 12, 15, etc.), when they have not been rubbed away. We shall study first the monuments, than the finds.

¹² Mound marked *b* on the map (our fig. 4), that must not be mistaken with the mound marked *D* on the map (our fig. 1). The two mounds are on the same Northwest direction from the town, but at different distances, the two maps not having the same scale.

The Monuments

The buildings are divided into two practically equal structures. On the East side: a quadrangle with cells, opening in an inner courtyard, and two large rooms for the common use of the Buddhist monks. On the West side, a large courtyard where three stone and six stucco-covered *stūpa* were still to be traced after a slight digging. The central *stūpa*, if it had ever existed, did not show anymore, except through a piece of wall¹³, supporting two statues, that may have belonged to it. It is mentioned that what appeared of these monuments, after digging, were walls, not more than seven inches high... The stone *stūpa* were set in the Northeast portion of the courtyard¹⁴, the stucco *stūpa* in the South and West portion¹⁵.

A stone pavement appeared in the courtyard, and supported the wall of the central *stūpa*, two of the stone *stūpa* numbered 22-74 and 22-76, and the small stucco *stūpa* numbered 17-74, as well as the bases of big statues. Only one of the *stūpa*, 22-76, had a round base, and could be probably compared to Sikri's tope, now exhibited in the Lahore Museum.

Out of the stone pavement, 'stucco' *stūpa* were still decorated with lines of Buddhas, sitting between pseudo-Corinthian pilasters and capitals (ASIAR 1909-10: pl. XIV a-b)¹⁶. On the stone pavement, many fragments were scattered, but also statues in a decent state of conservation and the bases with mortises on which they had once been exposed. Some of them were still stuck to the remaining walls, but the various situations in which they were found, tell, most often, of a late reconstruction of the site

¹³ The wall can be recognised at the crossing of vertical 21 and horizontal 78 to 81, on our fig. 11 (ASIAR 1909-10: pl. XIII, monastery B (1066), 1/2 mile Northwest of the town).

¹⁴ These stone *stūpa* are situated on fig. 11, at vertical 21, horizontal 70; vertical 20, horizontal 74; vertical 22, horizontal 76.

¹⁵ These stucco *stūpa* are situated on fig. 11, at vertical 17, horizontal 74; vertical 11, horizontal 73; vertical 12, horizontal 79; vertical 14, horizontal 85-86; vertical 20, horizontal 84; vertical 23, horizontal 84. As I have already mentioned, these so-called stucco *stūpa* must have had a solid core of slits and pebbles, as we find now in all the recent researches. See *supra*.

¹⁶ This *stūpa* may be: vertical 12, horizontal 79; but this location does not appear clearly in the text.



Fig. 12 — Sitting *bodhisattva* from site *b* (see location numbers on the footstool). Peshawar Museum, no. 1444. (After ASIAR 1909-10: pl. XIXa).

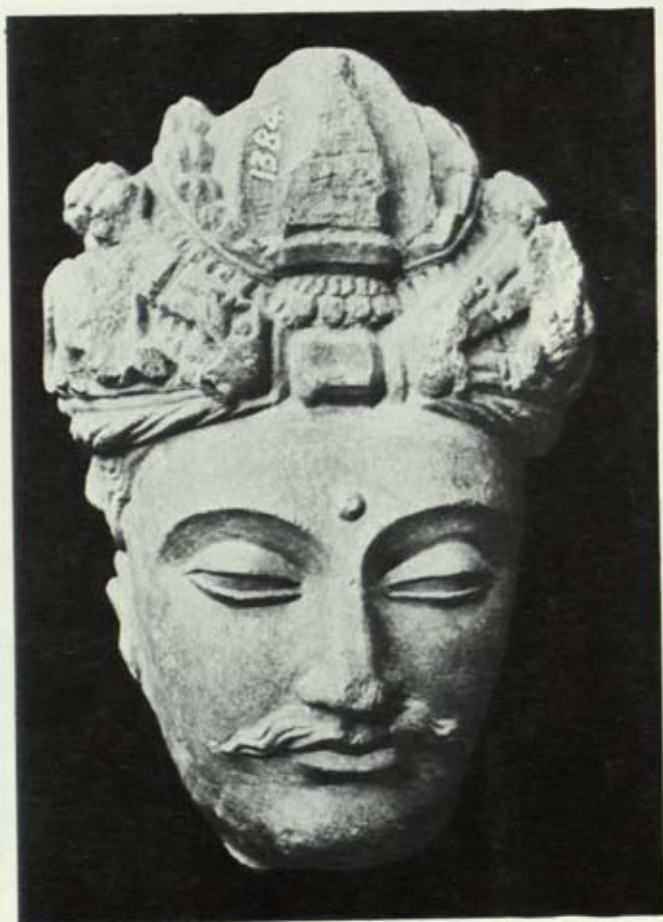


Fig. 13 — Head presumably belonging to the image in fig. 12, now headless. Peshawar Museum, no. 1384. (Photo Musée Guimet).



Fig. 14 — Standing *bodhisattva* from site *b* (see location numbers on the halo).
(After ASIAR 1909-10: pl. XIXd).



Fig. 15 — A detail of fig. 14.

with old pieces reused, or, anyway, used in an unusual way of setting the decoration of the *stūpa* and chapels. But one must notice that the material of the walls was, mostly, dried clay (*kacha*), and therefore very fragile and easy to take away or decay when not being taken care of; this is perhaps the cause for the aberrant descriptions of the excavator.

The Finds

The finds were very important and numbered 150 pieces that were put to safety in six cases of the Peshawar Museum (Hargreaves 1930: 109); 34 are photographed and published in Spooner's report for the years 1909-10 (pls. XV-XXII); 16 are photographed and published by H. Ingholt (1957: nos. 381, 2, 4, 6, 325, 261, 87, 89, 308, 423, 272, 271, 400, 210, 214) and one, previously by A. Foucher. Other researches must be therefore undertaken as I have already mentioned.

Let us note here some of the items: a very fine *bodhisattva* of a late period (crossed legs and *dharma-cakra mudrā*) is represented on Spooner's report (ASIAR 1909-10: pl. XIX a) with a head; Foucher publishes it with the same head (Foucher 1905-51: II, fig. 426; Ingholt 1957: no. 325); it was found exactly at vertical 21 and horizontal 81, against the South wall of the supposed central *stūpa*. It is now, without a head, in the Peshawar Museum where a single head, of very similar appearance is also to be found (figs. 12 and 13)¹⁷. A Buddha's statue was found against the East part of the wall of the same supposed central *stūpa*, but I could not trace it yet.

The round *stūpa* base, vertical 22, horizontal 76, had a sitting Buddha leaning against its East side: still untraced.

The square *stūpa* base, vertical 20, horizontal 74, had two *bodhisattva* turned towards it, as if looking at it from very near. One may suppose these statues had been moved from their original place in old times for some reconstruction or lately to take them out of the site: one is situated opposite the South face: this

¹⁷ The *bodhisattva* is no. 1444, the head no. 1384 of the Peshawar Museum.



Fig. 16 — Standing *bodhisattva* from site *b* (see location numbers on the halo). Peshawar Museum, no. 1438. (After ASIAR 1909-10: pl. XXII d, detail).

is *bodhisattva* vertical 20, horizontal 75, still untraced (figs. 14 and 15); the other one has not been found either, but a very fine one, located vertical 18 and horizontal 73, may be the missing statue (fig. 16) (ASIAR 1909-10: pl. XXII d; Foucher 1905-51: II, fig. 393; Peshawar Museum no. 1438). A fine garland was found quite near, and probably belonged to the small stucco *stūpa* located vertical 17, horizontal 74, since it bore numbers 17-73 (fig. 17).

The stone *stūpa* located vertical 20, horizontal 74, must have had a superb decoration of stone sculpture; all that is left is the figure of a Buddha, apparently seated in a grotto, in the midst of a mountain landscape, haunted by princes, men and animals; this scenery, though terribly broken, hints to the magnificence of the entire monument when it was new (fig. 18) (ASIAR 1909-10: pl. XIX b)¹⁸.

¹⁸ To be compared with Ingholt 1957: nos. 130 and 131, for the general appearance of this scene that represents the Visit of Indra to the Buddha.



Fig. 17 — A detail of a frieze with a festoon motif, from site *b* (see location numbers on the basis). (After *ASIAR* 1909-10: pl. XVd).

Two colossal statues of Buddhas were lying along the small stucco *stūpa* vertical 17, horizontal 74 (figs. 19 and 20) (*ASIAR* 1909-10: pl. XXII b-c)¹⁹. They are both about 8 feet high, they wear the *saṃghaṭṭi*, covering both shoulders, and their hair is done with simple waves, covering the *uṣṇīṣa*; master-works of Gandhāran art, they are excellent examples of the style at its best, and the forerunners of the colossal Buddhas of Afghanistan and Central Asia.

Spooner's report for the years 1909-1910 ends with a long list of other statues and reliefs, the quality of which, when one can discover one of the pieces, is frequently the best. We can briefly include here the lady donor of a royal issue (Peshawar Museum, no. 1427; Ingholt 1157: no. 400); a donor with a Kushan tunic (Rosenfield 1967: no. 63), and the portrait of the so-called Kushan king Huviṣka, who in my opinion, if he is somehow related to the lady donor, may better be some Hephthalite king. The lady donor herself bears the head-dress with side locks of

¹⁹ Peshawar Museum, nos. 1446 and 1447. Ingholt 1957: no. 214 (Peshawar Museum, no. 1447; our figs. 19 and 20 are also of no. 1447).



Fig. 18 — Seated Buddha, *in situ*. (After ASIAR 1909-10: pl. XIXb).

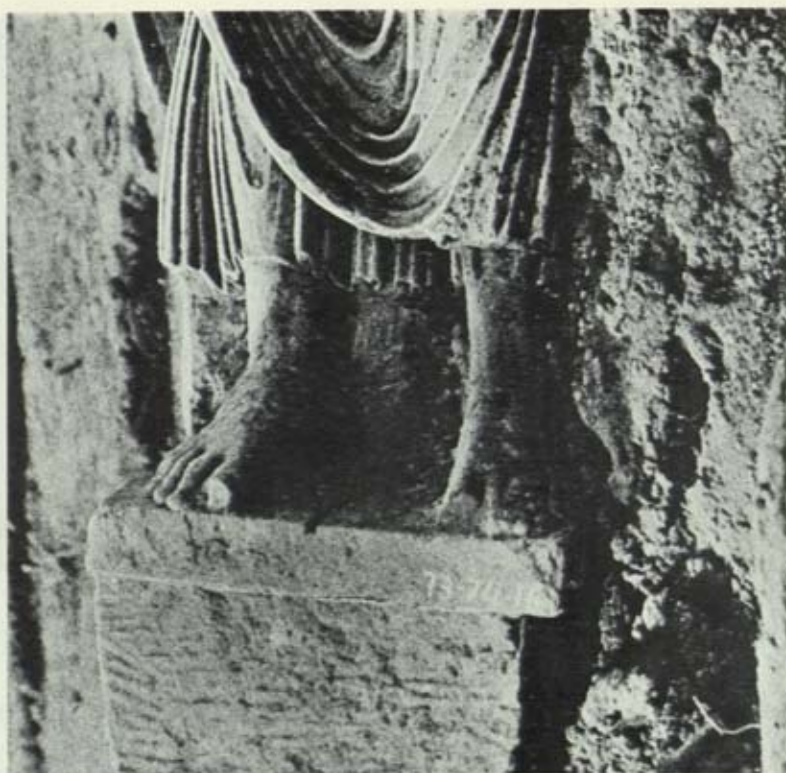


Fig. 19 — A detail of a standing Buddha (see location numbers on the basis). Peshawar Museum, no. 1447. (After *ASIAR* 1909-10: pl. XXIIc).

hair of some Hephthalite ladies, as known elsewhere in Central Asia ²⁰.

A few coins were discovered that year in Sahrī-Bahlol, including one of Soter Megas; one silver coin of the Sassanian king Varahan II, and a silver coin of Sassanian aspect, but with an inscription in Gupta characters, of Kidāra or some other so-called 'little Kushan' (Rapson 1898: 19, § 76).

I had no opportunity of going through the records of the Archaeological Survey of India, Frontier Circle, before 1906, and intend to do so in the following months. An important feature

²⁰ The so-called portrait of Huviška is published in Ingholt 1957: no. 423. A comparison with the head-dress of the lady donor is to be found in Tarzi 1976: 390, fig. 5 (middle and bottom: a lady donor).



Fig. 20 — Standing colossal Buddha (location numbers are hidden by wooden stand; right hand has been restored to its original place). Peshawar Museum, no. 1446. (Photo F. Tissot).

seems to appear in the *Annual Report* for 1906-07 (*ASIAR Frontier Circle* 1906-7: 6-8, nos. 21-87; 1909-10: 14-18, nos. 224-337) if not before: it is the use of photos on the spot, during excavations, and photos of the finds, probably in the depot near the site, or in the Peshawar Museum, later on. This is most important for our venture, even more as, if Spooner used this means with some parsimony, Aurel Stein, the year after, used it extensively (*ASIAR Frontier Circle* 1911-12: xx-xxxi, nos. 251-500).

V — SIR AUREL STEIN AND SAHRĪ-BĀHLŪL

In the year 1911, Sir Aurel Stein was an important member of the Archaeological Department, and a famous traveller, having already been twice to Central Asia²¹, and preparing a new expedition to Taklamakan.

But he had always loved the so-called North-West Provinces, and while having some rest, in between his travels, he lived in Lahore and went for short holidays to Kashmir. With the remembrance of what he had earlier achieved in the country²², and being Superintendent in charge for the Frontier Circle, during the year 1911-12, he selected a few weeks during the spring of 1912, to dig in Sahrī-Bāhlol.

The site had not been abandoned after Spooner's excavations, but was visited by the officials of the Department, five times from April 1911 to January 1912. The proper excavations conducted by Stein began on February 20th, 1912 and ended on March 31st²³, whilst one more fortnight was necessary 'to pack carefully the pieces due to be sent to Peshāwar Museum in fifteen bullock carts' (*ASIAR Frontier Circle 1911-12*: iv).

Stein's methods were probably the best in those times and provided efficiency, as well as they saved time and money. One may ponder on his lines when he emphasizes, 'The nature of the remains and of the ground permitted of the simultaneous employment of over three hundred labourers, and our camping on the spot made it possible to secure working days of 9-10 hours' actual digging. The total cost of the excavations [...] amounted to Rs. 4,204, a relatively small sum as compared with the work effected' (*ibid.*: iv).

Stein searched six mounds in an area of one mile or so, round the village built on the ancient town of Sahrī-Bāhlol and manipulated thousands of pieces of sculpture and fragments; he

²¹ He had already published: *Sun-buried Ruins of Khotan* in 1903, *Ancient Khotan* in 1907, and was about to give to the printer *Ruins of Desert Cathay*, published in 1912.

²² For instance, 'Detailed Report of an Archaeological Tour with the Buner Field Force', *Indian Antiquary* XXVIII, 1899.

²³ The official year ended on March 31st, in the Archaeological Department Services.

had 249 photographs taken of the sites, pieces and fragments, drawings and plans made, sculptures selected and packed to the Museum, all in or about a ten weeks time... No need to compare this with our modern ways: facts speak enough.

Like his predecessors, Stein remarks the condition of the mounds, due to the marshy country around. He underlines the fact that village people build their houses on some of the mounds, due to the fact that they give thus a solid stone base to these dwellings. Apparently, a number of mounds were not occupied in Stein's time, due to the protection by the powerful Khans of Mardan and Hoti, who wanted 'to keep in reserve quarries of sculptures for their own use' (*ibid.*: 9).

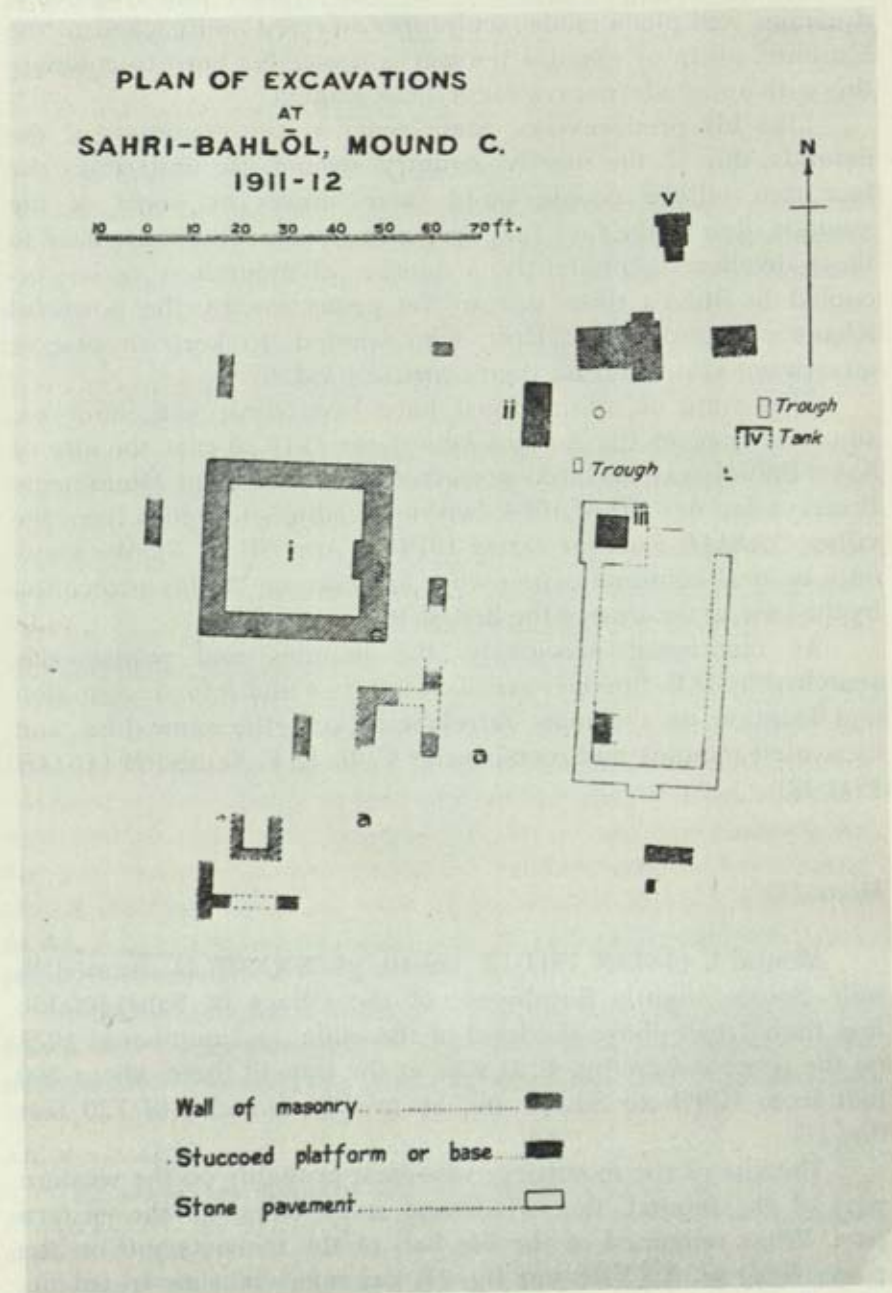
This state of affairs must have been dealt with later on, since we read in the *Annual Report* for 1919-20 that the site of Sahrī-Bāhlol was declared protected by the Ancient Monuments Preservation Act VII of 1904, 'within a radius of 2 miles from the village' (*ASIAR Frontier Circle 1919-20*: App. III, p. 7). We know only by oral communication what has become of this protection by the Law, at the time of the British Raj.

As mentioned previously, the mounds and monasteries searched by D.B. Spooner received letters *a* and *b* for recognition and location on the map. Aurel Stein kept the same line, and excavated mounds and monasteries C, D, E, F, G, and H (*ASIAR 1911-12*).

Mound C

Mound C (*ASIAR 1911-12*: 102-10, pl. XXXIII) is situated $\frac{2}{3}$ mile South, slightly Southwest, of the village of Sahrī-Bāhlol, less than 8 feet above the level of the plain, and numbered 1027 on the general map (fig. 4). It was, at the time of Stein, about 260 feet from North to South, and an average breadth of 220 feet (fig. 21).

The site of the monastery was most probably on the western part of the mound, the *vihāra* and *stāpa* being on the eastern part. What remained of the big hall of the monastery (*i* on the plan - *ibid.*: pl. XXXIII; our fig. 21) and miscellaneous fragments of walls and bases were built of schist, i.e. Gandhāran technique, for the ground-work, that had survived, and must have been of



mud-bricks for the walls, that had entirely disappeared. Testimony of the fire that brought the buildings to their dramatic state of destruction, was the presence of calcinated red clay and charred wood, perhaps the remnants of a wooden ceiling or roofing.

Bronze coins of the late Kushan kings were found on the surface, as well as potsherds (*a* on the plan; cf. *supra*), some of whom were inscribed with *kharoṣṭhī* characters in ink.

On the eastern part of the mound, no buildings were found, except an elongated pavement of 60×30 feet, supporting a small *stūpa* base on the Northeast corner (*iii* on the plan; cf. *supra*), and other *stūpa* bases on the northern portion. These bases were decorated with stucco modelling. Fragments of Buddha and *bodhisattva* images were scattered all over the northern portion (*ii* and *v* on the plan; cf. *supra*), whilst *stūpa* *iii* presented an amazing heap of broken statues, reliefs and fragments, in the utmost confusion (ASIAR 1911-12: pl. XXXVI, fig. 1).

Among the pieces recovered from mound C, and before a more complete study of the old photos, I am able to trace a very fine *bodhisattva* Maitreya (Peshawar Museum, no. 1866; Ingholt 1957: no. 294; Foucher 1905-51: II, fig. 416), two seated *bodhisattva* (Peshawar Museum, nos. 1739 and 1747. No. 1739 is illustrated in Ingholt 1957: no. 284), and a late seated Buddha (ASIAR 1911-12: pl. XLI, fig. 15). At least three statues of donors in Kushan attire (Peshawar Museum, nos. 1767, 1769, 1770) also come from this mound C, as well as the well-known four-armed *Haritī* of late period that has been regarded as a synthesis of both the Buddhist and Hindu cults, after the 5th century AD (Peshawar Museum, no. 1773; Ingholt 1957: no. 341).

Statues, reliefs and fragments reached 600 pieces for this unique mound, but most of the small fragments were left behind when the listing and packing began.

Coins from the period of Azes to that of the Little Kushans were collected from the site, giving an approximate datation of 2nd to middle of 5th century AD, and thus emphasizing the destructions by Mihirakula and explaining the fact that Hsüan-ts'ang did not describe Sahrī-Bāhlol (nor indeed Takht-i-bahai) in his memoirs (Foucher 1901: 19, fn. 1).

The site was later occupied, down to the 10th century AD, and Aurel Stein explains that the heaps of broken sculptures

were therefore collected and placed on the bases of old *stūpa*, making thus monuments of a new kind, the old faith and good carvers having disappeared in the turmoil. This interpretation of the astonishing heaps may perhaps be discussed, though some other examples have lately been discovered elsewhere ²⁴.

Mound D

Mound D (ASIAR 1911-12: 110-3) is situated one mile South, slightly Southeast, of the village of Sahrī-Bāhlol, 7 feet above the level of the plain, and is marked 1073 on the map (fig. 4). On the southern part of the mound lay what remained of the monastery and on the northern part, the *vihāra* and *stūpa* (*ibid.*: pl. XXXIII — our fig. 22). The architecture was described as quite similar to that on mound C, and heaps of broken sculptures were, as well, discovered during the diggings (*ibid.*: pl. XLVI, figs. 27-28). In the *stūpa* precinct two large schist platforms were decorated with rows of stucco Buddhas and *bodhisattva*, sitting in *dhyāna-mudra* (*ibid.*: pl. XLII, fig. 20; pl. XLIV, figs. 23-24).

The pieces and fragments amounted to more than 300, and appeared, as a whole, of a somewhat better style and probably earlier than those on mound C. Some special items were discovered, *viz.* a large pot, full of small terracotta lamps (*chiragh*), and a piece of rude glassware.

I have traced, up to now, but a few statues, including large seated Buddhas and *bodhisattva* in stone (schist) (*ibid.*: pl. XLVI, fig. 28, being no. 1565 of the Peshawar Museum; *ibid.*: pl. XLVIII, fig. 33), and a very well known group usually described as the representation of one of the Miracles in Śrāvastī, and now sometimes looked upon as a forerunner of the Paradise compositions of Central Asia and China (Peshawar Museum, no. 1554; ASIAR 1911-12: pl. XLVII, fig. 30; Ingholt 1957: no. 257. — Peshawar Museum, no. 1527; ASIAR 1911-12: pl. XLV, fig. 25 and pl. XLVI, fig. 28; Ingholt 1957: no. 253). One of these pieces is to be seen on two of Stein's photos, and it might be interesting to scrutinise

²⁴ Oral remark by Prof. Maurizio Taddei, 1983. I shall discuss this matter in another chapter.

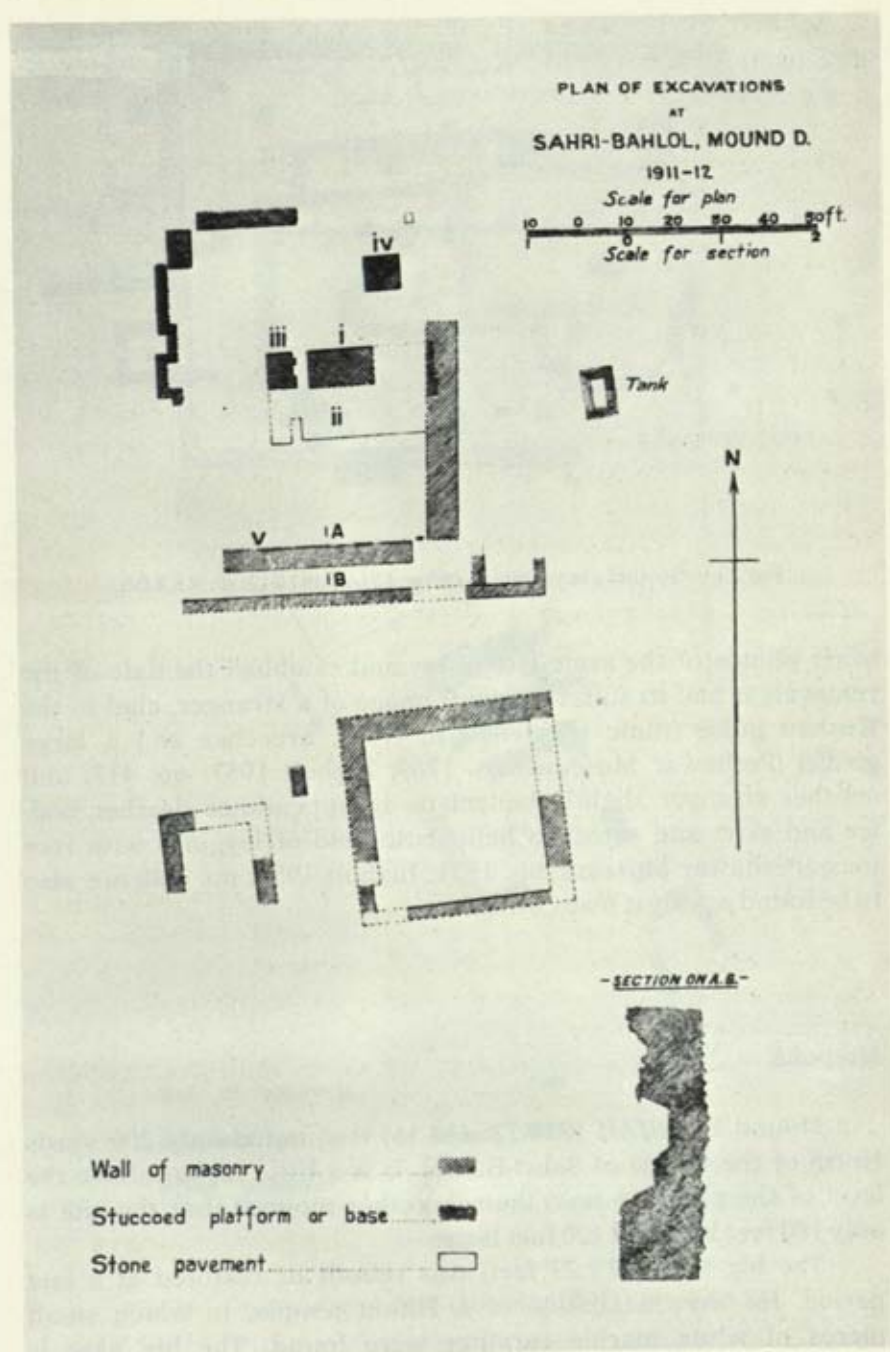


Fig. 22 — Ground plan of site D. (After *ASIAR* 1911-12: pl. XXXIII).

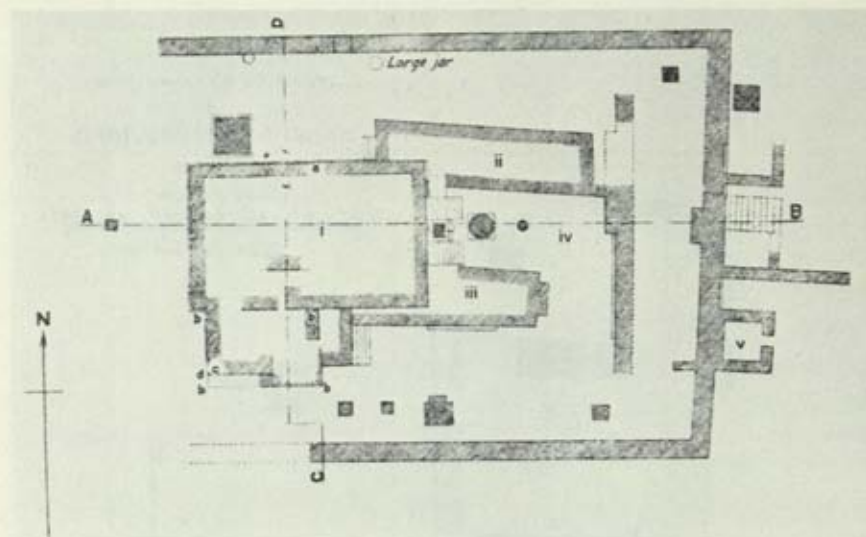


Fig. 23 — Ground plan of site E. (After ASIAR 1911-12: pl. XXXIV).

other photos of the same site to try and establish the date of the removals it had to suffer. A small image of a stranger, clad in the Kushan guise (tunic shortened in front, breeches and a large girdle) (Peshawar Museum, no. 1769; Ingholt 1957: no. 417) and another stranger slightly hellenistic in appearance (leather bodice and skirt and *embás*, a hellenistic kind of leggings with free toes) (Peshawar Museum, no. 1551; Ingholt 1957: no. 420) are also to be found amongst many others.

Mound E

Mound E (ASIAR 1911-12: 114-16) is situated only 200 yards North of the village of Sahrī-Bāhlol. It is a little higher above the level of the plain (16 feet) than the other mounds, but the site is only 180 feet long and 100 feet large.

The big base (47×29 feet) was rebuilt or restored at a late period, for the installation of a Hindu temple, in which small pieces of white marble carvings were found. The big base is situated inside a vast quadrangle whose walls survive on three

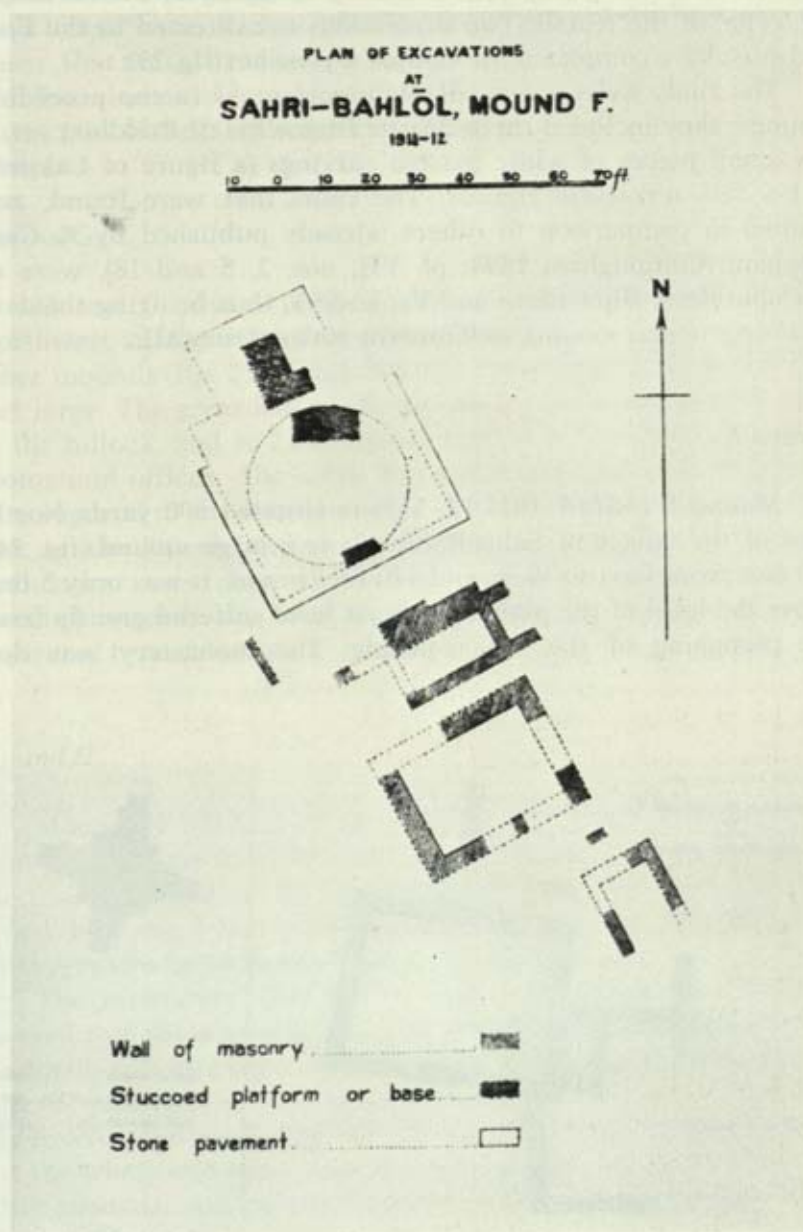


Fig. 24 — Ground plan of site F. (After *ASIAR* 1911-12: pl. XXXV).

sides. This space is practically entirely occupied by the rectangular 'cella' of the temple; two projections are directed to the East and must have completed the 'temple's' precinct (fig. 23).

The finds were not at all so important as in the preceding mounds: they included three dozens fragments of Buddhist art, a few small pieces of white marble carvings (a figure of Lakṣmī), and a few terracotta figures. The coins that were found, and studied in comparison to others, already published by A. Cunningham (Cunningham 1894: pl. VII, nos. 2, 5 and 18), were of Spalapatideva, Bhīmadeva and Venkadeva, thus bringing the date of this particular mound, well into the 10th century AD.

Mound F

Mound F (ASIAR 1911-12: 117) is situated 600 yards North-west of the village of Sahrī-Bāhlol. It is a large mound (fig. 24), 250 feet from East to West and 120 feet broad. It was only 5 feet above the level of the plain, and must have suffered greatly from the ploughing of the village-people. The monastery was due

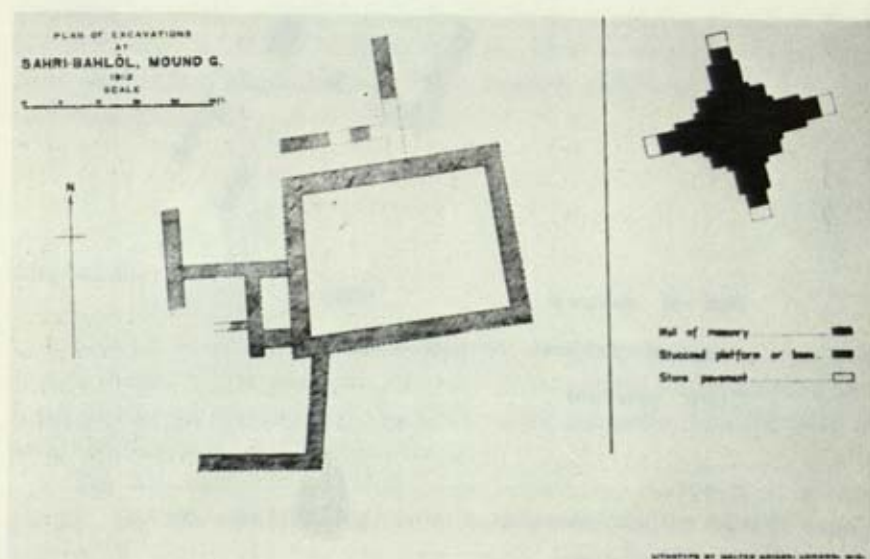


Fig. 25 — Ground plan of site G. (After ASIAR 1911-12: pl. XXXV).

South, with a large square hall. The *vihāra* proved to preserve a large *stūpa* base, with a circular trace of over 32 feet in diameter, that must have been the apāda of the *stūpa*.

Two dozens of late reliefs were found in mound F, as well as three coins of the late Kushans or Kidarites.

Mound G

Mound G (*ibid.*: 117-8) is situated about 800 yards North-Northwest of the village of Sahrī-Bāhlol. It is larger than the other mounds (fig. 25), being 300 feet from East to West and 200 feet large. The great hall of the monastery is on the western side of the hillock, and is 2,240 square feet; it is completed by other rooms and offices. The *stūpa* has a cross-shaped plan, and may be compared to the Kaniška *stūpa* in Shāh-jī-kī-dhērī, near Peshawar, or the Rawak *stūpa* near Khotan; the corridor for circumambulation was reached by four staircases, approximatively directed towards the four cardinal points. No sculptures were recovered from this site.

Mound H

Mound H (*ibid.*: 118) is situated 200 yards Northwest of mound G and marked 1091 on the general map (fig. 4). It was, at the time of A. Stein, 80 feet from North to South and 180 feet broad; but only 5 feet above the level of the plain. The plan (fig. 26) is very similar to those of mounds C and D.

The monastery, due North, had a large hall (40×35 feet) marked *i* on the plan (fig. 26). The *vihāra* contained a large stone platform, still bearing a *stūpa* (*iv*), and preserving a stucco decoration of pilasters, as well as other *stūpa* bases (*v*, *viii*, etc.). A big *bodhisattva* Maitreya (*ibid.*: pl. XL, fig. 10) was discovered *in situ*, but the whole site must have been plundered even more than the other mounds, and mostly fragments of stucco decoration were recovered from it.

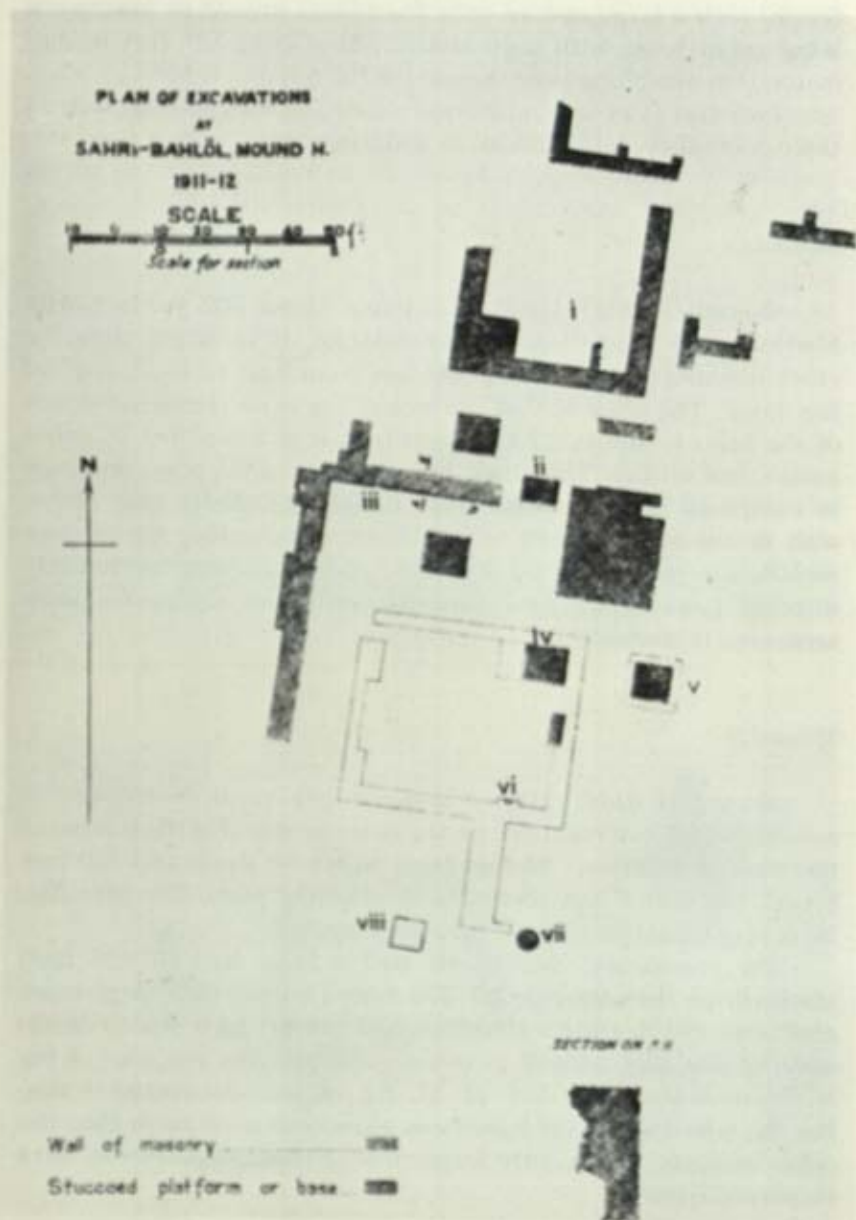


Fig. 26 — Ground plan of site H. (After ASZAR 1911-12: pl. XXXV).

This work is just an introduction to the hard one to be attempted in the museums in India, Pakistan and elsewhere. But it was necessary to make a start and express the need of some new research and new studies on the subject of the ancient history of Gandhāra art. Since I began this long and somehow tedious work, that may lead to excellent results if luck is on my side, I heard of other students who had started similar studies and therefore I am no longer alone on the trail, but hand in hand with Mrs Elizabeth Errington who deals with Jamal-garhi, and Mr Shabbaz Khan who works, in Lahore, on the subject of Sikri. Many good wishes to them both.

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MAURIZIO TADDEI

A New Early Śaiva Image from Gandhāra

The formative period of Hindu iconography certainly owes much to the Buddhist tradition in the North-West, and we possess clear evidence that, in the first centuries of our era, Buddhist and Hindu image-makers employed the same lexical units, though we are not in a position to state whether such lexical units had similar semantic values as well.

We are sometimes led to suggest identifications that are in themselves not only labels for particular icons, but implicitly also interpretations of a whole religious and cultural context whose features need a much safer approach for being correctly outlined than the purely empirical one we have too often followed (cf. Maxwell 1983: 43).

Yet it is my firm belief that, for the time being, rather than of a theory we are in need of a wider documentation; I only venture to suggest that even in purely Buddhist Gandharan iconography the seeds of a possible 'Hindu' reading can be easily recognized. I do not allude here to the all too obvious fact that *Brahmā* and *Indra* are two usual characters in Gandharan representations of Buddhist stories — I would rather refer to those Gandharan iconographies in which the two Vedic gods are taken to symbolize the two highest constituents of Indian society, i.e. the Brahmins and the Kṣatriyas, and seem to reflect the same bipolarity on the pair of Bodhisattvas that form with a centrally placed Buddha the so-called Buddhist 'triad' (Taddei 1969).

Be it as it may, I think everybody will agree with me that what we need is a larger corpus of 'syncretic' images than we have now — and I put the word 'syncretic' within inverted commas in order to make it clear that reference is made only to iconographic syncretism, the field being left open to any kind of

speculation as far as religious syncretism *stricto sensu* is concerned.

This is why I felt it was my duty to publish this small Gandharan image at the earliest opportunity I could get, even before I could draw any sound inference from the comparative material and the other references I was able to collect (figs. 1-5).

As it happens very often in Gandharan art, this is not a figure in the round but only an image executed according to the technique of the reliefs and cut out along its outline except in its lower part where a portion of the background has been left in order to strengthen the legs which otherwise would provide too weak a support. The result is therefore something between a statue and a stele, its back (fig. 2) being roughly hewn by means of a chisel and showing two grooves for cramps, both vertically placed, one at the top, the other at the bottom. That a part of the back surface was removed by chiselling at a date later than the carving of the sculpture is made clear by the fact that the two grooves, as they are now, would not be deep enough for holding their respective cramps soundly.

The image is standing on a plain socle. It is a three-headed and four-armed *deva*, wearing a *dhoti* that reaches down to the knees, an *uttariya* on the left shoulder, and a flat necklace. There is a characteristic knot in front between the knees, a detail that sometimes distinguishes the hermits in Gandharan art but is rather inconsistently shown here as a hanging appendix which has no natural connection with the *dhoti*. This is actually a hermit's loincloth with straight vertical grooves which are supposed to depict its folds or fibres; it covers the hips and the upper part of the legs but the god's erect phallus remains visible though covered by it.

Of the god's three visible heads, the central one is human, with moustaches, wavy hair bound by a string or ring and done in a double loop decorated by a small crescent; the forehead is marked by a biconvex (lens-shaped) third eye, while the two normal eyes are shown half closed under heavy lids (fig. 5).

The two side heads have animal features, the one on the right proper being that of a boar with protruding tusks, the other resembling that of a bovine. Both have small globular eyes.

Of the god's hands — all adorned with wristlets — the upper left one holds a beamed disc at head height, the lower left holds



Fig. 1 — Gandharan composite image. Private collection, Rome. (Photo by C. Astuti; courtesy, Museo Nazionale d'Arte Orientale, Rome).

a water-flask, the lower right is placed against the chest and holds a rosary, the upper right holds a long trident. The two lower hands can also be described as belonging to the front (or 'natural') arms, the upper ones to the back arms.

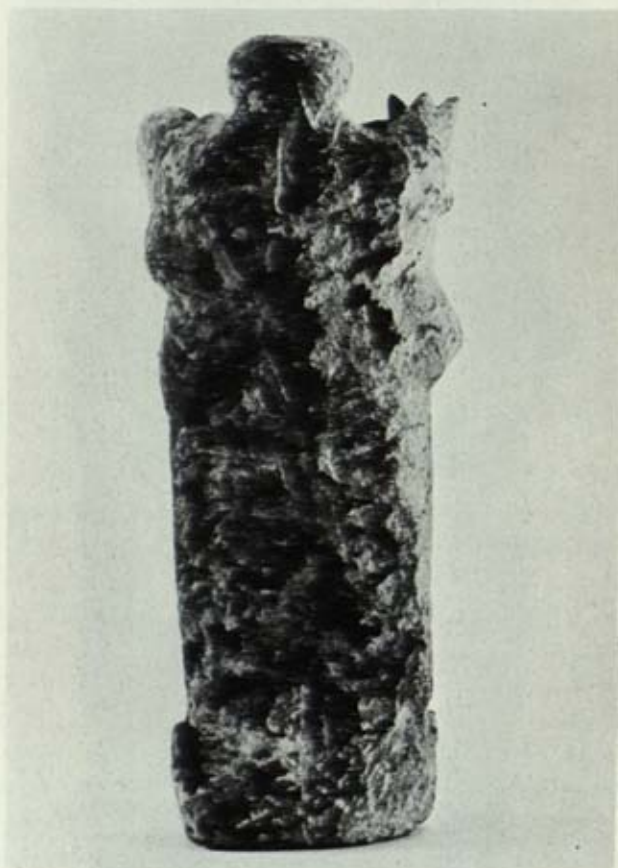
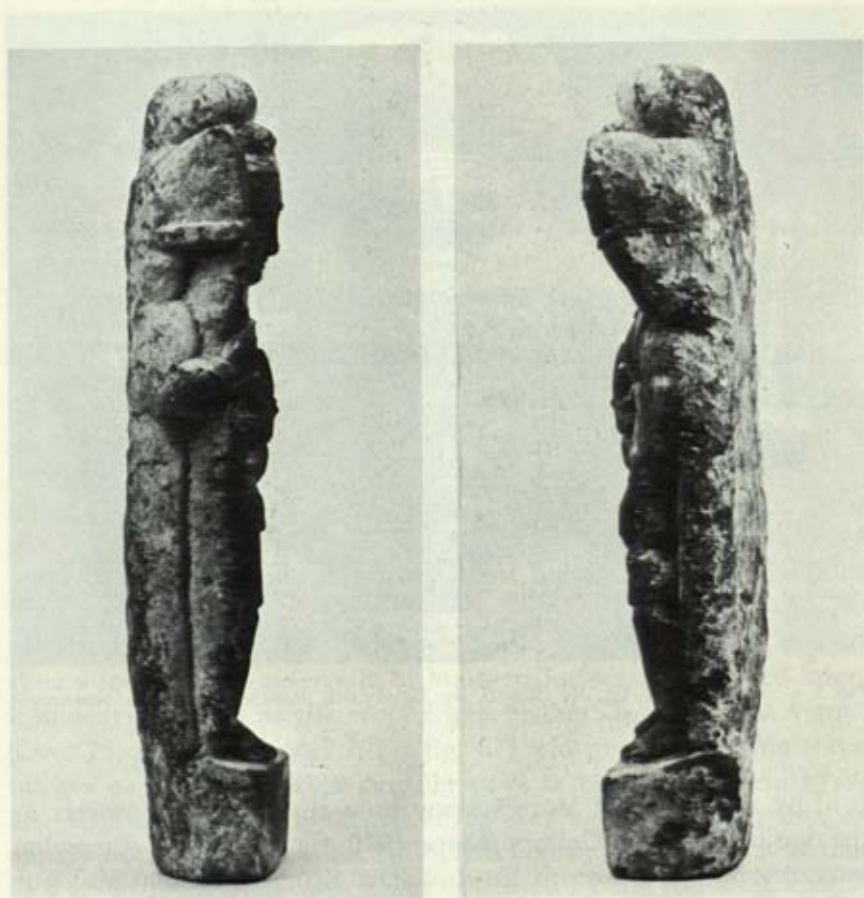


Fig. 2 — Back view of image in fig. 1. (Photo by C. Astuti; courtesy, Museo Nazionale d'Arte Orientale, Rome).

The heads are topped by a globular feature slightly flattened above.

The piece, which apart from some minor chippings is complete, measures 33 cm in height, 13 in width, and 6 in thickness; it is made of gray schist and is kept in a private collection in

Rome, that of Dr Virgilio Pontecorvo, a distinguished scholar and a diplomat now retired. Both the quality of the stone and its typical 'silken' texture and the information provided by the present owner lead me to point to the Taxila area as to the source of this interesting and somewhat puzzling image.



Figs. 3-4 — Side views of image in fig. 1 (Photos by C. Astuti; courtesy, Museo Nazionale d'Arte Orientale, Rome).

I would suggest that a 4th-century date is assigned to our image on the ground of stylistic comparison. I would indeed recognize a clear similarity with the Gandharan image of Śiva

and his *vāhana* the bull¹ found in Mesopotamia, which cannot be dated later than the 4th century thanks to the stratigraphical evidence (Invernizzi 1968-69; Taddei 1971); on the other hand the typological details do not help us so much in solving the problem of chronology — e.g. the trident can be compared to the weapon



Fig. 5 — A detail of fig. 1. (Photo by C. Astuti; courtesy, Museo Nazionale d'Arte Orientale, Rome).

held by a daemon of Māra's army in such Gandharan reliefs as the one in the Freer Gallery (Lippe 1970: fig. 11) or the somewhat later one in the Museum für Indische Kunst, Berlin (Catalogue 1976: no. 62, fig. on p. 164), but it can also be compared with the

¹ In an earlier paper of mine (Taddei 1971) I called Śiva's *vāhana* 'Nandin', but Dr G. Bhattacharya kindly pointed out (letter dated 7.9.83) that 'vṛṣa' would be a better label and referred to a paper of his for discussion of this topic (Bhattacharya 1977: 1545).

triśula held by Śiva in the 'portable sanctuary' published by Goetz (1965) and presumably not earlier than the 7th century (Taddei 1964-65)².

I think it is more useful to dwell upon the various parts that compose the image and try by way of analysis to show how the image itself was obtained by progressive addition of lexical units.

The front part of the figure with its central head and lower arms can be easily isolated: this is the basis on which the rest has been built, a model that the Buddhist iconographic tradition handed over to the carver ready for use. We cannot fail to notice that this is just a modified image of Maitreya, the Buddha-to-be who was represented so often in Gandharan art with a water-flask in his left hand, moustaches, hair done in a double loop and decorated with a crescent (Bussagli 1949), while his right hand is not seldom brought to shoulder or breast height with palm inwards (Taddei 1969) — all features that were borrowed by early Hindu iconography for depicting the god Śiva.

It would be easy to provide examples of this type of Maitreya, chosen among the best known pieces of Gandharan art, but, for the sake of publishing an otherwise unknown specimen, I prefer to reproduce this relief from the antiquarian market (fig. 6)³ in which two Bodhisattvas are standing: the one on the right is presumably Avalokiteśvara, the other is certainly Maitreya with water-flask in left hand and right hand brought to shoulder with palm inwards.

It would be useful to know whether the rosary was at that time a feature characteristic of Maitreya or was introduced later; it appears as early as the second half of the 5th century at Ajaṇṭā (Cave 26; see e.g. Taddei 1977: fig. 67) and in such late Maitreya images as the 9th or 10th century ones in Ladakh (Fontein 1979; also Klimburg-Salter 1982: fig. 16) as well as in few other images mostly not earlier than the 8th or 9th century. Let us look at this nice relief from Swat which was collected by the Italian Archaeo-

² For the disc (or shield), a possible comparison is provided by a Gupta terracotta figurine of the Mahiṣamardini in the Museum für Indische Kunst, Berlin (Catalogue 1976: no. 59 and fig.).

³ The photograph was taken at Karachi in 1973 and a print is kept in the archives of the Museo Nazionale d'Arte Orientale, Rome (no. Gandhara 1155). The present location is unknown to me.



Fig. 6 — Schist relief depicting two Bodhisattvas. Location unknown. (Courtesy, IsMEO, Rome).

logical Mission in Pakistan and is still unpublished (fig. 7). The *kalaśa* in the left hand and the *stūpa* on the *mukūṭa* make the identification sure (Bhattacharya 1980)⁴.

To come back to our four-armed god, the only modifications brought to the Maitreya model are the erect penis and the type of *dhoti*, which obtain the result of emphasizing the hermit-like aspect of the image.

⁴ Another nice Maitreya image with *akṣamālā* and flask is the Nepalese one published by Slusser & Vajrācārya (1973: fig. 12).



Fig. 7 — Stone stele with Maitreya and worshippers, from Swat. Museo Nazionale d'Arte Orientale, Rome. (Photo by F. Tucci Bonardi; courtesy, IsMEO, Rome).

The upper (or 'back') arms are rather clumsily added and so are the two animal heads.

While the trident is an attribute to be found easily in Śaiva iconography, this is not the case with the sun-disc, which is rather associated with Viṣṇu. Of the two animal heads, the boar is known for its Vaiṣṇava connections, the bovine — if it is a bovine — points rather to a Śaiva direction.

The general Śaiva flavour of the image is confirmed by its globular topping in which we are obviously prone to recognize a *liṅga*, though I do not know any other specimen of this peculiar form. Even if the *Śiva-liṅga* has been represented by Indian sculptors well before our statuette was carved, it seems that the

man who conceived its iconography had much less in mind the Indian examples than some other, perhaps Mediterranean, iconographic feature. In any case, this appears to be an iconographic creation independent of the Indian *liṅga*, even if the concept may be, and most probably is, the same ⁵.

Actually I can remember only one Śiva image which is topped by a globular feature similar to the one in our statuette: it is the standing and ithyphallic Śiva from Mathurā in the Pennsylvania University Museum, Philadelphia, that Coomaraswamy (1927: fig. 80) described as a bodhisattva because the globular feature is placed just behind the god's head in such a way that it can be easily mistaken for a halo when it is seen frontally, and Śiva's erect penis is much abraded. Nevertheless other details visible on the back make the allusion to a *liṅga* much clearer than in our image (Joshi 1972: 43-44, figs. 5-6; Kreisel 1981: 244-45, pl. 10 a-b).

Lastly, I want to call the attention of the reader to a minor detail that may turn out to be of the utmost importance, viz. the third eye. This is not placed vertically in the middle of the forehead as one would expect it to be. Rather surprisingly it is inclined towards the god's right in a very conspicuous way, so much as to make us doubt whether this peculiarity is simply due to the carver's slip or it has an explicit meaning.

If it is so (one may compare a Kushan Ardhanaṛī in the Victoria and Albert Museum — Srinivasan 1978-79: no. 14 ⁶, and a Harihara in a private collection — Pal 1985: fig 11), we could try to interpret our image as a composite one, its right and dominant half being Śiva, its left half being Viṣṇu. This is identified by the sun-disc and the flask, the latter being an attribute which is certainly more closely connected with Śiva but was also present in some early Viṣṇu images in the place (lower left hand)

⁵ Representations of *liṅgas* are to be considered as extremely rare in Gandharan reliefs. I remember only one, from Butkara I, Swat, in which what seems to be a *liṅga* appears between a man seated in a pensive attitude and a *cauri*-bearer (Faccenna 1964: 148, pl. CDXCIIIa). It is a fragment of a 'false niche' that was certainly part of a Buddhist context: it now preserves only a portion of one of the crescent-shaped friezes surmounting the main lunette, a position therefore of subordination.

⁶ I owe this important reference to Professor Doris M. Srinivasan who kindly read the manuscript of this paper and commented on it.

which was to be taken later by *śaṅkha* (e.g. Agrawala 1965: 255, fig. 170; Joshi 1966: 30; also Slusser & Vajracārya 1973: 94 ff.).

An altogether different solution of our iconographic problem is suggested by a comparison with some images of six- or four-armed ithyphallic deities of various ages that have been identified as Śiva by P. Pal (1973-74: 39 ff.). The most interesting one for our discussion is in the Sri Pratap Singh Museum, Srinagar (Pal 1973-74: fig. 10). Dr Pal describes it as follows: 'Although damaged, the arms can be recognized as six in number. Of the three left hands one holds a waterpot, a second is placed on his wife's back, and the third supports a disc. The only remaining right hand carries a rosary, and [...] the other two hands may have held a second disc and the trident'⁷. That one of the lost right hands held another disc (the lunar one, i.e. a crescent within a disc) is deduced by Pal from the fact that other images, such as one in the British Museum, the well-known one from Rang Mahal in the Bikaner Museum, and two from Chinese Central Asia have the same attributes and seem to be recognizable as representations of Śiva. These identifications are perhaps to be submitted to a closer scrutiny (cf. Maxwell 1983); whatever the case, our statuette does not show the peculiar balancing of sun and moon in the upper pair of hands, and does not therefore fall within the same class as the images discussed by Pal.

On the other hand, it is also to be kept in mind that, at least on some Kushan coins, a beamed disk or a *cakra* is among the attributes of Oesho/Śiva, the better specimen being a three-headed and ithyphallic standing image of Indian type on a coin of Huvishka (Rosenfield 1967: 92, coin 163). This is not the only case in which Oesho is seen adopting a weapon usually characteristic of Viṣṇu: e.g. one can be referred to another Huvishka coin on which Oesho appears as holding a *daṇḍa* or *gadā* in his lower left hand (Rosenfield 1967: 93, coin 164). The great variability of Oesho's attributes is a clear symptom of his still vague conceptual definition in the Kushan period⁸.

⁷ The description is confirmed even more strongly in a later paper by P. Pal (1981: 9) where he states that two of the god's hands 'support the sun and the moon as he does in Central Asian images and in the Bikaner relief'.

⁸ I am greatly indebted to Dr G. Bhattacharya for the precious suggestions he gave to me in the course of a fruitful epistolary discussion we had on this subject (letters of 7.9.83 and 22.10.83). The reader is now referred also to the Oesho-type coins reproduced by Göbl 1984: pl. 169.

I am not ready to suggest any conclusion; nevertheless I would not see any difficulty in identifying the image as a composite deity (I dare not call it 'Harihara') because of the differentiation of the two halves entrusted only to the attributes. One may recall in this connection some Nepalese images that show this same attitude in expressing the Harihara concept — images that are indeed 'undifferentiated except by [their] cognizances, two of Śiva on the right, two of Viṣṇu on the left' (Slusser & Vajrācārya 1973: 115-6, fig. 7). One may also compare the 9th-century four-headed Harihara from Kashmir in the Museum für Indische Kunst, Berlin, recently discussed by Härtel (1983: figs. 33-34), on whose forehead the third eye has one side convex (Śiva), the other straight (Viṣṇu), as it becomes usual in later imagery. On the contrary, the Nepalese image published by Slusser & Vajrācārya has a full biconvex third eye.

A difficulty that I am not able to surmount is given by the two animal heads — were their places inverted we would certainly feel more at our ease.

Let me only point out that, while I have tried here to show how deeply were the early representations of Śiva connected with Maitreya, V.S. Agrawala (1965: 255) could write that 'the earliest form of Vishnu is exactly similar to that of the Bodhisattva Maitreya and both must be taken to be the products of the same formula', and for other scholars it is the Bodhisattva Avalokiteśvara that shows the most striking similarity with Śiva (see for discussion de Mallmann 1948: 111 ff.). When everything can indifferently be anything else, there must be something wrong in the very approach.

One of the first points to be emphasized in this connection is that we cannot be sure that every 'Hindu' image in Gandhāra actually is an object of Hindu cult. There is indeed a gradation from purely Hindu images such as the Śiva from Mesopotamia mentioned above, on one side, and the six-armed god in a relief from Swat that was variously interpreted by G. Gnoli (1963), R.C. Agrawala, and myself (Agrawala & Taddei 1966), on the other. The latter, like several other representations of deities, may also be due to a carver and a donor who intended to show that non-Buddhist deities (whatever their Buddhist name might be) pay homage to the Buddha or form a celestial frame within which the Buddha holds an undisputed central position. By no

means can we feel sure that the Swat image exactly reproduces a definite Hindu god according to a canon accepted by the god's devotees.

Our three-headed and four-armed god is too small for being an object of public worship; nor can it be a domestic image, the two cramps on the back being too complicate a device for holding such a small image in its position. The two cramps clearly show that the image was placed in an architectural context — whether in a subordinate position close to a Buddhist dominant image or in a purely Hindu place of worship, is only a matter of conjecture.

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KLAUS FISCHER

How Were Love Scenes on Gandhāran Stūpas Understood by Contemporary Worshippers?

In his work on Gandhāran art Alfred Foucher described Bacchanalian scenes as early examples of Indian erotic sculpture (Foucher 1905-51: I 246, 248; II 604). Italian excavations in Swāt have revealed further evidence of a theme (IsMEO 1962b: pls. 166-68) also to be found on contemporary *stūpas* from Mathurā (Vogel 1930: 52-3) and Āndhra (Fischer 1980a: 94 with fn. 43-45). A loving couple on the wall of a *stūpa* in Gandhāra, Bactria or Swāt may represent a *mithuna*, in Sanskrit 'a pair' (Gangoly 1925: 50), have an auspicious meaning and depict quite ostensibly female beauty and love in the sense of the age-old Indian fertility symbolism. Indicative of the contacts between the Mediterranean and the Indian worlds (Taddei 1965: 174) some enamoured pairs recall erotic scenes engraved on Greek and Roman gems (Fuchs 1908: pls. 16-20, 128, 129). At the same time motives in antique gold jewellery found in Asia (Speiser 1953: 133) could have inspired artists in North-West India to depict these *mithunas* (fig. 1).

Many unprovenanced finds also indicate the luck-bestowing significance of woman and man in love: for example a pair in classical style where the male partner holds a bowl in his right hand, probably an offering (Davidson 1953: 256). But other fragments of an unusual composition, as for instance that of a man who violently embraces a woman who seemingly attempts to escape (fig. 2), may remind us of other iconographical connections: In the latter love scenes convey a warning against sexual pleasures¹, and an admonition to laymen and monks to avoid

¹ Fischer 1979: 161-3, 287 = 'Asketische Ziele' (von *mithuna*-Bildern) and also some playful scenes between the *mugdha-Nāyika* 'The bashful Heroine' and her lover whom she is avoiding or feigning to avoid; see Thomas 1960: pls. 28, 30, 31, 79, 80, 84, 85, 145, 147, and, for example, Gandhāran sculptures in the Swāt Museum, Saidu Sharif, Objects 283, 685, 4350, 7017 (= our fig. 3).



Fig. 1 — Fragment of a door-frame with two representations of *mithunas*, from Butkara I. Museo Nazionale d'Arte Orientale, Rome. (Photo IsMEO).

women and erotic passion as a danger as well as a hindrance on the way to final liberation.

No literary sources exist which shed light on the ideas that patrons and worshippers in Gandhāra and Swāt had about love scenes on the walls of Buddhistic *stūpas*. Among the various modern interpretations one refers to ancient Near Eastern and Iranian traditions of Hierogamy and Sacred Prostitution reflected in the culture of North-Western India (Golzio 1983: 165-8). The juxtaposition of enamoured couples with images of the Buddha, from Butkara in Swāt (Taddei 1970: pl. 79; Fischer 1979: pl. 23), has moved some scholars to think of celestial pairs (Franz 1982: 126, fig. 7), whilst Pugačenkova, on the other hand, in her

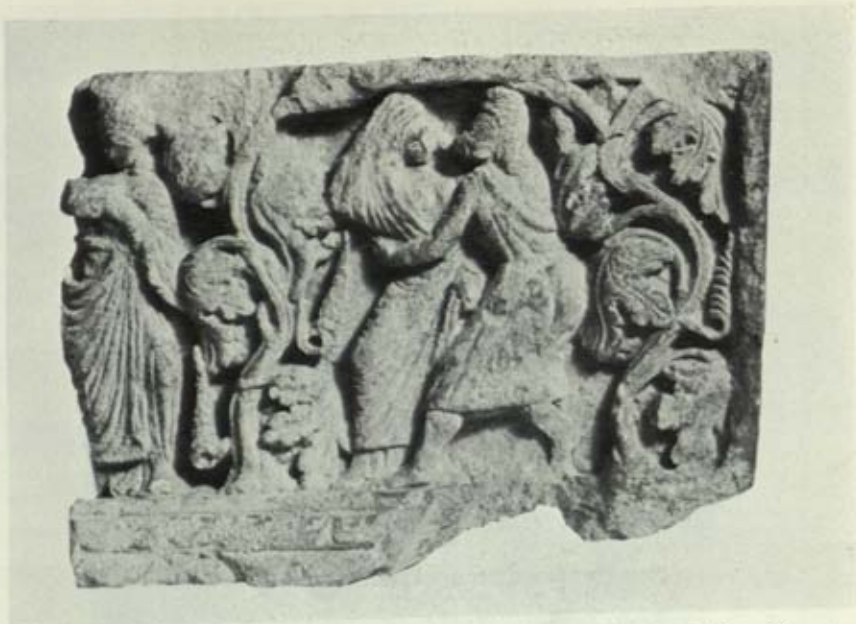


Fig. 2 — Schist fragment of unknown provenance. Collection Julian Sherrier, London. (Photo J. Sherrier).

recent book on Gandhāra confronts these obviously worldly, 'svetskie' persons (Pugačenkova 1982: 109-11, pls. 114 and 115) with heavenly, 'božestvennaja' pairs, for example of the deities Kubera and Hārītī, rendered on other reliefs.

Another possible, mythological source for these love scenes is a well-known Indian subject: the seduction of *ṛṣis* by *apsaras* as attested by a Gandhāran relief of the *Ṛṣyaśṛṅga* legend (Schlingloff 1971: 61, fig. 3). Examples of erotic sculpture in the Italian publications on Swāt are currently being enriched by pieces from private collections (fig. 4). They illustrate vividly an earlier statement by Tucci²: 'There are some scenes which seem

² In IsMEO 1962a: X (Introduction). Later on Tucci gave further examples of erotic art in North Western India: '[...] The recourse to eroticism to express religious and highly mystic stages is [...] well-known [...] a Gandhāra image [...] should be considered under such a light [...] the attribution of the image to a particular Śaiva school is undeniable [...] Gandhāra was a Śaivite centre, and some peculiar Śaiva schools [...] were developed in Swāt [...]' (Tucci 1968: 289, 292, quoted recently by O' Flaherty 1981: 361). See also the remarks on a peculiar, non-canonical sexual imagery in the Buddhist Gandhāra country by Soper 1949: 325 (quoted recently by Fischer 1980b: 280) and a new find from Nimogram in Swāt (= our fig. 5).



Fig. 3 — 'Fragment of a door-jamb showing love scenes', from Butkara I. Swāt Museum, Saïdu Sharif, no. 7017. (Photo K. Fisher).



Fig. 4 — Schist fragment with two representations of *mithunas*, 'from Swāt'. Collection Julian Sherrier, London. (Photo J. Sherrier).



Fig. 5 — 'A frieze decorated with lotus petals, depicting a love scene', from Nimogram. Swāt Museum, Saidu Sharif. (Photo K. Fischer).

to be stressed in the art of Swāt, but on which no emphasis is laid in other provinces — that insistence on erotic subjects, inspired not only by the Bacchanal scenes of Hellenistic art, but also by some literature akin to the *Kāmasūtra*. They have nothing to do with Buddhism, nor with the supposed manifestation of the creative divine force indicated as a source of inspiration of erotic scenes in the temples of India. In Swāt they may rather have some connection with the accent that in their country old beliefs laid on women which later on left their imprint on Buddhism itself'. Faccenna and Taddei give valuable details to some representations of couples: 'A turbaned man [...] offers a necklace to a woman (fig. 6). She is standing in *tribhaṅga* posture [...] Her right hand is touching [a] garland [in her] hair, while



Fig. 6 — Sundarī with mirror, Nanda offering a necklace, from Butkara I. Swāt Museum, Saidu Sharif. (Photo IsMEO).



Fig. 7 — Sundart with mirror, Nanda holding a toilet-tray, from Butkara I. Museo Nazionale d'Arte Orientale, Roma. (Photo IsMEO).

her left holds the handle of a round mirror [...] The gift of a mirror, put in the bride's left hand, is part of the *vivaha-saṃskāra* [the leading away of the bride from her father's house]. [Possibly] a marriage is the subject of this scene' (IsMEO 1962b: 46-7, pl. 166). And to the next (fig. 7) sculpture: 'The woman [...] holds a handled round mirror in her left hand [and] seems to be picking up something from a tray held by her companion' (IsMEO 1962b: 47, pl. 168). I should also add an observation, made by Francfort: that the woman takes make-up from a small toilet-tray familiar from Gandhāran art and its Mediterranean inspiration (Fischer 1982: 125 and fn. 97; Francfort 1979: 5, 94, pls. 1-33, 48 A, 50-53; Dar 1980: pls. III-XII). And I should like to offer a further interpretation of the two Butkara reliefs by comparing them with contemporary Mathurā sculpture: The famous pillar from Gurgaon shows two representations of a woman looking into a mirror: in one scene a male companion is arranging her hair, and in another he holds a large tray filled with jewellery (V.S. Agrawala 1965: pl. IV; Sivaramamurti 1955: pl. XII 39; Härtel & Auboyer 1971: 165-6 and colour pl. V;

Fischer 1979: pl. 48; Catalogue 1982: no. 121). Sanskrit scholars have explained these figures as Nanda and his beloved Sundarī who enjoyed themselves in her palace. Aśvaghoṣa tells us in his *Saundarananda* (Aśvaghoṣa, transl. Johnston 1982: 21) how the woman played with the mirror and used the paint and the ornaments offered by the man, how she acted in the way of an *Ākrānta-Nāyikā* engaging her lover in various services, chapter IV, 12-23: 'He covered her with ornaments [...] She put her mirror into her lover's hand saying: Just hold this up in front of me while I paint myself. She cast the lotus from her ear onto his shoulder and rubbed the stick of paint she was using up and down his face [...] The strings of pearls swung loose from her breasts. She laughed with the earrings hanging across her face [...] Nanda looked at the face of his beloved on which the lines of paint were rubbed away at the end by her earrings'. But we know that Nanda was destined to follow the Buddha. When he is taking leave Sundarī tries to win him back — frequently referring to her cosmetics, 32-44: 'joining his hands like a lotus bud and raising them to his head Nanda asked his beloved for leave to go by saying: I want to go and do reverence to the Guru. Sundarī gazing at him with rolling eyes swimming with tears said to him with a long sigh: Go, my lord, but return quickly before the paint is dry. If you return to me quickly before the paint is dry I shall hug you with my unadorned arms with the ointment still wet on them [...] Nanda held back by the passions of his love and drawn forward by his inclination for the Buddhist law went on reluctantly'. We find this love play depicted on fragments from Chaurasi on the outskirts of Mathurā (Bajpai 1956-57: pls. XLVI 5, XLVII 8, XLVIII 10 and 14; Fischer 1980a: pl V. 1 [general]; Fischer 1979: pl. 49 [detail]; V.S. Agrawala 1946 = V.S. Agrawala 1965: 165, figs. 89-96; P.K. Agrawala 1983: pls. 77 and 78). Again the mirror plays an important part, but no female trick can prevent Nanda from carrying out his religious vocation clearly shown at the end of the narration. This fragment illustrates love as a transitory pleasure to be conquered by monks for the sake of *mokṣa*, or liberation. Once more we quote Aśvaghoṣa in his conclusion XVIII 63-4: 'This poem dealing with salvation has been written not to give pleasure but tranquillity. I have handled other subjects in it besides salvation in accordance with the laws of Kāvya poetry to make it palatable, as sweet is

put into a bitter medicine to make it drinkable. Since I saw mankind mainly given over to the pleasure of the senses I have here told the final truth under the guise of a Kāvya considering Salvation to be supreme'.

When we take into account Schlingloff's or Taddei's remarks on a relative freedom of the ancient Indian artist towards the religious texts (Schlingloff 1975: 102; Taddei 1984: fn. 60), we may understand these fragments from Butkara as scenes of the love play between young and innocent Sundarī and Nanda. The traditional Indian subject of love and renunciation was enriched by motifs of the Graeco-Roman world, as for example the toilet tray. The latter served as a source of Mediterranean inspiration for North-West Indian artists. In ancient Rome such toilet-trays contained Indian cosmetics which found their place in the frivolous entertainment of Roman ladies and her lovers alluded to by Juvenal, *Saturae* VI 465:

[...] moechis foliata parantur,
his emitur quidquid graciles huc mittitis Indi.

In the art of Gandhāra, Swāt, Mathurā, Āndhra and Ajaṇṭa we find love scenes that contemporary worshippers could easily understand as a *mithuna* in an obvious erotic content as fertility symbolism (figs. 1, 4, 5). But loving couples in the context of the R̥śyaśṛṅga story or the *Saundarananda* legend (figs. 6, 7) conceived by sculptors in these art centres were to symbolise the victory of a saintly man over worldly lust (figs. 2, 3). Due to oral and literary traditions most of the contemporaries of Gandhāran and Swāt artists must have been aware of this moral lesson in the ascetic-minded sculptures. Some visitors of the holy Buddhist places, however, also may have regarded these couples as erotic-minded *mithunas*³ and enjoyed scenes of a love play in the same way as modern, non-Buddhist observers.

³ Fischer 1982: 128. — To our references on a play between a lover and his *Nayika* in her various moods (our fn. 1), add also Aśvaghoṣa, *Saundarananda* IV 3 ('Three were the names by which she was known — Sundarī on account of her majesty and beauty; Mānini for her obstinacy and pride; and Bhāmini for her radiant loveliness and high spirits') and the illustrations after V.S. Agrawala 1965: 165, fig. 89 and P.K. Agrawala 1983: pl. 78.

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In 1955, Dr. W. Speiser (1953: 252-7) published a black and white photograph of the Ashmolean Museum, Oxford (Department of Antiquities, 1953: 131/2). It shows an inscription and shows a man reclining on a reclining horse with behind him a lot of the horses' heads. The style is Gandhāran and Roman (1967: 102). pointed out that the inscription is a good deal smaller in scale than the male figure. The reclining, which is of the same style, is said to have come from the well-known site of Bahri Bahi in Pakistan.

The Ashmolean reclining belongs to a group of similar reclining and reclining reclining, mostly only consisting of one reclining in a particular style which is variously called 'the

JAMES C. HARLE

**Herakles Subduing the Horse(s) of Diomedes
and Kṛṣṇa Slaying the Demon-horse Keśin:
a Common Iconographic Formula**

In 1955, Bivar (1955: 202-7) published a black wax seal impression in the Ashmolean Museum, Oxford (Department of Antiquities, 1953.1311). It bears an inscription and shows a man fighting a rearing horse with below it one of the 'devices' (*tamghas*, 'monograms') familiar from Kuṣāṇa coins (fig. 1). The style is Graeco-Roman and Rosenfield (1967: 102) pointed out that the rampant horse is a great deal smaller in scale than the nude male figure. The sealing, which is 24 mm wide, is said to have come from the well-known site of Sahri Bahlol in Pakistan.

The Ashmolean sealing belongs to a group of gem seals and sealings bearing inscriptions, usually only consisting of one word, in a particular script which is variously named or de-



Fig. 1 — Black wax sealing. Ashmolean Museum, Oxford.

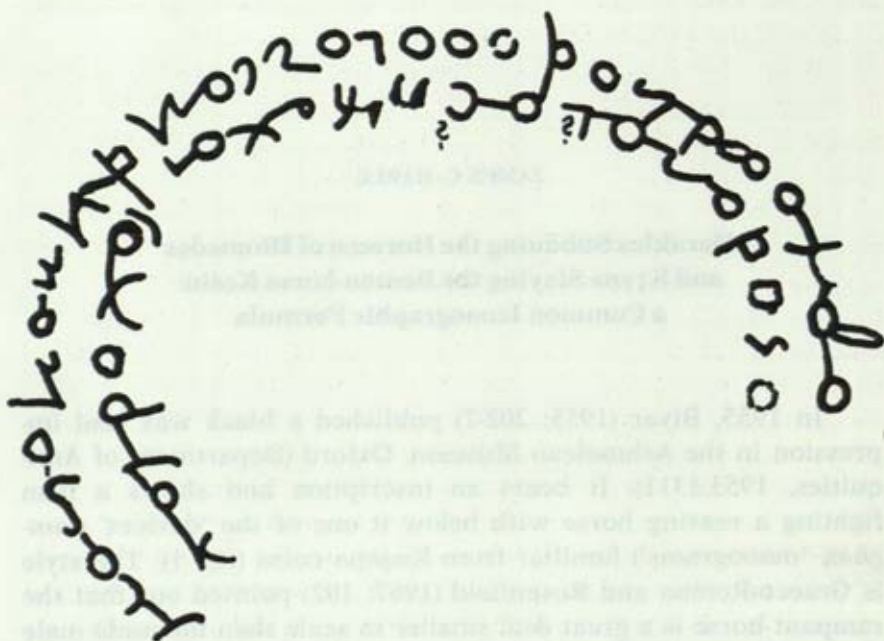


Fig. 2 — Inscription on above.

scribed (fig. 2). For a list, see Rosenfield (1967: 101 and Ch. III, fn. 120) with references to Maricq and Stavisky below. The script of the Ashmolean sealing, according to Bivar (1955: 205) 'is that cursive form of the Greek alphabet usually associated with the inscriptions of the Hephthalites'. Stavisky (1960: 102) calls it the 'so-called Kushāṇa (or 'Tokharian') cursive script'. Rosenfield (1967: 103), again referring to this particular sealing, terms it 'a Kushan cursive Greek script of a debased type'. The first attempt to list the gems and gem sealings of this group was made by Maricq (1958: 419-20); Stavisky (1960: 102 ff.) emended and added to this group but the total only reached nineteen, justifying his remark that they are 'not numerous'. In compensation, it should be added that these gems, seals and sealings do not exist in a vacuum. There are others, not inscribed or with inscriptions in a different script which are related to them in style or general lay-out; in addition, there is the rich numismatic background.

The consensus is that most of the group belong towards the middle of the Kuṣāṇa-Sassanian-Hephthalite centuries.

Bivar (1955: 206), on the basis of a partial reading of the inscription suggested the following translation: 'Son of the great Kanishka, NN (official of such and such a grade), a Kushan'. He dated the sealing to around the accession of Vasudeva (Year 72 of Kaniṣka, c. 200 AD in Konow's reckoning which Bivar follows). Stavisky (1960: 102, fn. 6) questioned both Bivar's reading and his translation of the inscription as well as his dating. Rosenfield (1967: 102-3) rejects the possibility that the owner of the seal was a son of Kaniṣka I on palaeographic grounds: 'the letter types are close to later Kushan or Kushano-Sasanian coins, indicating a date near the end of the third century A.D.' He considered the inscription nearly illegible but believed the name *Kaneshko* could be detected. Göbl (1967: I, 224-7) does not attempt a full translation of the inscription, only questioning some of Bivar's readings. That a form of the name Kaniṣka appears he feels certain. He assigns the sealing to the 3rd century AD (time of Huviṣka, in Göbl's very late reckoning) which indicates that Kaniṣka I, his father, is the one mentioned in the sealing.

Humbach then proposed a new and very different translation of the inscription (Humbach 1969: 70), as follows: 'the moon Kaniṣka whose sovereignty has risen, Vibo's son, the independent one, who beats the enemies, the king'. This was accepted by Göbl (1967: I, 224 ff.) with one variant. Apparently thanks to a greatly enlarged photograph of the inscription provided by Bivar, Humbach made one significant alteration to the reading upon which the translation was based, namely *Webo* for *Vibo* which prompted him to speculate whether there is any etymological connection between this name and the *Wemo* of *Vima Kadphises* (Humbach 1969: 66-9). Otherwise Humbach makes no attempt to date the sealing nor speculate on the identity of this Kaniṣka.

Bivar, the first to publish the Ashmolean sealing, identified the man fighting the horse as Herakles fighting the horses of Diomed, perhaps the least often mentioned of the hero's labours. Diomedes, King of the Bistones, a war-like people of Thrace, owned man-eating horses which Herakles had to subdue. A colleague at the Ashmolean Museum, Mr Michael Vickers, provided a reference to Kurz (1975), the most up-to-date account of the

legend as well as of important representations in art of Herakles subduing the horses of Diomed. Kurz makes three important points:

1. Herakles' labour was not to kill the horses, but to bring them back to Eurysthenes to use in his own chariot.

2. The number and sex of the horses is nowhere made clear in the literary sources, although Dr Kurz believe it most likely they were four, the ideal chariot team, and that they were mares.

3. In art, only one horse is usually represented. The earliest depiction of the myth previously known is on one of the metopes of the temple of Zeus at Olympia. Even earlier, however, of the last decade of the 6th century BC, according to Kurz, is the painting on a black-figure cup in Leningrad which actually shows one of the horses seized by Herakles, with the head, shoulder and arm of a man hanging from his mouth (figs. 3-4). This is not Diomed but the groom, for some recently discovered verses of Pindar vividly describe how one night Herakles stole into the stable where the horses were kept, tethered to the manger by a single bronze chain, snatched up the groom, and fed him to the horses to distract them, one a leg, one a head, another a forearm. This last may have a bearing on some later representations of the hero fighting the horse.

Bivar's identification of the figures on the Ashmolean sealing as 'the combat of Herakles with the horses of Diomed' was sound (Bivar 1955: 203). It was based on the general identity of pose of horse and man on certain coins from Pontus (Heraclea Pontica) of the first half of the 3rd century AD, notably one described and illustrated by Bauer (1910: 75, pl. III 18) (fig. 5b). Another example from Pontus, a coin of the Empress Tranquillina (AD 241-244), the wife of the Roman Emperor Gordian III, showing the same scene, attributes and poses was recently pointed out to the author by Mr David Walker (*SNG, Herakleia* 438) (fig. 6). The style of the figures on these coins from Pontus, which come at the very end of Roman coinage in the region, is Graeco-Roman.

While it may be said that the coins from Pontus and the Ashmolean sealing belong to the same type of representation of Herakles in combat with the horse(s) of Diomed, there are significant differences. On both coins Herakles brandishes his club in his right hand, ready to strike; on the other hand, the figure on



Fig. 3 — Interior of black figure cup, Hermitage.



Fig. 4 — Detail of above.



Fig. 5 — (a) and (b). Coins from Pontus showing Herakles subduing one of the horses of Diomedes — reigns of Caracalla and Gallienus.

the Ashmolean sealing holds a small unidentified object in the hand of his outstretched right arm as if about to throw it at the horse. Again, the man on the Ashmolean sealing either kicks or, more likely, holds off the horse with his outstretched left leg whereas Herakles, on the two coins from Pontus, stands with both feet on the ground, the left leg (nearest the horse) slightly flexed as he advances rather aggressively towards the horse. The highly distinctive almost vertical rearing position of the horse is identical in all three examples as is the pronounced difference in scale between man and horse.

There is also a common feature in all three examples which is difficult to interpret. The left arm of the man stops short at the elbow as if disappearing into the horse's mouth. It has been suggested, for the Ashmolean sealing, that the hand and fore-arm are behind the horse's head, grasping its mane, while the horse takes the opportunity of biting the arm (Göbl 1967: I, 244). A similar interpretation is possible for one of the Pontus seals (fig. 5b) but not for the other (fig. 6) where the position and length of the left arm would make it impossible for the hand to grasp the horse's mane. Since a propensity to eat human flesh was the distinguishing characteristic of Diomed's horses, it seems difficult to avoid the conclusion that, when in combat with Herakles, the biting or eating of the human hero, or a part of him, would not be depicted.



Fig. 6 — Coin from Pontus — effigy of the Empress Tranquillina and Herakles subduing one of the horses of Diomedes.

Professor van Lohuizen tentatively identified two reliefs from Mathurā of the Kuṣāṇa period as representing Kṛṣṇa as the slayer of the horse-demon Keśin ('he of the mane'), referred to in the texts as *Kṛṣṇa Keśivadha* or *Keśi Nisudhana*. The myth is quite different from that of Herakles. Kansa, the evil King of Mathurā, instructs Keśin to kill Kṛṣṇa and Balarama. In the

ensuing fight, Kṛṣṇa thrusts his left arm into Keśin's mouth, who tries to bite it but the arm, expanding in size and radiating great heat finally chokes Keśin who falls down dead.

The relief in fig. 7 conforms exactly to the iconographic formula of the Ashmolean sealing: the right hand of the man is ready to hurl something or strike at the rearing horse. No club is shown. He holds off or kicks the horse with his outstretched left leg, and his left arm appears to disappear into the horse's mouth. The only differences are the fact that the horse, although he is rearing, is not completely or nearly upright, as in the coins and the Ashmolean sealing, and of course the latter are in a Graeco-Roman Style, while the Mathurā relief is entirely Indian in style. Once again, there is no possibility of the man's left hand reaching the horse's mane supposing that the arm was passing behind the horse's head. The horse's mouth, moreover, is open although it could not possibly accommodate the whole of the outstretched arm. The second relief is fragmentary, only showing the horse but in an identical pose: both reliefs are carved on stones used in contests of weight-lifting (fig. 8) and there is a presupposition that the fragment also represents Kṛṣṇa Keśivadhā, although it has been suggested (personal communication from Dr G. Bhattacharya) that it actually depicted the ass demon Dhenuka and Saṃkarṣana because of the presence of a tree which he identifies as a *tāla* (fan palm).

Kṛṣṇa Keśivadhā will, however, in any case, be depicted in India for the next three or four hundred years according to the iconographic formula first used in India or lands contiguous to North-West India, on the Ashmolean sealing and in the two reliefs from Mathurā. Williams illustrates one on the lintel of the Gupta doorway at Pipariya (Williams 1982: fig. 174); U.P. Shah one from Valabhi in Saurāṣṭra of the 5th-6th century and there are other examples. Even in the early 18th-century painting from Mankot, the two figures are juxtaposed in the same way and the horse, although no longer rearing, is mangling Kṛṣṇa's arm (fig. 9). He is also discharging balls of dung, as he is supposed to have done in his death throes.

Greek and Roman representations of Herakles with the horse(s) of Diomedes appear generally to avoid the juxtaposed combatant grouping, preferring other arrangements, notably with Herakles striding beside the horse. This composition can be



Fig. 7 — Relief on gymnastic stone (for weight-lifting), private collection, Pakistan. Photo: J.E. van Lohuizen.



Fig. 8 — Fragment of similar stone with relief, Mathura Museum. Photo: J.E. van Lohuizen.

seen on another coin from Pontus contemporary with the others already discussed (Bauer 1910: 74, pl. III 16) (fig. 5a). A frieze depicting all the labours of Herakles around a marble cup of the Augustan period (the Tazza Albani, no. 383 in the Museo Torlonia), however, shows Herakles facing one of the horses of Diomedes (Bauer 1910: 75, fn. 5; Zoëga 1811: pl. 62, not 63) (fig. 10). He brandishes his club in his right hand, and his left is nearly touching the horse's muzzle. The horse has his front legs off the ground, instead of rearing in a near vertical position. This representation is of particular interest because of its more informative iconography: it shows the other three horses, in composite form, and a chariot wheel.

To conclude, the horse combat on the Ashmolean sealing depends for its depiction on two closely linked iconographic formulae. One is used on occasion to represent in visual form the labour of Herakles where he subdues one of the horses of Diomedes. The other is standard for representations of Kṛṣṇa slaying the horse-demon Keśin. One belongs to the world of Graeco-Roman art, the other to the art of India. The latest examples of the Graeco-Roman formula date from about the same time that the Indian formula emerges, at a time when there were still contacts between the two worlds. This creates a strong presupposition that the Indian iconographic formula, in spite of some differences, derives from the Graeco-Roman. It must be emphasized in closing, however, that there is no evidence that the Kṛṣṇa myth in question derives from one dealing with any of the labours of Herakles. Myths and stories of heroes' combats with horses, beginning with that of Alexander, are too widespread to argue for any link between the two.

As to whether the scene on the Ashmolean sealing represents Herakles' or Kṛṣṇa's combat with a horse, there can be no definitive answer, and in the absence of any more definite indications regarding the time and place where it was made, even speculation becomes difficult. Göbl's (1967: 225) suggestion that the official, if such he was, for whom the seal was made may have dealt with the king's horses is interesting. The well-known statue of Herakles and the Nemean Lion, from Mathurā of the Kuṣāṇa period, now in the Calcutta Museum, is another example of a Graeco-Roman iconographic formula (it exists in countless Roman examples) faithfully used by Indian carvers (Vogel 1930: 118,



Fig. 9 — Kṛṣṇa killing the demon horse Kéśin, miniature painting, Mankot, early 18th century, Chandigarh Museum, Mankot Raj Collection.



Fig. 10 — Herakles fighting one of the horses of Diomedes, part of a frieze depicting the labors of Herakles, on a marble cup of the Villa Albani.

47b). Its original identification still stands despite Foucher's suggestion that it represented a scene from Kṛṣṇa legend since it is very difficult to imagine that god with a lion's skin around his shoulders, as in the sculpture. That a Graeco-Roman theme embodied in an iconographic formula such as this should retain its identity in Mathurā, on the southernmost confines of the Kushanshar, implies that it would have been possible for the Herakles/Horse of Diomedes motif on the Ashmolean sealing to have done so, wherever it was made. Bivar's original identification must, therefore, stand until new and definite evidence appears in favour of the Kṛṣṇa/Keśin hypothesis.

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HERBERT HÄRTEL

The Concept of the Kapardin Buddha Type of Mathura

To speak once again of the Kapardin Buddha type of Mathura, is to take in hand one of the 'oldest hats' of the research on Buddhist art. But even an old hat can be turned round and round again to show thereby new angles of vision. Admittedly, the method adopted here to interpret the Kapardin relief needs some intuition and readiness to reorient the traditional opinion. Let us start with a critical remark: on the pictorial representation of the oldest Buddha figures in human shape, we are accustomed to put a mature Gandhara Buddha against a seemingly characteristic Buddha from Mathura, as for example, the Takht-i-Bahai Buddha on the Lion-throne (fig. 1) against the well-known Katra relief with the spirally shaped hair (herefore: *kapardin*) of the Mathura Museum (fig. 2), and argue thereby that both of them represent their individual style, being of different regional origin only. Thus, these two image-types almost imperceptibly get on one and the same chronological level. But there are enough reasons why this conventional opinion is to be rejected as insufficient, if not even false. First of all, the oft-repeated comparison pretended here is, in fact, inappropriate. As it will be expounded later, the Kapardin *reliefs* from Mathura cannot be compared with the *free-standing* Buddha figures but only with the early Buddha reliefs from Gandhara, which Mrs van Lohuizen (1981) has commendably brought to our notice in a comparatively large number. Why a suitable comparison is possible only thus needs an explanation. For this, it is necessary to examine once again and without prejudices our so familiar so-called 'Kapardin' type of Buddha, both sitting and standing. For a better understanding, some sort of statistical inventory is to be made at the beginning of this effort.



Fig. 1 — Buddha from Takht-i-Bahai. Museum für Indische Kunst Berlin, MIK I 74.

It is difficult to count how many smaller and bigger reliefs and statues of 'Kapardin' type exist scattered all over the world. The number of the more or less fragmentary bigger figures (i.e., images created not for the house-altar but for the community cult) should not go much beyond 50, with and without inscription. Of the inscribed pieces there are about 25 with dates. But unfortunately, not all of the pieces furnished with dates and inscriptions can be used for the comparison aimed at here. Besides the inscription, sufficient remains of sculpture must also be preserved in order to determine the type of the image. In a few cases, there is only a short notice available without sufficient



Fig. 2 — Kapardin type relief from Katra. Government Museum, Mathura, no. A1. (Copyright Archiv Museum für Indische Kunst Berlin).

informations and without illustration¹. The following list will therefore clarify on which dated Kapardin figures our study rests.

¹ Those unpublished pieces or fragments, known from brief citations only, are not taken into consideration in this study. It is not likely that they would state something other than the listed sculptures. The following objects are taken here into consideration.

— G.R. Sharma (1958) mentions 'Inscriptions on the pedestals of three Bodhisattva images donated by the famous nun Buddhāmītrā, a disciple of Bhikṣu Bala'. 'In addition we get informed that one of the inscriptions which is compara-

Date	Ruler	a) Seated b) Standing	Provenance	Location	Partial bibliography	Inscriptional designation
2	Kaniška	b	Kaśambī	Allahabad Museum, AM 69	P. Chandra 1970: no. 85. ABIA 9: pl. II. E/24: 212.	Bodhisatva
3	Kaniška	b	Sarnath	Sarnath Museum, SM B(a)/1	ASIAR 1904-05: pl. XXVI a, b. Bachhofer 1929: II, pl. 79. E/8: 173 ff.	Bodhisatva
?	Kaniška?	b	Sravastī ²	Indian Museum, Calcutta	E/8: 179 ff. & pl. ASIAR 1904-5: pl. XXVI d.	(Bodhisatva)
4	Kaniška	a	unknown	priv. coll. ³	unpublished	Bodhisatva
16	Kaniška	a	Mathura Distr.	Mathura Museum, no. 2740	Lüders 1961: § 157.	Bodhisatva
17 (?) ³	—	a	Mathura Distr.	Mathura Museum, no. 121	Lüders 1961: § 150. ASIAR 1909-10: pl. 24c.	Bodhisatva
20	Kaniška	a	Mathura City	Mathura Museum, no. 1558	Lüders 1961: § 73. ASIAR 1919-20: pl. 176.	Bodhisatva

² The statue from Sravastī, likewise named as Bodhisatva, has been donated by Friar Bala, as the Sarnath Image of the Year 3 of Kaniška, and became installed, like this, with *chakra* and *yaśi* (or *daṇḍa*). The extraordinary similarity of the proceedings suggests the location at this place of the list. In any case, the dating is limited to the lifetime of Friar Bala.

³ Reading not uniform.

23	Kāni	a	Sonkh	Mathura Mus., no. 1602	Lüders 1961: § 136.	Bodhisatva
31	Huviṣka	a	Ral Bhadar	Mathura Mus., no. A 71	Lüders 1961: § 103. Vogel 1919: 65.	missing
31	Huviṣka	a	unknown	priv. coll.	unpublished	Bodhisatva ⁴
32	—	a	Ahichchhatra	National Museum, New Delhi, no. L. 55-25	JASB XXI, 1955: 65 ff. Auboyer & Nou 1982: 92.	no designation
33	Huviṣka	a	Chaubara Mounds	State Museum, Lucknow, Lu B 2	E18: 182. Lüders 1961: § 24.	Bodhisatva
35	Huviṣka	b	Hathras?	Mathura Mus., no. A 63	Vogel 1919: 62.	missing
39	Huviṣka	a	Palikhera	Indian Museum, Calcutta, no. 4145	Lüders 1961: § 126. Bachhofer 1929: pl. 83 r.	Bodhisatva
45	Huviṣka	b	unknown	PW Museum, Bombay, Acc. No. 2	M. Chandra 1974: fig. 61. Lüders 1961: § 180.	Sakyamuni
46	—	b	Mathura	Mathura Mus., (71.101?)	IAR 1972-73: pl. Lb.	Bodhisatva
51	Huviṣka	b	Jamalpur	State Museum, Lucknow, no. B 3	Lüders 1961: § 29. • R.C. Sharma 1984: fig. 110.	Sakyamuni

⁴ Reading: 1. *Huviṣkasya sa 30 1 gra 2 di 5 etasya purvaye bhikṣusya Mamāsyā saññe viharisyā bhikṣusya Brddhasamisyā danam*

2. *Bodhisatva-pratima p[ra]t[is]ṭh[ā]p[ita] saha mātaptirhi sahā upajharya-acaryahi sarva-Budhapujāye bhavatu.*

The fragmentary condition of the majority of these sculptures makes a complete comparison next to impossible. But those who are well-acquainted with the figures of this type must agree with us that they are as a rule uniformly shaped. Thus in the case of the reliefs with the sitting so-called Kapardin Buddha, the feet and the garment put around them are always represented in one and the same way. A rather important fact is also the position of the left hand on the left shank. A fragment like our figure 5 (year 17) is therefore a part of a Kapardin-relief undeniably. More serious, however, is the decision whether all the sitting figures listed here were reliefs with attending figures. Complete reliefs would generally show a back-plate projecting to the left and right (cf. figs. 2 and 8). Our figure 6 makes this clear even in its fragmentary condition. It becomes more difficult to impose this judgement on fragments like figure 5, whose central socle only is preserved, and consequently does not allow the jutting out of the back-plate to be recognized clearly. But it seems to be certain that all the fragments listed here belong to the type of Kapardin-relief with attendants⁵.

The majority of the sculptures mentioned here designates the figure represented epigraphically as Bodhisatva. In the three cases where no such designation is ascertainable it is either broken off or, as is the case with the Ahichchhatra relief (fig. 9), not mentioned. At the same time, the list of the dated Kapardin

tively better preserved than the other ones records the installation of the image in the year 3 of king Kanishka'.

— Srivastava & Misra (1973: 88-95) enlist a number of inscribed and dated fragments in the Inventory of Mathura Museum sculptures from 1939 upto the present time. Among them there are pieces with dates of the years 3, 4 and 5. No. 24 (Buddhist) of the list of Srivastava & Misra (1973) seems to be identical with the inscription published by D.C. Sircar in *EI*, 1934: 10 & pl.

— Rosenfield (1967: 265) mentions a 'Buddhist pedestal' of the year 4 of Maharāja Kaniška. To his knowledge it was an unregistered piece in the Mathura Museum but it might again be identical with the object just mentioned, as is the No. 5 in Rosenfield, MM 3533, with No. 67 of Buddhist items in the quoted list of Srivastava & Misra (1973).

⁵ Comparable conditions are found with those fragmentary pieces which are not dated but carry the appellation 'Bodhisatva' in the inscription, as for instance S.M.L. 66.48 (D.R. Sahai, *ASIAR* 1908-09: 133 ff.) and MM 74.20 or 26 (R.C. Sharma 1984: 181, fig. 88).



Fig. 3 — Standing figure of the year 2, from Kausambi. Allahabad Museum, no. AM 69. (Copyright Allahabad Museum).

Fig. 4 — Standing figure of the year 3. Sarnath Museum, no. SM B(a)1. (Copyright Archiv Museum für Indische Kunst Berlin).

figures shows that the designation 'Bodhisatva' remains unaltered through the years 2 to 39 of the Kanishka Era. The first deviation from this appellation is to be found on the fragment of a standing Buddha of the year 45 in the Prince of Wales Museum, Bombay, the inscription of which records the installation of a *bhagavato Śakyamune apratimasya pratimā* (fig. 12). Actually, a phase of transition is being heralded by this change in the designation. The fragment of the year 46 (fig. 13) speaks again of a



Fig. 5 — Lower part of seated image of the year 17(?). Government Museum, Mathura, no. 121. (Copyright H. Härtel).



Fig. 6 — Fragmentary pedestal of seated image of the year 20. Government Museum, Mathura, no. 1558. (Copyright H. Härtel).



Fig. 7 — Mutilated image of the year 23. Government Museum, Mathura, no. 1602. (Copyright H. Härtel).

Bodhisatva image while the following inscription transmitted to us, of the year 51, takes up the Śākyamuni formula finally*. All the three last-mentioned sculptures represent standing figures and it seems safe to assume that the seated image of the Kapardin type with attendants had already vanished. The sculptures dated later than the year 51 are of a new, free-standing type, the inscriptions of which speak of the installation of a *Śākyamuni*- or

* The observation of Mrs van Lohuizen that the change of the Kapardin type starts during the Huvīṣka period proves absolutely correct on a broader basis of material also. Here, we only try to separate the types according to their religious concept.

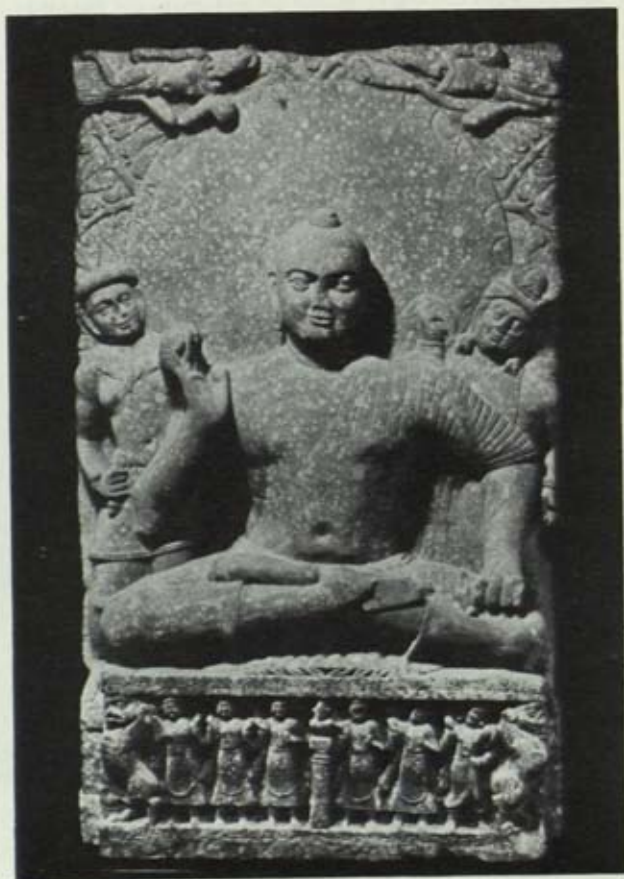


Fig. 8 — Seated image of the year 31. Private collection. (Copyright Archiv Museum für Indische Kunst Berlin).

Buddha-pratima alone, before it becomes completely unusual to name the statues at all.

*It is possible therefore, to conclude from the inscriptions that the designation Bodhisatva is used only for the original Kapardin relief type with companions and the standing Kapardin figure from Mathura. The appellation changes at the very moment when this type disappears*⁷.

⁷ The Bodhgaya image of the year 64 G.E. imitates the Mathura type and therefore uses its inscriptional formula as well.



Fig. 9 — Seated image of the year 32. National Museum, New Delhi, no. L. 55-25
(After *JASB* XXI).

Such an observation compels one nearly to question whether the ornamented proper Bodhisatva statues and seated figures, only slightly related to the Kapardin type, and hardly carrying an inscription, occurred at first at the time of this change or they had existed side by side with the inscriptional Kapardin Bodhisatvas. The so-called Maitreya of the year 29 is a part of the answer (Rosenfield 1967: 229 ff., fig. 32). The newly found sculptures of a Buddha Amitabha of the Huviṣka year 26 throws new light on the religious situation of the early Kuṣāṇa period



Fig. 10— Headless statue of the year 35. Government Museum, Mathura, no. A63. (Copyright H. Härtel).

(Sharma 1979: 25 f., fig. 18). The fact that the seated proper Bodhisatva figures from Mathura are generally represented in *dhyāna-mudrā* implies a character quite different from that of the Kapardin image, showing clear affinities to the Bodhisatva in the Mahāyāna stele from the Kankali mound (S.M.L. no. J 621), which on stylistic grounds cannot belong to the early Kuṣāṇa phase (Sharma 1984: 179, fig. 83). It looks as if we have to gain a new approach to the questions involved which should just be raised but not solved here.



Fig. 11— Headless seated image of the year 39. Indian Museum, Calcutta, no. 4145. (After Bachhofer 1929).

The obscurity of the situation justifies an analysis once again of the Kapardin relief, interpreted unanimously as Buddha by the experts, in its essential components (fig. 2). Let us study at first the main figure of the relief: a man sits in *paryāṅkāsa* on a socle projected from the relief background. He is clad in the garment of a monk, the right shoulder is left free. The chest is put forward in a markedly manly manner. The head with the commanding face is covered by tightening the hair together in a spiral scroll which is of course not an *uṣṇīṣa*. The arms and hands are in powerful and lively gestures. The raised hand is turned inwards, the left one lying with its palm downwards or,



Fig. 12 — Fragmentary pedestal of standing figure of the year 45. Prince of Wales Museum, Bombay, acc. no. 2. (After M. Chandra 1974).

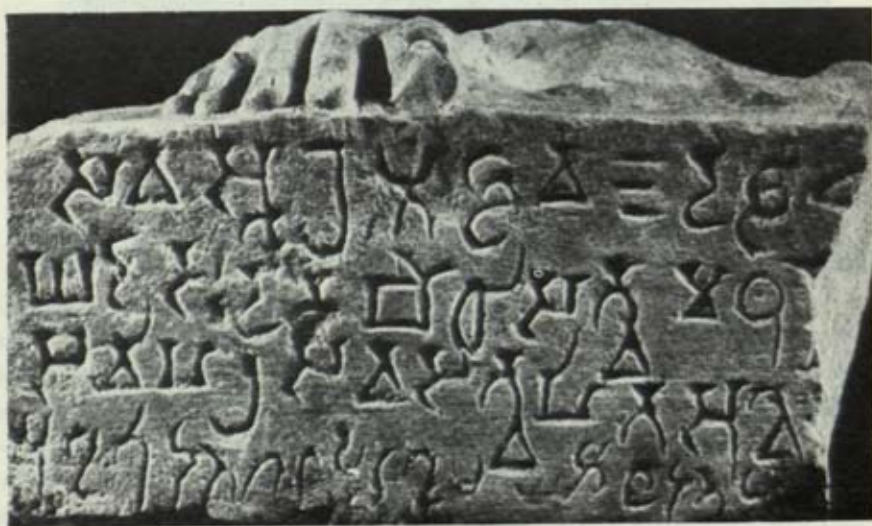


Fig. 13 — Pedestal of standing image of the year 46. Government Museum, Mathura, no. 71.101? (Copyright Government Museum, Mathura).



Fig. 14 — Standing figure from Mathura. Government Museum, Mathura, no. 71.105. (Copyright Government Museum, Mathura).

more often, in a fist on the bent left leg. The position of the left hand is normally taken no serious notice of and consequently given no definite designation. The position of the right hand is conventionally named *abhaya-mudra* without a second thought. In my opinion, the '*vyāvṛtta*' position of this hand of the Kapardin figure and also of the early figures of the Hindu gods of Mathura cannot be equated with the '*parivṛtta*' position (i.e. palm to front) of the same hand of the later Gandhara and Mathura figures at all. The '*vyāvṛtta*' gesture of the right hand expresses

rather 'addressing an audience' than 'removing fear'. In any case, *the postures of both the hands of the main figure form an integrated whole, they reflect a consciousness of sovereignty.* The whole figure with the big circular nimbus behind the head and the shoulders is seated under the branches of the Bodhi tree. Heavenly figures hovering above the nimbus indicate the strewing of flowers.

In the early reliefs, on the right and left of the main figure stands a chowrie-bearer, i.e. an unusual companion for a Buddha, the chowrie being a royal attribute in the first place. This is valid with the Kāra relief and it is the case also with the unpublished relief of the year 4 of Kaniṣka I. The artists must have felt that their conception was not yet quite understood in this way, for very soon there appears — as an interpretation, so to speak — a person holding a vajra, instead of the whisk, in his right hand. He is usually dressed in a knotted scarf and loincloth. In this attire he can only be Vajrapāṇi, who stands here opposite to the chowrie-bearer. The figure of this tutelary spirit appears already at an early date as an attendant of the Bodhisatva, as in the reliefs of the Great Renunciation from Gandhara and on other occasions especially of his migratory life. *The main sitting figure is thus flanked by attendants, one of which is of royal and the other of Buddhist coloring.*

The identification of this attending pair as Śakra (the *Sakka devānām Indra* of the texts) and Brahmā is not possible, because the chowrie-bearer always remains a chowrie-bearer*, and the loincloth of Vajrapāṇi saves him from a confusion with Śakra. The fragment from a seated figure assumed to represent Śakra and Brahmā on the steps of a socle, otherwise undecorated, used as counterargument, cannot be brought in with the explanation, that 'The pedestal [...] was too small [...] for placing the acolytes at his sides and they were therefore given a place in front against his seat' (van Lohuizen 1949: 175). This fragment is, in fact, not part of a Kapardin relief but of a free-standing figure. The problem it still presents is connected with the inscription, not with the figures under discussion.

* With the exception of the figure holding three buds of lotus in the Ahichhatra relief, now in the National Museum, New Delhi. There is no reason to call this figure Padmapāṇi because of this change alone.

The front side of the socle of the seated figure, as is well-known, is always furnished with the two lions. The central field is decorated differently in each piece. The statement by Mrs van Lohuizen that with the early Kapardin reliefs the lions are in profile and turned outwards, is valid once for all. These lions are found with or without wings. Functionally observed, they are the lions on the sides of a royal throne. To identify them as the Śakyasimha at the same time is to carry the argument too far. But the lion in the midst of the socle of the Katra relief (fig. 2) is all the more likely to be Buddhist in its symbolism. Such an interpretation becomes even more probable if one considers the remarkable exchange of symbols in this very field of the socle. Often one finds, instead of the middle lion, a column with a wheel on it, a *cakrastambha* (figs. 6, 8). The *cakra* is the no. 1 of the *saptaratnāni*, the 'seven aids', of a universal king, i.e. a *cakraratna*. But it is also at the same time the wheel of law, the *dharmacakra* sometimes more lotus-like placed on a *triratna* (or *nandyāvarta*) symbol (figs. 7, 11). Thus, the circle of a double meaning of the seated Kapardin type relief is closed.

The standing figure of the Kapardin type, designated likewise as Bodhisattva, goes together with the seated relief. The well-known Friar Bala figure from Sarnath (fig. 4) of the year 3 as well as the comparable statues from Mathura, represent a masterly masculine figure with mighty chest and powerful standing position not inferior in any way to one of the seated majestic figures. The right hand is raised in *vyāvṛtta* position (fig. 14), the left hand does not hold the drapery with the fingers but is in most cases clenched to a fist. The hair arrangement is like that of the seated figures. Between the feet occurs, always singly, either a lion turned in front (fig. 4) or some object decorated with a lotus (figs. 3, 10). Although the double meaning cannot be clearly understood from this lotus, its presence is more than probable by the exclusive use of both the symbols, lion and lotus on stand⁹.

⁹ This symbol is very often named as a 'cluster of lotus'. But at the sight of the Maholi-figure (fig. 15) with the prominent stand of the lotus, looking rather like hair, one must question if this object is not in fact the *caḍa*, either the hair of the Bodhisattva decorated with lotus, which was cut off at the time of renunciation of the world and on which the heavenly honour was bestowed later at the *caḍamaha* function, or the hair of a great king, cut on the occasion of *rajabhi-*



Fig. 15 — Standing figure from Maholi. Government Museum, Mathura, no. 2798. (Copyright H. Härtel).

The standing figures as well as the seated reliefs of the Kāpardin type are no doubt a creation of the Mathura artists. They have created out of Buddhist faith and with full intention independently the image of the Master as a vision of the Great Being, the Mahāpuruṣa, in which dwell the essential powers of a king dominating the world as well as those of a Buddha.

śeka, the royal consecration ceremony. Thus the double meaning of the Kāpardin figures would become evident through this symbol also. One may compare in this connection the 'turban' with hair on the plate in the *sudhammā devasabha* relief from Bharhut. For the fertility and vegetal aspect of the royal hair-cutting see also Heestermann 1957: 212 ff.



Fig. 16 — Seated Buddha from Anyor. Government Museum, Mathura, no. A 2.
(Copyright G. Hahn).

It is from the seated Kapardin relief with companions only that the artists of Mathura tried to derive a *free-standing* Buddha figure, which is at the beginning nothing else but the Kapardin relief type *without* the companions, as represented in the only two specimens of this type, the unfinished Hāruṣa sculpture from Anyor (fig. 16), called *Buddhapratimā* in the undated inscription, and in the recently found and published, also free-standing sculpture at the Government Museum, Mathura (fig. 17), named *Buddha Śakyamuni* in the likewise undated inscription.

To stress the point: As soon as the companions are omitted, the figure is not called Bodhisatva any more, but Buddha.

The type of the Great Being is not necessarily a creation of the early Kaniška era only. Single undated images, e.g. the so-called Katra Buddha, can of course be older. The presence of this type before Kaniška I mirrors itself in the few representations of legendary scenes, believed generally to be older, *in which the Kapardin figure is inserted more or less as a pictogram*. Take, for instance, the Lokapāla slab (fig. 18) from Mathura where the

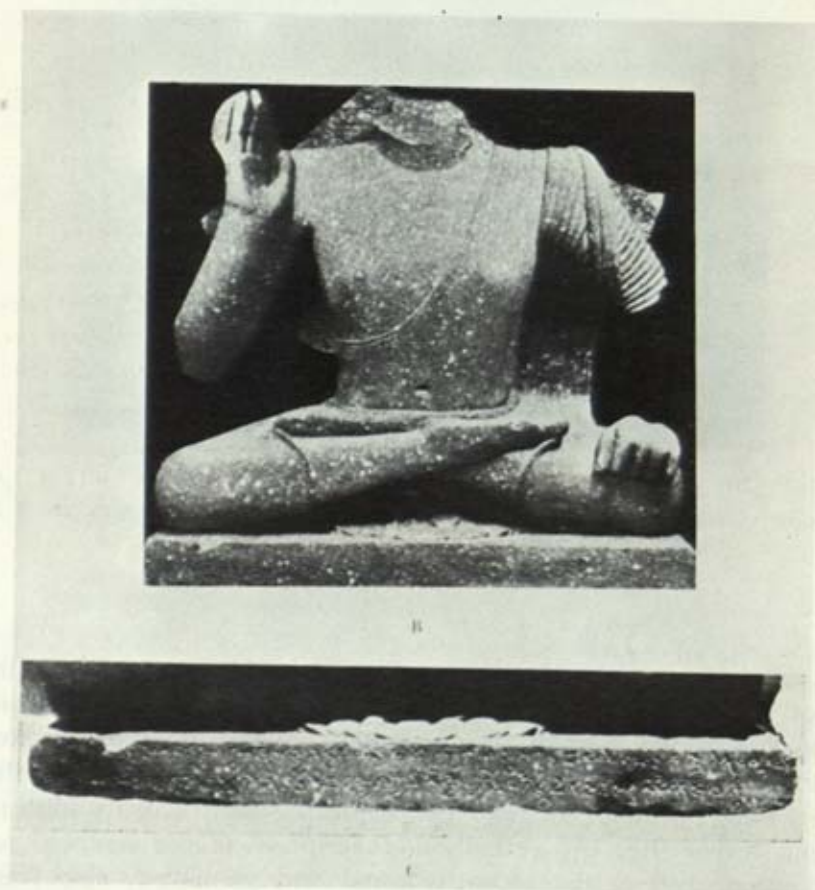


Fig. 17 — Seated Buddha from Mathura City. Government Museum, Mathura, no. 78.34. (Copyright Government Museum, Mathura).

Buddha is seated on a remarkable lion-throne. As in the Kapardin type the right hand is raised in *vyāvṛtta* position while the left rests in a fist upon the left thigh. The same holds good for the Indraśailaguhā representation on a lintel in the Government Museum, Mathura (fig. 19)¹⁰. *If one follows the clear conception of this Kapardin figure it would seem to be out of question that this type can ever have been preceded by the intellectually completely different Buddha in dhyāna-mudrā from Lahore* (van Lohuizen 1979: fig. 27).

To make one perfectly conscious of the *conceptional difference* of the Kapardin type from other representations, we should confront it with a few examples of actually comparable Gandhara reliefs published by Mrs van Lohuizen (1979). There the Buddha sits, as a rule, as the Meditative Being, as a real Buddha, on a simple throne under a tree (fig. 20). The upper part of the body, otherwise naked, is covered by the garment over the left shoulder and the side only. The face is shown with moustache and open eyes, the hair is raised up and bound in a chignon. The Buddha sits in *panyānkāsana*, the hands lie in *dhyāna-mudrā* on the lap. The throne is either bare or decorated with carpets and other ornaments. *Lions never appear in these reliefs*. The attendants here are, however, legitimately expected to be Śakra and Brahmā, entreating the Buddha to preach (fig. 21). The side from which the two gods should flank the Buddha is not fixed. They can stand alternately at the right or at the left. When the Buddha holds the right hand in *abhaya-mudrā*, which in early Gandhara seems to present a step of development, it is always in the

¹⁰ The use of the main image of the Kapardin relief as scenic Buddha figure and also as free-standing Buddha sculpture is logical. But with the standing figures the situation is different: the striding Buddha belonging to the legendary scene is required there also and derived from the standing Kapardin figure, as in the famous Kankali Tila relief (S.M.L. J 531). But an independent standing Buddha Śakyamuni cannot be created and does in fact not exist because the figure named as Bodhisatva is already a free-standing sculpture. So one must be content for the time being with a change of name as well as of some details as in the fragments of the years 45 and 51 of the Kaniška Era. The artists had on the other hand no problems to create a figure of a former Buddha like the Kāśyapa from the main bazaar in Mathura City (MM 2739) or the Buddha Amitābha of the year 26 (or 28) of Huviška, of which regrettably only the inscribed pedestal with the feet is preserved.



Fig. 18 — The four Lokapālas offering the Buddha begging bowls. Government Museum, Mathura, no. H 12. (Copyright H. Härtel).

parivṛtta position, in which the palm is directed to front, and the left lies on the lap with the palm upwards, as if only the right hand has been taken away from the *dhyāna* posture.

It is to be fully recognized that Mathura and Gandhara took two completely different ways of representation of the Buddha: Mathura first views him as an ideal figure, as Mahāpuruṣa, Gandhara as the acting and meditating Buddha. The influence of one on the other starts with the disappearance of the seated Kapardin relief in Mathura and of the early relief type in Gandhara. The Gandhara free-standing Buddha for example, gets the lions



Fig. 19 — The Buddha in the Indraśailaguha. Government Museum, Mathura, no. M 3. (Copyright H. Härtel).

on the throne, and the Mathura artists create a new free-standing type which receives the plaited garment ¹¹.

There has been much discussion on the reason why the Kapardin figure was named Bodhisattva in the label inscriptions. Bachhofer expresses his surprise, as many others do, when he writes: 'As with the statue from the year 3, so it is astonishing with the image from Katra as well, that a figure which carries all the marks of a Buddha, is passed off as a Bodhisattva [...]. No difference is made between Buddha and Bodhisattva with the seated figures; the same is valid also for the statues, because here, as there, the Bodhisattva is represented by a figure, having the typical marks of a Buddha'. Similarly Vogel writes: 'We are

¹¹ The discussion about the development of the Mathura-Buddha figure suffers from the combination of free-standing sculptures with the Kapardin relief with acolytes. A line of evolution of the sitting Buddhas must start with the free-standing Kapardin type from Anyor and lead one over the figures of the years 40, 51, 83 to (1)22. Rather interesting in this connection is the 'display gallery' of different types side by side in the door lintels like B 182 in the State Museum, Lucknow, published e.g. in Vogel 1930: pl. XXXVI c.



Fig. 20 — Brahmā and Indra entreating the Buddha to preach, from Gandhara. Gai collection, Peshawar. (Copyright Archiv Museum für Indische Kunst Berlin).



Fig. 21 — Brahmā and Indra entreating the Buddha to preach, from Gandhara. Sherrier collection, London. (Copyright J. Sherrier).

thus led to the conclusion that in seated images, at least, the Mathura sculptors of the early Kushana period made no distinction between Gautama the Bodhisattva and Gautama the Buddha'. Others like Banerjea and Growse discuss the problem of the meaning attached to the term Bodhisattva. Mrs van Lohuizen suggested 'that the meaning of the word Bodhisattva has altered, that is to say, in the long run the word acquired a more limited sense than was originally the case'. In other discussions the question arises if there is a *time element* expressed in these sculptures. Scherman (1924) feels that all these Kapardin images represent Gautama after his renunciation of the worldly life, and before the Enlightenment. Of the same opinion is V.S. Agrawala whose argument has been discussed and criticized by Rosenfield (1967: 314) when he writes: 'Agrawala claims that these figures represent Śākyamuni at the stage of his life between his departure from the palace and his Enlightenment. Agrawala's explanation seems to presuppose an iconographic type to represent this phase in the life of the Buddha; however the Mathura Buddha images which are called Bodhisattvas do not form an independent iconographic type; they cannot be distinguished from a Buddha image'.

What is most amazing in this discussion is the general presumption that the Kapardin figures, designated as Bodhisattva, represent the Buddha. Why so? The inscription of the year 2 says clearly and quite plainly that 'the nun Buddhāmitrā [...] sets up [this image of] Bodhisattva at the promenade of the Lord Buddha [*bhagavato Buddhāsa caṃkame*]'. It is evident that the donor and the artist were not of the opinion that they must name their image *Buddha*.

Nearest to the solution was Coomaraswamy (1927: 315) when he theorized quite generally and without any relation to the Kapardin figures, with the help of relevant texts: 'Indians from the beginning were deeply interested in physiognomy and it is with this preoccupation that a fundamental type like that of a Mahāpuruṣa-Cakravartin was conceived. This theoretical type, with its thirty-two principal marks, is older than the Buddha image, older presumably than the Buddha himself [...] In other words, a definite idea of the Buddha's appearance existed before the time of actual representations'.

Evidently, the artists of Mathura were enthusiastic adherents to the age-old ideas. They depicted the Hindu gods, and they conceived above all, as we have tried to show, the Buddha as Mahāpuruṣa, as *Cakravartin* and *Buddha in one timeless form*. The denomination of such a figure as Bodhisatva is, therefore, absolutely correct and understandable.

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K.R. VAN KOOLJ

Gods and Attendants in the Relief of Viṣṇu Anantaśayana at Deogarh

The sculpture of Viṣṇu Anantaśayana at Deogarh is one of the classical pieces of Indian art and almost too well-known. Nevertheless, its iconographic programme is not quite clear, in particular the identity and the meaning of the group of gods represented in the upper part of the relief, and, to a lesser extent, the group of attendants in the lower part.

The sculpture itself (fig. 1) needs little introduction. It belongs to the Viṣṇu temple at Deogarh, Uttar Pradesh, which most probably dates from the beginning of the 6th century AD (Vats 1952; Harle 1974: 27 f., 51). It is made of a red-coloured sandstone, although many parts of the stone have a dark blue colour, probably owing to atmospheric influences. The panel of Viṣṇu Anantaśayana can be found on the southern wall of the main temple and measures 1.50 m by 1.17 m.

The visual representation of Viṣṇu lying asleep on the coils of the cosmic serpent Ananta has appeared in sculpture from the Gupta period onwards. The panel in Deogarh is fairly elaborate when compared with other early representations¹, considering the number of figures depicted in the upper and in the lower part.

The whole sculpture is a vivid expression of the critical moment when a new creation is beginning to take form. A still undifferentiated world arises from the primeval waters, respec-

¹ Other Gupta examples come from Udayagiri, Bhitargaon and Sultanganj. About the first mentioned, see Gail 1981: 183 f., fig. 1; a picture of the Bhitargaon relief can be found in Sivaramamurti 1977: fig. 263. The relief of Sultanganj has been published by Sahai 1967: 53 f.



Fig. 1 — Viṣṇu Anantaśayana. Viṣṇu temple, Deogarh, 6th century AD. (Photograph by the author).



Fig. 2 — Four āyudhapuruṣas and two Asuras, Madhu and Kaiṭabha. Detail of fig. 1. (Photograph by the author).

tively symbolized by a lotus as the equivalent of the primordial mound and by a serpent (Kuiper 1979: 13 f.). The undifferentiated character of this world is impersonated by the sleeping Viṣṇu, who is the successor of the Vedic god Prajāpati in this role (Kuiper 1979: 13).

The critical moment is mythologically expressed by Viṣṇu's fight with two demons (*asura*), called Madhu and Kaiṭabha. They are represented in the lower part of the sculpture on the left-hand side (fig. 2). The god, however, has delegated the actual fighting to a group of four attendants impersonating his weapons (*āyudhapuruṣa*). This group has been depicted opposite the two demons in such a way that they are moving according to the direction of circumambulation. It is not without reason that the Asuras are staged against the walking direction.

There is some difference of opinion about the identity of two of these four *Āyudhapuruṣas*. Sivaramamurti (1955: 128 ff.) noticed that personified attributes can be represented in different ways, either leaning against their attribute or their attributes being visible on their heads, respectively in their hairdress. The last method is explicitly mentioned in the iconographic part of the *Viṣṇudharmottara Purāṇa*² (Shah 1958: 224) and seems to have been applied in the relief of Deogarh: each figure wears his (or her) own attribute in his (her) hairdress. There is another iconographic rule that masculine or neutre substantives should be personified as male figures, a feminine substantive becoming a woman. Begley (1973: 48 f.) has identified the feminine figure to the right as a personification of Viṣṇu's club (*gada*)³. The knob of the club can be recognized on her head (fig. 4). The second person from the right is, according to Begley and others, the personified disc (*cakra*). The disc is to be seen in his hair. Both personifications are frequently represented in this period as attendants of Viṣṇu.

² See III 85, 27 cd: *cakrādīnāṃ svarūpāṇi kiñcin mārđhasu darśayet*, 'the real forms of the disk, etc. should be in some way visible on their heads'.

³ See also *Viṣṇudharmottara Purāṇa* III 85, 11: (*dakṣiṇe tu*) *gada devī tanu-madhyā sulocanā / sīrtrāpadhāriṇī mugdhā sarvābharaṇabhāṣaṇā*, 'the goddess "Club" has the form of a woman with a slender waist and beautiful eyes, innocent, adorned with every kind of ornament...'.



Fig. 3 — Cakrapuruṣa (left) and Gadādevī (right). Detail of fig. 2. (Photograph by the author).



Fig. 4 — Padmapuruṣa (left) and Śāṅkhapuruṣa (right). Detail of fig. 2. (Photograph by the author).

It would seem that the artist of the Deogarh relief has been more consistent than most of his interpreters. The hairdress of the third figure is quite different from that of the others. It has the form of a conch-shell (*śaṅkha*), and the figure accordingly should represent the personified conch, as has recently been noticed by Gail (1981: 183 and fn. 11). The fourth person has a small lotus flower in his hairdress (fig. 3), and should be identified with the personified lotus (*padma*). Because of his position facing the two demons he is the only one assuming a fighting attitude and holding a real weapon, namely a sword, which he is about to use⁴. The others assume various attendant attitudes⁵.

With regard to the group of figures appearing in the upper part of the sculpture, it is more or less commonly accepted (Vats 1952: 15) that they are, from left to right, Skanda riding a peacock, Indra sitting on his elephant Airāvata (fig. 5), Brahmā on a lotus, Śiva together with Pārvatī on the bull (fig. 6), and a figure who is variously called a Vidyādhara, a Marut, a garland-bearer or nothing at all (fig. 7). The identity of the last mentioned is not settled, whereas that of the first is at least too readily accepted. Moreover, nobody seems to have considered the meaning of these gods as a group.

In a first report by A. Cunningham (1880: 107), the figure in the upper left-hand corner (fig. 8) has been identified with Brahmā riding his goose. The remark is important, because Cunningham apparently first saw a goose, and he accordingly identified the deity with Brahmā. There are practically no other means of identification. Moreover, the association of Brahmā with the goose is quite common in Post-Gupta period⁶. After-

⁴ During the discussion Prof. Gail remarked that this figure should be identified as the personified sword, Nandaka, considering its repeated occurrence in Sanskrit literature and drama of the Gupta period (Gail 1981). A serious argument against Padma is the fact that the lotus as an attribute of Viṣṇu does not occur in sculpture before the 7th century AD. Arguments in favour of the personified lotus are the inner consistency of the representation (all personified weapons have their attributes in their hairdress); the lotus being clearly visible on Padma's head; the sword being held as a real weapon that conforms with the fighting posture.

⁵ About the attendant attitude of Cakrapuruṣa, see Jamkhedkar 1977-78: 1 f. A parallel of the posture of Śaṅkhapuruṣa can be found in Ellora, Cave 20, small attendant figure to the right of the inner chamber.

⁶ See e.g. Ellora, Cave 21, panel of dancing Śiva (Härtel & Auboyer 1971: pl. 65). In the upper right-hand corner Brahmā is depicted riding a goose.



Fig. 5 — Varuṇa and Indra in the upper left-hand corner. Detail of fig. 1.
(Photograph by the author).



Fig. 6 — Brahmā and Śiva together with Pārvatī in the upper part. Detail of fig. 1. (Photograph by the author).

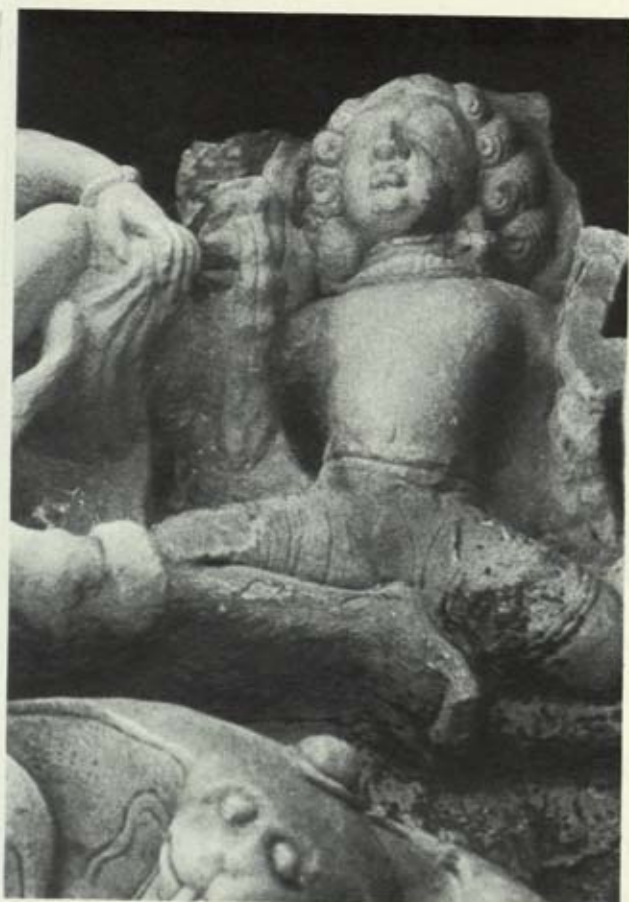


Fig. 7 — Vayu in the upper right-hand corner. Detail of fig. 1. (Photograph by the author).

wards Brahmā has been recognized in the figure represented in the centre of the group. In Gupta sculpture Brahmā is depicted sitting upon a lotus flower. He has three visible heads and two arms, holding a waterpot in his left hand and a rosary in his elevated right hand. In our sculpture the right hand is damaged. Mostly the hide of an antelope can be seen on his left shoulder. The identity of Brahmā in the Anantaśayana sculpture leaves no doubt (fig. 6). A similar figure of Brahmā is found on another panel of the same temple, that of Nara and Nārāyaṇa on the East side. In this case the hide of the antelope is substituted by the brahmanical cord (fig. 9).

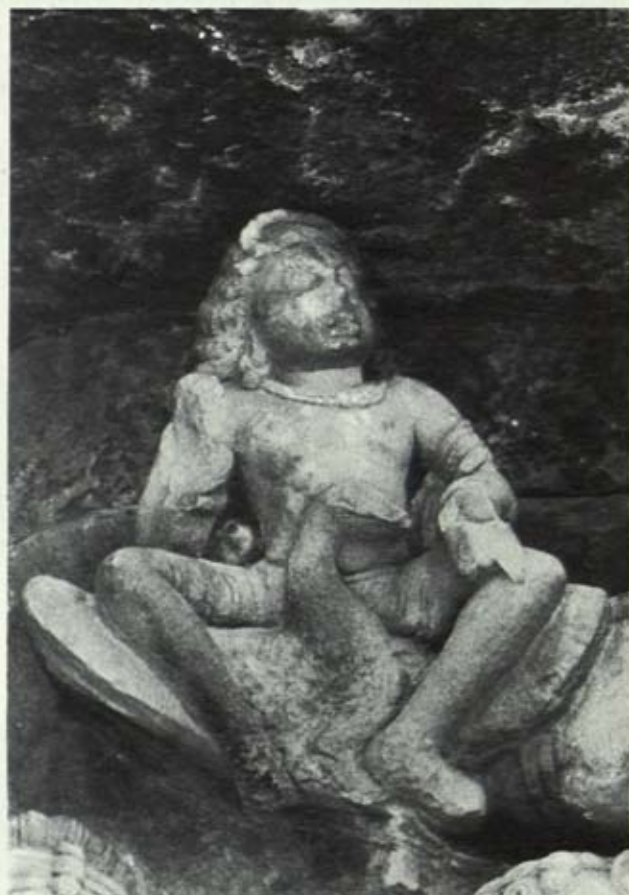


Fig. 8 — Varuṇa. Detail of fig. 5. (Photograph by the author).

The solution offered to distinguish the figure in the left-hand corner was to promote the goose to a peacock, and to change Brahmā into Skanda (Rao 1914: 111). Ever since that time everybody has seemed to see a peacock. There is only one exception. Debala Mitra (1963: 99 f.) remarks in a footnote that the bird is a goose, and that the male deity represents Varuṇa. Her observation has been inspired by her detailed analysis of the many figures which accompany Viṣṇu Varāha at Udayagiri, but she does not provide any further arguments, and nobody seems to



Fig. 9 — Brahmā. Detail of the upper part of the panel with Nara and Nārāyaṇa. Viṣṇu temple, Deogarh, 6th century AD. (Photograph by the author).

have accepted her idea. In the following remarks several reasons will be given that strengthen Debala Mitra's observation.

It is evident that the bird in the upper left-hand corner of the relief misses several characteristics of the peacock, such as the little bunch of feathers upon its head; clear peacock feathers or an outspread tail are not visible. But this is yet only negative evidence. Moreover, it appears that goose and peacocks are not always clearly distinguished. In his article about the temples of Osia, Bhandarkar (1912: 102, 114) gives a description of the Dikpālas of the temple no. I, which is dedicated to Harihara and dated c. 780 AD (Viennot 1976: 217). He mentions Varuṇa being once depicted sitting on a peacock. It seems, however, probable that a goose is meant⁷.

Another example is a sculpture belonging to the National Museum in New Delhi (fig. 10), which comes from Madhya Pradesh and is dated in the 6th century AD⁸. The male god

⁷ I could not find a photograph of this sculpture.

⁸ Acc. no. 67.37. Label: 'Kārttikeya, red-coloured sand-stone, Madhya Pradesh, 6th century A.D.'. According to information from the Museum the sculpture has not been published.

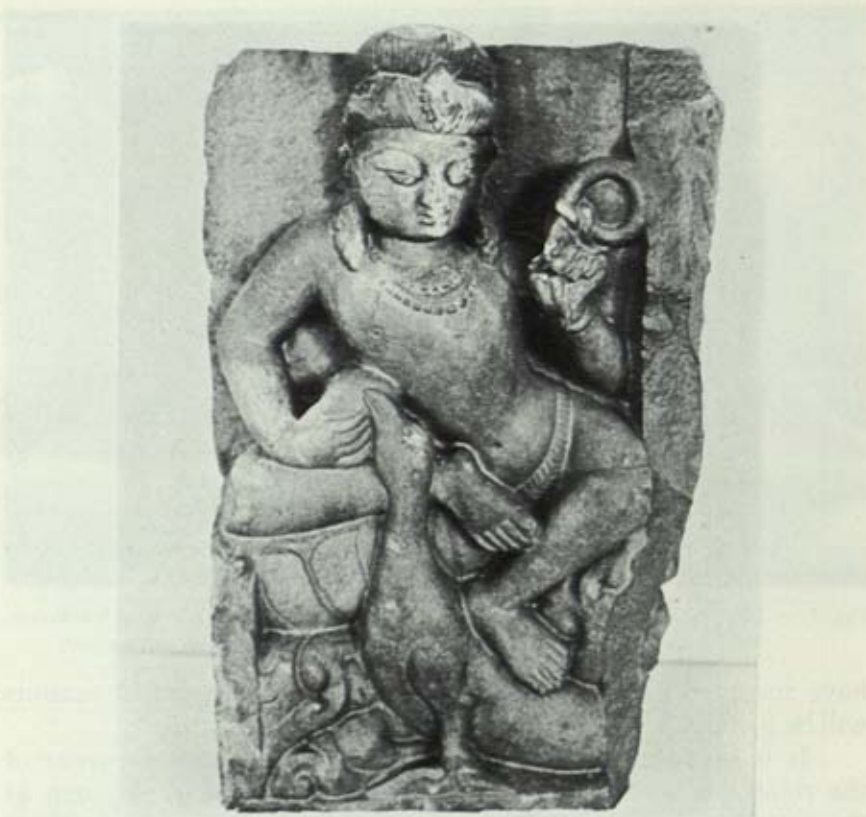


Fig. 10 — Varuṇa. Madhya Pradesh, 6th century AD. National Museum, New Delhi, Acc. No. 67.37. (Photograph by the author).

sitting on a bird has been labelled as Skanda, but in my opinion Varuṇa is represented. The figure is seated in the royal attitude, his left leg hanging down, the foot resting upon a bird. His right leg is on the seat, which consists of a lotus-flower growing out of the water. He has an oval-shaped attribute in his right hand, which might be a jewel. In his left hand is a noose, which is Varuṇa's distinctive attribute. The bird seems to be a goose. Moreover, it is joined with a lotus flower and water, which is very appropriate when Varuṇa, Lord of the waters, is meant.

The National Museum in New Delhi possesses another sculpture (No. 77.276), also dating from the 6th century, but coming from Benares (fig. 11). It is an architectural fragment, in which a male god on a bird is represented, who considering the attributes



Fig. 11 — Skanda. Benares, 6th century AD. National Museum, New Delhi, Acc. No. 77.276. (Photograph by the author).

of spear and fruit is rightly labelled as Skanda. The bird represented should be a peacock, but it is not very clearly distinguished from a goose.

An undisputable goose is depicted on an image in the Metropolitan Museum of Art (Lippe 1962: pl. 33), representing a male deity sitting in the royal attitude⁹. The attribute of the noose is visible in the right hand. The left leg rests upon a goose. Lippe identified the sculpture as being Varuṇa. Agrawala (1971: 139 fn. 3) is probably not right in criticizing him, when he states that Skanda-Kumāra is represented because of the third vertical eye in his forehead. The goose, the attribute of the noose and the

⁹ Label: Varuṇa, Northeast India, 8th century A.D. Stone, H: 12 1/2".

absence of any characteristics of Skanda can only point to Varuṇa.

From the foregoing it may appear that to distinguish geese from peacocks is not the only problem. In a few cases the birds are not clearly marked as a goose or a peacock. In other cases the goose is not recognized, because the association of Varuṇa with the goose is not very well-known. Banerjea (1956: 526 f.) states that the literary tradition of Varuṇa riding a goose is not substantiated by actual sculptures, which usually show the god standing or sitting on a *makara*. This view has already been challenged by De Mallmann (1963: 132), who found one exception, namely an image of Varuṇa belonging to the Paraśurāmeśvara temple in Bhuvanesvar, dating from the 7th century AD. Here a goose is depicted on the pedestal. The sculptures mentioned above may be added to the one noticed by De Mallmann. The statement of Banerjea is indeed justified with regard to the Varuṇa of the Mediaeval period. Then the *makara* is his animal. A sculpture of Varuṇa, which can be seen in the Prince of Wales Museum in Bombay shows Varuṇa sitting on a *makara*, together with his consort (Chandra 1974: pl. 130). The sculpture is dated in the 8th century AD. In Elephanta¹⁰ and Ellora¹¹ we see Varuṇa riding the *makara* among other attendant deities.

This development seems to be in accordance with the evidence from literary sources. In the early iconographic records Varuṇa is associated with the goose. *Nāṭyaśāstra* III 63 f. (Ghosh 1967: 28) describes Varuṇa as *haṃsavāhana*. Varāhamihira (*Brhatsaṃhita* 58 (57), 57) mentions Varuṇa riding a goose. The much later *Viṣṇudharmottara Purāṇa* (III 52, 1 ff.; Shah 1958: 173) gives a description of Varuṇa riding on a wagon with seven geese, but his banner is adorned with the symbol of the *makara*. In the *Agni Purāṇa* the *makara* is Varuṇa's animal, with one exception. De Mallmann (1963: 131 f.) noticed that Varuṇa is still

¹⁰ Elephanta, Cave temple, 7th century AD, sculpture of Siva Arddhanārīśvara; to the right of Siva's upper left hand (Härtel & Auboyer 1971: pl. 63).

¹¹ Ellora, Cave temple no. 29, panel of dancing Siva, upper right-hand corner: Varuṇa on a *makara* with a noose in his hand; Ellora, Gopura of the Kailāsanātha Temple, 8th century AD: Varuṇa on a *makara* with lotus in his hand, see Heston 1981-82: 219 f., fig. 5.

connected with the goose in a particular ritual context. In later iconographic works only the *makara* is mentioned.

The conclusion from this evidence may be that first, Varuṇa was associated with the goose up to the late Gupta period; second, that a gradual change has been taking place in the animal belonging to Varuṇa in post-Gupta times. This change of animals, from goose into *makara*, may reflect a change of function on the part of Varuṇa. De Mallmann (1963: 132) and Kuiper (1979: 132) already hinted at this change. The goose (Vogel 1962) is connected with water, but it is also a bird of passage. Before the rainy season the geese leave and disappear in the direction of the Himālaya, which is the residence of the gods of heaven according to Indian tradition. The goose as the *vāhana* of Varuṇa seems to confirm the ambiguous nature of Varuṇa, which has so clearly been demonstrated by Kuiper. The goose symbolizes Varuṇa's connections with the primeval waters and at the same time points to his nature as a Deva, an Āditya. But Varuṇa's role was gradually reduced to that of a Lokapāla of the Western direction and of a god of the oceans. The ocean is called *makarālaya*, the place where the *makaras* are at home. Varuṇa's ambiguous nature disappears, and the goose as a symbol of this double nature has seemed no longer appropriate.

For the sculpture at Deogarh we conclude that if the figure in the upper left-hand corner is Varuṇa, we expect him to be riding a goose in this period. What is more, he should be considered not merely as a Lokapāla, but rather as one of the Devas, in particular as one of the Ādityas belonging to the group of the Thirty-three gods of heaven.

According to ancient Indian tradition the Thirty-three (*trayastrīṃśa*) have their residence on the top of Mt Meru, their leader is Indra, or Śakra in the Buddhist works, their president is Brahmā. Filliozat (1951: 532 f.) when discussing this tradition with the help of Buddhist and Brahmanical sources speaks of two different concepts. When the cosmic mountain is represented in literature or in art, either the Thirty-three are described (or depicted) as the inhabitants of Meru, or the Lokapālas. Indra, for instance, is present either as the leader of the Thirty-three, or as the regent of the Eastern quarter and the king of the city of Amarāvati. Varuṇa is either the god of cosmic order and a member of the Thirty-three, or he is the guardian of the Western

direction. In the symbolism of the Phnom Bakheng discussed by Filliozat, the world of the gods is represented by the Thirty-three, not by the eight Lokapālas.

It is well-known that in early Buddhist art Brahmā and Indra appear by the side of the Buddha, attending to him or assisting him in several episodes of his life. They can be substituted, however, by the group of the four Lokapālas. The same symbolism of representing the world of the gods is differently expressed. From this evidence we may expect that these two concepts are also found in Hindu mythological reliefs of the Gupta and post-Gupta periods.

Proof of this can be found in the Viṣṇu Viśvarūpa sculptures, which have been studied by Maxwell (1973: 59 f.; 1975: 8 f.; 1983a: 41 f.; 1983b: 213 f.)¹², and in the Varāha relief at Udayagiri (Mitra 1963). Before examining these reliefs, it should be mentioned that the group of the Thirty-three, from Vedic times onwards, has consisted of the Rudras, the Ādityas and the Vasus. According to *Śatapatha Brāhmaṇa* VIII 4.3.16 (Kuiper 1979: 27) the Vasus, Rudras and Ādityas are separated from the undifferentiated world when heaven and earth become separated. *Jaimintya Brāhmaṇa* II 141 (Kuiper 1979: 27) relates that Prajāpati first created the Vasus, Rudras and Ādityas. The tradition of the gods of heaven consisting of the three groups mentioned is retained in the Epics and the *Purāṇas*. The leadership of the separate groups varies depending on time and tradition. Varuṇa, however, is mostly the chief of the Ādityas, Agni is very often the leader of the Vasus, the leadership of the Rudras is not constant, but they are gradually regarded as forms of Rudra-Śiva¹³.

The cosmic nature of Viṣṇu is very pronounced in the iconographical form of Viṣṇu Viśvarūpa, which bears some resemblance to the theme of Anantaśayana. Like a cosmic pillar Viṣṇu connects the netherworld with the world of the gods, the former being symbolized by the serpent Ananta, the latter by the Thirty-three. Most of the Viśvarūpa sculptures have been discussed by Maxwell. For the sake of argument only a few aspects are to be mentioned in the present context. In his explanation of

¹² I am grateful to the author for sending me the proof.

¹³ See *Viṣṇudharmottara Purāṇa* III, 72 (Shah 1958: 199).

the host of figures which is depicted in the nimbus of Viṣṇu Viśvarūpa, Maxwell perhaps lays too much weight upon an opposition between Rudras and Ādityas, symbolizing darkness and light. It may be suggested here, that both groups are present, because they form part of the inhabitants of heaven together with the Vasus, and as such refer to the world of the gods on the top of Meru.

This would mean that the Vasus also occur in these reliefs. They often do so, but they are mostly not recognized. In a Viśvarūpa sculpture from Deogarh, Maxwell recognized Rudras and Ādityas, and moreover the figure of Agni. The part below Agni is occupied by seven figures, which are very vague and difficult to distinguish. Maxwell suggests they might be the seven Ṛṣis. Although this possibility cannot be ruled out, it is more plausible that they form together with Agni the eight Vasus. A similar arrangement can be found in the Varāha relief of Udayagiri, where only the leaders of the group are iconographically distinguished (see below).

A Viśvarūpa relief from Changu Nārāyaṇa, Nepal, gives a complete picture of the world of the gods, although, unfortunately, the left half of the sculpture is seriously damaged. Pal (1970: 52 f., pl. 19) recognized Śiva on the top of the relief next to the disc of the sun. In the part below there are three rows of gods forming the eleven Rudras, and immediately following we see the eight Vasus appearing in two rows of four. Next are the four Lokapālas, although they form a separate group and are not included in the Thirty-three, and below them the two Aśvins are added, who sometimes make the number of Thirty-three complete. The part of heaven is clearly separated from the middle region by a cloud-like ornament. Because the Ādityas are normally represented in this category of sculptures they probably occupied the part of the relief which has broken off. In the Viśvarūpa sculpture of Kanauj (Pal 1970: 56, pl. 21), the eleven Rudras are found on the right half, the twelve Ādityas on the left and, in my opinion, the eight Vasus at the edge of the nimbus, although Pal calls them Bhairavas.

The iconographic pattern in a Viśvarūpa relief from Śamālājī (Maxwell 1983: 49 f.) has some resemblance to that of the Viṣṇu Anantaśayana sculpture at Deogarh. Apart from Viṣṇu, who is present in a number of manifestations, there are Brahmā,

Śiva, Varuṇa and Agni. It would seem that Rudras, Ādityas and Vasus in this case are only represented through their leaders: Varuṇa on the right-hand side as the head of the Ādityas, Agni on the left-hand side as the chief of the Vasus, Śiva as the representative of the eleven Rudras.

Additional evidence with regard to representations of the Thirty-three can be found in the Varāha sculpture at Udayagiri (Mitra 1963: 99 f.). The discussion is confined to the secondary figures in the upper right-hand part. Despite much damage Mitra recognized the figure of Brahmā right above Varāha in the centre (fig. 12). To his left a male figure is represented sitting astride on an animal. Mitra identifies him with Śiva on the bull (fig. 12a). To the left of Śiva there is a group of twelve deities, all of them with a round nimbus behind their heads. Apart from the first two, they are not iconographically distinguished from one another. But the first has a *vajra* in his left hand and is, according to Mitra, to be identified with Indra. The second has a noose and represents Varuṇa (figs. 12, 13, 13a). The group as a whole can be explained as the twelve Ādityas, Indra and Varuṇa being both reckoned among this group in the Epic and Puranic tradition. Then follow eight male figures, the eight Vasus according to Mitra. Again two of them are provided with iconographic characteristics (fig. 14): the first is Agni with flaming hair, the second is Vāyu with a garment blowing up in the wind. In the second row there are twenty figures, eleven of them with some characteristics of Śiva, such as the ascetic hair and the erect phallus. Mitra recognizes the eleven Rudras (fig. 15). The remaining figures do not concern us in the present context, but the nine that follow could represent the group of the Viśve Devāḥ. There are mostly nine of them and they have the appearance of gods (Shah 1958: 199).

The most important elements in this context are that, apart from Brahmā and Śiva, Indra and Varuṇa appear being the leaders of the Ādityas; Agni and Vāyu as the chiefs of the Vasus, all of them in the top row. Furthermore, the eleven Rudras are depicted in the second row, together with the nine Viśve Devāḥ. The world of the Thirty-three is completely present in this sculpture.

In the foregoing the attention has been directed to some iconographic phenomena which seem to have not been properly

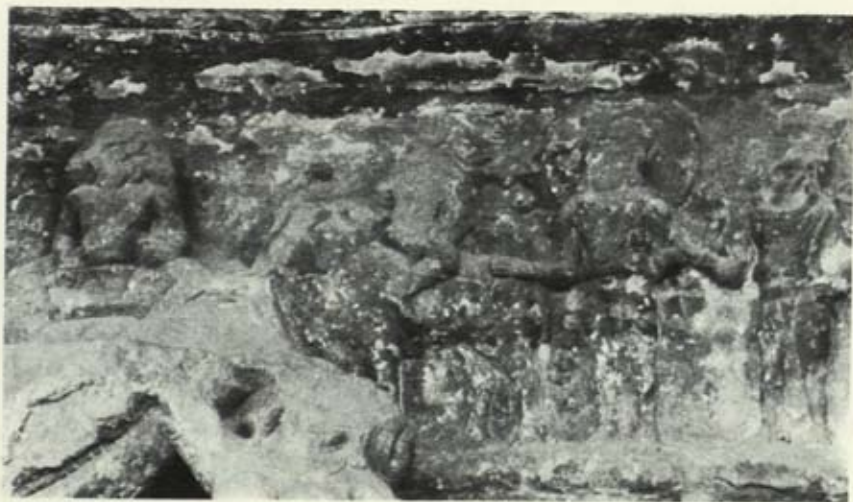


Fig. 12 — Brahmā, Siva on the bull and Indra. Upper part of the Varāha relief at Udayagiri, Madhya Pradesh, early 5th century AD. (Photograph by the author).

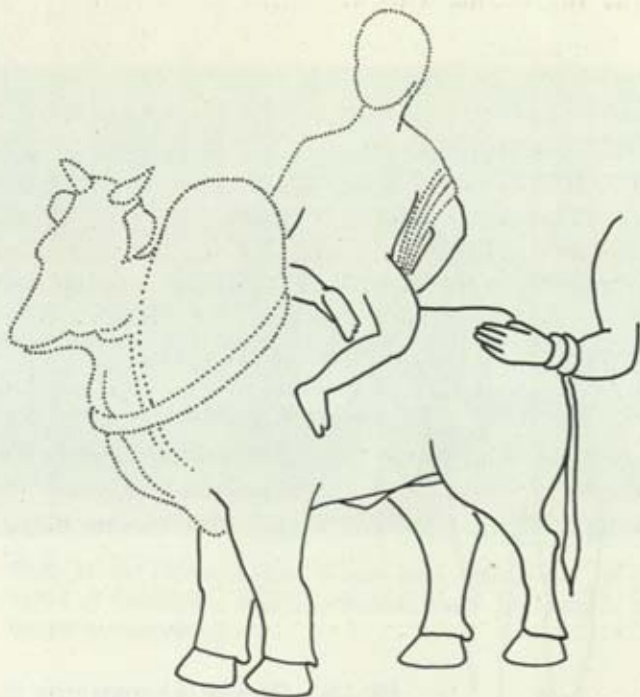


Fig. 12a — Drawing of Siva in fig. 12.



Fig. 13 — Varuna and four of the other Ādityas. Upper part of the Varāha relief at Udayagiri, Madhya Pradesh, early 5th century AD. (Photograph by the author).



Fig. 13a — Drawing of Varuṇa in fig. 13.



Fig. 14 — Agni, Vāyu and four Vasus. Upper part of the Varāha relief at Udayagiri, Madhya Pradesh, early 5th century AD. (Photograph by the author).



Fig. 15 — Four of the eleven Rudras. Upper part, second row, of the Varāha relief at Udayagiri, Madhya Pradesh, early 5th century AD. (Photograph by the author).

recognized. The appearance of Varuṇa as the leader of the Ādityas and riding a goose could be established in Hindu sculpture of the Gupta and Late Gupta periods. Equally important is the representation of the world of the Thirty-three, either complete or through their leaders.

From this evidence it may be concluded that the figure in the upper left-hand corner of the Anantaśayana relief at Deogarh (fig. 8) is very likely to be Varuṇa riding a goose. His attributes cannot be recognized because of the damage. He wears a necklace and a kind of crown. Next to him is Indra sitting upon Airāvata, his right hand holding a *vajra*, his left hand grasping a slip of his garment (fig. 5). Brahmā is in the centre¹⁴; Śiva together with Pārvati are depicted sitting on the bull¹⁵. The attribute in Śiva's right hand cannot be distinguished.

Varuṇa is present, because he stands for the Ādityas; Indra and Brahmā are the foremost representatives of the Thirty-three; Śiva is to be regarded as the representative of the eleven Rudras¹⁶. The world of the Thirty-three is complete but for the Vasus or their representative.

The figure in the upper right-hand corner (fig. 7) is difficult to identify, because there are practically no iconographic indications left. An animal is not represented. The figure is depicted in a flying attitude. There is much damage near his head and his left hand. The only detail which may give some indication is the fluttering piece of cloth in his right hand. An image from the Somapura Stūpa, Paharpur, has wrongly been identified with Yama (Dikshit 1938: pl. XXXII (a) 39; Asher 1980: pl. 222). De Mallmann (1963: 133 fn. 5) has already pointed out that Vāyu is represented. The image is in perfect accordance with a passage

¹⁴ Brahmā, of course, also takes part in the myth represented here. He is the first deity appearing and is seated on the lotus which emerges from the primordial waters behind Viṣṇu. He is threatened by the two demons, Madhu and Kaiṭabha.

¹⁵ That the name of Nandin is not correct with regard to Śiva's bull has been demonstrated by Bhattacharya (1977: 1545 f.).

¹⁶ There is a clear emphasis on the figure of Śiva, who is the only one represented with his consort. This is most probably due to the importance of Śiva as one of the great gods next to Viṣṇu and Brahmā. In this respect, Śiva is more than the leader of the Rudra group. He occupies the same special position in the Viśvarūpa reliefs and the Varāha relief at Udayagiri.

in the *Viṣṇudharmottara Purāṇa* (III 58; Shah 1958: 181), in which it is stated that Vāyu should have two arms, his garment being filled by the wind (*vāyvāpūritavastras*); the ends of his garment are held in his hands. There is no mention of a *vāhana* or animal in the text. In early iconography, from the Kuṣāṇa period onwards (Rosenfield 1967: fig. 76), Vāyu's main characteristic is the inflated garment¹⁷. Its fluttering ends are clearly visible in the image at Paharpur. As this fluttering end of the garment in the right hand of the flying figure of the Anantaśayana relief seems to be the only indication left, an identification with Vāyu seems at least better than any other suggestion. The part of the garment which should be visible above his head has broken off.

Agni and Vāyu both appear as the leaders of the eight Vasus in Udayagiri. When the other deities in the upper part of our sculpture stand for the Thirty-three, the presence of Vāyu as the leader of the Vasus is perfectly understandable.

The conclusion may be that the group of gods depicted in the upper part of the Anantaśayana relief at Deogarh represents the heaven of the Thirty-three. After all, they immediately appear when creation has begun, according to Indian cosmogonic tradition. The myth of creation would have been incomplete without them.

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¹⁷ Vāyu appears as one of the Dikpālas on the Svarga Brahmā temple, which is dated at the end of the 7th century AD; he is depicted standing, with two arms; a flag is in his right hand; the ends of the fluttering garment are held in his hands (Michell 1973: 80 f.).

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SIMON LAWSON

Dhāraṇī Sealings in British Collections

There are four types of Buddhist clay sealings found in India. This article is about *dhāraṇī* sealings, but to place them in context, let us consider the others briefly. Firstly, there are the so-called 'creed sealings' (Fleet 1908: 37). Following the example of Hsüan-tsang, I prefer to call them *dharma śāstra* sealings, meaning 'relic-of-the-law sealings' (Beal 1884: 146). The Buddhist law was represented on these sealings by the *Gathā* of the Chain of Causation: *Ye dharmā hetuprabhavā hetuṃ teṣāṃ tathāgato hy avadat teṣāṃ ca yo nirodha evaṃ vādī mahāśramaṇaḥ* (Oldenberg 1879: 40). This can be translated as follows: 'All things arise from a cause, the Tathāgata has explained the cause. This cause of things has been finally destroyed. Such is the teaching of the great Śramaṇa' (Takakusu 1896: 151). The chief use of these sealings was consecration (Lawson 1982: 29-30). I agree with Prof. Taddei that you will almost always find them inside miniature clay *stūpas* (Taddei 1970: 82). I show two examples where the *stūpa* has been broken and the sealing can be seen. The first is from Dharāwat, near Gayā (fig. 1) The second, from an unknown provenance, is in the Ashmolean Museum, Oxford (fig. 2).

The second type of sealing is the one made by monks of the great monasteries. They probably denoted possession of something by the *mahāvihāra*. I show two examples from Nālandā (fig. 3). The fine 8th century AD script reads, *Śrī Nālandā Mahāvihārīyārya bhikṣu saṅghasya*. Monastic sites usually also have simpler sealings with personal names on them (Sastri 1942: pl. VII). Rules were laid down restricting the wearing of sealings made of precious metals, so it seems likely that possession of them was a monkish affectation (Csoma de Körös 1836: 86).

Thirdly, there are the so-called 'votive plaques' found at monasteries and holy sites. These depict Buddhist deities or *stū-*



Fig. 1 — Broken miniature *stāpa* from Dharāwat, near Gayā. Patna Museum, No. 10807.

Fig. 2 — Broken miniature *stāpa*. Ashmolean Museum, Oxford, No. X 2348.



Fig. 3 — Nālandā sealings. Courtesy, Archaeological Survey of India, Neg. No. 572-73.

pas in low relief. They almost invariably have the *Gāthā* of the Chain of Causation as well. (From hence I shall call it the *Gāthā*, for short). I show two examples from the Ashmolean collection, both made in the 9th century AD. One depicts Mañjuśrī (fig. 4), while the other depicts Avalokiteśvara (fig. 5). I also show a Burmese example, made in the 11th century AD, which depicts Gautama Buddha between two standing Buddhas (fig. 6). If this type of sealing ever served the purpose of a religious souvenir, this was a secondary purpose, in my opinion. We have a vivid description of an abbot making them (Cousens 1975: 15). It appears that he was performing a religious exercise and I believe that this was their true purpose.

Judging from what archaeologists have found, Indian Buddhists made sealings from about the time of Christ onwards (Lawson 1982: 13). From the time of the Guptas, they made large numbers. The earliest sealings were all monastic ones. In Gupta times the *Gāthā* appeared on sealings depicting *stūpas* and deities. In post-Gupta times it appeared alone. It was in that period that the fourth type of sealing appeared. This was the *dharaṇī* sealing (figs. 7-12).

Now, let us be clear about the uses of all the sealings. The *dharma śarīra* sealing was for consecration, usually of model *stūpas*. Monastic sealings were either for monastery business or monkish affectation. The votive plaque was probably made by the monks as a religious exercise. Then it may have been given to pilgrims or kept in the monks' cells or chapels. *Dharaṇī* sealings were concerned with the magical power of the text impressed on them, which gave either protection or power (Waddell 1925: 156-7). I have never seen one with a suspension hole, so I presume they were carried in a pocket or bag or kept on an altar or shelf in the cell. I should write a few words about *dharaṇīs*¹. They are short formulas of words or verses, sometimes in the form of *sūtras* or discourses, usually attributed to Buddha. They were credited with irresistible magical power, which came in to force when the formula was repeated, remembered or worn. *Dharaṇī* comes from the Sanskrit *dhṛ* 'to hold'. In Pali and Pra-

¹ This is taken from Waddell's work, reference above.



Fig. 4 — Vādirāja, a form of Mañjuśrī (ht. 7.5 cm). Ashmolean Museum, Oxford, No. X 2076.

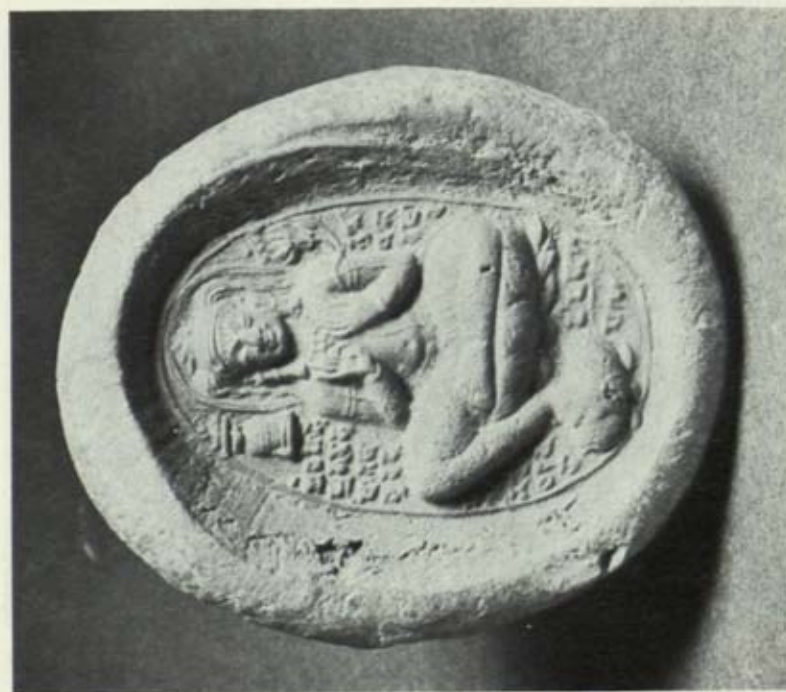


Fig. 5 — Avalokiteśvara Padmapāṇi (ht. 9.9 cm). Ashmolean Museum, Oxford, No. X 2340.



Fig. 6 — A Burmese sealing depicting Gautama between two standing Buddhas (ht. 15.1 cm). Ashmolean Museum, Oxford, No. 1964-166.

krit *dhāraṇa* means 'holding' or 'supporting'. As L.A. Waddell wrote in 1925, 'The word *dhāraṇī* literally means « The holder, or vessel (of claimed power) »' (Waddell 1925: 156-7). He also states (*ibid.*) that the *dhāraṇī* is

addressed to particular spirits or deities whom it propitiates or coerces. Latterly, its power was extended as a luck-compelling talisman to encompass all worldly desires, to achieve miracles and mystically for spiritual advancement by short cuts to Bodhisatship or to Nirvāṇa itself.

We will consider this development later on in this article.

The British Museum in London has twenty-one *dhāraṇī* sealings and the Ashmolean Museum in Oxford has eight. Some are too worn to be read, but I have read nineteen of them. Five of these, in the British Museum, were found at Bodh-Gayā by General Cunningham (Lawson 1982: 339-42, 373-8). They show a



Fig. 7 — A sealing from Bodh-Gayā (ht. 4.4 cm). British Museum, No. 87 7-17 105c.



Fig. 8 — A sealing, possibly from Sankisa (ht. 5.2 cm). British Museum, No. 87 7-17 106b.

six-line *dhāraṇī* with a script of the 9th century AD (fig. 7). There are three more, possibly from Sankisa, which have the same *dhāraṇī* preceded by the *Gāthā* and once again, these have a script of the 9th century AD (Lawson 1982: 379-83) (fig. 8). The remainder have the same long *dhāraṇī*. They are a random selection. Five were found by Cunningham at Śrāvastī (Lawson 1982: 357-72) (fig. 9). The rest have no known provenances, but the scripts date them from the 8th to the 10th centuries AD (Lawson 1982: 129-32), so they cover a period of at least two centuries. Their different styles suggest that they were popular over a fairly large area. This possibility is supported by the fact that the same *dhāraṇī* was found on sealings at Nālandā (Ghosh 1941-2: 172), about 275 miles from Śrāvastī as the crow flies. Of those with unknown provenances, I illustrate two in the Ashmolean Museum, Oxford (Lawson 1982: 206, 213). The first has an 8th century AD script (fig. 10), while the second dates from the 9th century AD (fig. 11). I also show an example in the British Museum with an 11th century AD script (Lawson 1982: 390) (fig. 12).

The shorter *dhāraṇī* found by Cunningham at Bodh-Gayā reads as follows:

Om triyadhvi sarva tathā
gata hṛdaya garbha jvala
dharma(d)dhātu garbha saṃhāra
svayaṃ saṃśodhaya pāpaṃ
samantāduṣṭīṣa vimāla
viśuddha svā hāḥ!

This means (Lawson 1982: 34, 47):

Reverence to the Essence of all the Tathāgatas! O Essence, shine forth, and through that shining, may one draw near to the Essence of the Ultimate Buddha (Dharmadhātu). Yourself purify the evil all around, O spotless Uṣṇīṣa, O pure Uṣṇīṣa.

As you see, this is addressed to *uṣṇīṣa vimāla*, the spotless *uṣṇīṣa*. She is one of the four *uṣṇīṣa* deities, all of whom are feminine (Hopkins 1981: 240-1). It besought her protection from evil. Cunningham could not read it and he commented as follows in his book on Bodh-Gayā (Cunningham 1892: 51):



Fig. 9 — A sealing from Śrāvastī (ht. 6.4 cm). British Museum, No. 87 7-17 104b.

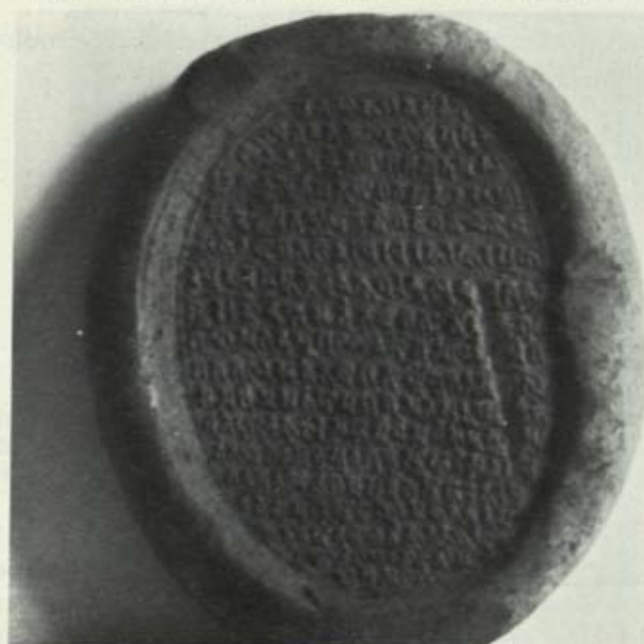


Fig. 10 — A sealing of unknown provenance (ht. 7.6 cm). Ashmolean Museum, Oxford, No. X 2330.



Fig. 11 — A sealing of unknown provenance (ht. 5.6 cm). Ashmolean Museum, Oxford, No. X 2332.

I do not expect they will yield any valuable information, as they most probably contain, in addition to the well-known creed, only a few religious formulae, as in the last line of Fig. 6, which reads *viśuddha swāhā*.

Actually, the *dhāraṇī* was quite well known. It is available to us in Tibetan texts. The Co-Ne edition of the *bsTangyur* includes a version of it with a few small differences². This version is

² Dr Paul Williams of Bristol University told me this in a letter dated 11th March 1982. He gave me the reference *bsTan-'gyur rgyud 'grel Thu* fols. 287b-288a. I was unable to consult this edition, but I checked it in the Derge edition, Section 269a³-320b² (Sendai 1934) and there the *dhāraṇī* is almost identical.

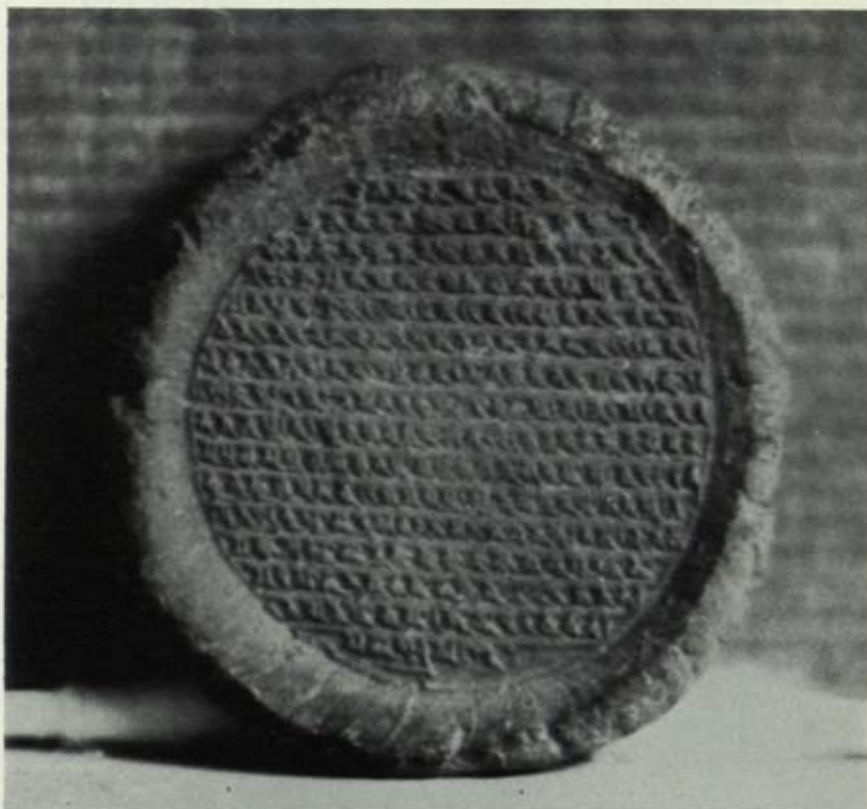


Fig. 12 — A sealing of unknown provenance (ht. 4.15 cm). British Museum, No. 87 7-17 170.

included with a commentary by an Indian teacher called Sahaja-lalita. Tārānātha tells us that he lived in the 8th century AD (Chattopadhyaya 1970: 251). In Tsong-ka-pa's *The great exposition of secret mantra*, 2 and 3, translated by Jeffery Hopkins, we read that Vimaloṣṇīṣa is one of the four Uṣṇīṣas of the Tathāgata family, the others being Vijāya Uṣṇīṣa, Sitatapatra Uṣṇīṣa and Jvala Uṣṇīṣa (Hopkins 1981: 240)³. The index of the Lhasa

³ This information comes in an appendix to Hopkin's translation of Tsong ka pa's work and the author of the work translated in that appendix is actually Pan-chen So-nam-drak-ba, who lived from 1478-1554 AD (Hopkins 1981:258).

bKa'-'gyur, which includes another version, informs us that it was translated by Jinamitra, Śilendrabodhi and Ye shes sde, who lived in the 9th century AD⁴. So these *dhāraṇī* sealings, found by Cunningham at Bodh-Gayā, are evidence of the cultural links between India and Tibet at the time when the Vajrāyāna was still strong in the land of its birth.

The longer *dhāraṇī* reads as follows:

Om namo bhagavate vipula vadana kanchan akshipta prabhāsa ketu purvva tathāgatāya namo bhagavate Śākya Munaye tathāgatāyārhatē samyak sambudhāya tad yathā om bodhi bodhi bodhi sarva tathāgata gocara dhara dhara hara hara prahara prahara mahābodhi citta dhare culu culu śata raśmi saṃchodite sarva tathāgatabhīṣikte guṇa gaṇamate Buddha guṇāvahāse mili mili gagana tāla pratiṣṭhita sarva tathāgatādhiṣṭhite nabhastale śama śama sarva pāpa praśamane sarva pāpa viśodhane hulu hulu mahābodhi mārga saṃprasṭhite sarva tathāgata pratiṣṭhita śuddhe svā hā om sarva tathāgatavyavalokite jaya jaya svā hā om huru huru jaya mukhe svā hā Ye dharma hetu etc. etc.

As I am about to explain, this text consists of praise offered to Gautama Buddha via an unspecified female deity. Here and there are repeated *mantras*, which I have written in roman script, at the end is the *Gāthā*. It may be translated as follows (Lawson 1982: 35):

Om! (Hail!) Obeisance to the Blessed One, to the Tathāgata who is preceded by the radiant banners shed by the gold of his numerous faces; Obeisance to the Blessed One, Sage of the Śākyas, Tathāgata, the Arhat who is fully enlightened, in the following manner: 'Om! Perfect, perfect, perfect perfect Wisdom! O you, who bear, who bear all the Tathāgatas, hara hara prahara prahara, O you, great enlightened One, supporter of intelligence, culu culu, O you who have been stirred up by the sun, consecrated by all the Tathāgatas, who possess innumerable good qualities, who have the brilliance of the Buddha's qualities, mili mili, O you who are established in the heaven, firmly settled in the sky by all the Tathāgatas, śama śama, O you who lay all evil to rest, who purify all sin, hulu hulu, O great enlightened One, who has set out along the Path, O pure One, firmly established by all the Tathāgatas, Hail! Om! You who behold all the Tathāgatas, jaya jaya, Hail, Om! You who behold all the Tathāgatas, jaya jaya, Hail, Om! huru huru, O source of all victory, Hail! All things arise from a cause, the Tathāgata has explained the cause, this cause of things has been finally destroyed; such is the teaching of the Great Śramaṇa'.

⁴ This information also comes from Dr Williams in his letter of the 11th March 1982. The Index is vol. 100.

The *dhāraṇī* begins with formulas of obeisance to Gautama Buddha. These usually take up five of the eighteen lines and they go as far as *tad yathā* which means 'in the following manner'. These initial formulae are in the dative case. Then the main part of the *dhāraṇī* follows. In it the praises are in the feminine vocative. Gautama is approached via a female or rather, I would suggest, his name is included as a formality in a *dhāraṇī* where nearly all the worship and interest were directed towards the female deity. Who is she? She bears all the Tathāgatas, is consecrated by them, is a supporter of intelligence, possesses innumerable good qualities, is established in the heavens and purifies all sin. Lip-service has been paid to Gautama, but this female gets most of the praise. A clue to her identity may be found in the words *citta dhare* in the middle of line four above⁵. They mean 'supporter of intelligence'. They call to mind the ideal of perfect wisdom, worshipped in the form of the female *bodhisattva* Prajñāpāramitā. I have not found this *dhāraṇī* in the extensive *Prajñāpāramitā* literature, but I have found another which follows the same format. It is a *Prajñāpāramitā dhāraṇī* in E. Conze's *Selected Sayings from the Perfection of Wisdom* (Conze 1968: 123-4). It has formulae sandwiched between commentaries. Thus Gautama speaks to Bodhisattva Avalokita and teaches him to pay homage to him first, 'homage to the Triple Jewel, homage to Śākyamuni, the Tathāgata, the Arhat, the fully enlightened one, etc. etc.'. This corresponds to the first part of our *dhāraṇī*. After it has been explained what power this homage gives, the recitation continues in a similar vein to our *dhāraṇī*: 'Om. May I conquer, may I conquer, possessor of Wisdom, possessor of Wisdom ... Goddess ... Protectress ...'. Gautama then explains, 'This, O son of good family, is the Perfection of Wisdom in the ultimate sense, the genetrix of all the Buddhas, the mother of the Bodhisattvas, giver of enlightenment, remover of evil... etc.'. On the sealings there was no room for the commentary. The *dhāraṇī* had to suffice by itself. But apart from that, there is a fairly close similarity. Therefore it seems quite likely that this large *dhāraṇī* is addressed to Prajñāpāramitā.

⁵ See fig. 9, where the words may be read in the eighth line from the top, akṣaras 5 to 8.

Earlier I quoted Waddell's opinion that the first *dhāraṇṭ*s were addressed to particular deities, while the later ones were 'luck compelling talismans'. Does this group shed light on his opinion? Yes, I think that it does. The earliest, with an 8th century AD script (fig. 10), does not mention a deity by name, though I think that it may be addressed to Prajñāparamitā. The other sealings with the same *dhāraṇṭ* can be dated in the 9th and 10th centuries AD (figs 9-12). Although the deity is not named, there is a recitation of her powers and attributes, probably to give powers and protection to the reciter. So our earliest *dhāraṇṭ* conforms to Waddell's late type. On the other hand, the short *dhāraṇṭ* with the Uṣṇīṣa Bodhisattva's name appears on sealings of a later date than the earliest of the other type (Fig. 7). It praises the essence of all the Tathāgatas and asks the Spotless Uṣṇīṣa for protection from evil. The specific praise and specific request put it closest to Waddell's earlier type. The *dhāraṇṭ* may well be earlier than the sealing which bears it, but excepting that possibility, we have a reversal of Waddell's development. This suggests that it was complete by the 8th century AD.

I should stress that, apart from the group being considered here, all the other *dhāraṇṭ* sealings actually dated by the authors of the reports are said to be either 9th or 10th century AD (Lawson 1982: 48-9; Mitra 1981: 31). The 8th century sealing is interesting, therefore, for being one hundred years earlier than the norm. It presents us with the possibility that *dhāraṇṭ* sealings had already become 'luck compelling talismans' by that time⁶. The chief questions are, when and where did *dhāraṇṭ*s acquire importance for the power they could give to the reciter? The answers are, in the Tantric Buddhist age, chiefly in Pāla Bengal and Bihar, in the great Buddhist monasteries such as Nālandā, Vikramaśīla and Ratnagiri (Lawson 1982: 48-9). The 8th century AD sealings are important for pushing the 'Dhāraṇṭ age' back a hundred years. Is it possible to accept this earlier date? I do not see why not. At the end of it, the first great Pāla king, Dharma-

⁶ This is assuming that one accepts Waddell's hypothesis. This is a large assumption, I admit, requiring more space than I have here for discussion. But if one traces the history of sealings back from their modern use as *ts'a-t's'as* in Tibet to Pāla times, I believe one can accept it. See Lawson 1982: 33-49, in which I discuss *dhāraṇṭ* sealings.

pāla, ruled from c. 783-818 AD. He established the monasteries of Somapura and Vikramaśīla and gave endowments to Nālandā (Asher 1980: 118 fn. 10). At Nālandā, for example, a new and rich phase of art production began in the 8th century. There is the large and famous black stone image from Site No. 3 (Asher 1980: pl. 162), depicting either Samantabhadra or Avalokiteśvara, which has the *Gāthā* in 8th century AD script on the verso (Asher 1980: 81). There is also the large stone 12-armed figure of Avalokiteśvara from Site No. 3, which Asher believes was made at the same time (Asher 1980: 81, pl. 163). If you agree with his dating, then you accept the latter figure as an early example of the complex Pāla tantric Buddhist art. These sculptures, and others shown by Asher (Asher 1980: pls. 161-8) and *dhāraṇī* sealings are two manifestations of the same phase of Buddhism. If you accept that the sculpture was made in the 8th century, you should not find it difficult to believe that the *dhāraṇī* sealings were as well.

In studying these *dhāraṇī* sealings, which have lain so long in the dusty drawers of museums, I have been carrying out a form of secondary archaeology. When originally found, they were not felt to be of special interest, if we are to judge by Cunningham's remarks on our Uṣṇīṣa *dhāraṇī* (Cunningham 1892: 51). Nowadays, we can see their importance. Consider the infinite care taken to make the tiny *akṣaras* on the sealing from Śrāvastī (fig. 9), or the beautiful script on the Uṣṇīṣa *dhāraṇī* (fig. 7). Clearly, these objects were thought worthy of an infinite amount of skill and patience. We do not have to look far to find out why this was so. There is an inscription, now in the State Museum in Bhubaneswar, which tells us that the construction of a single *caitya* with a deposit of a *dhāraṇī* inside it confers on the donor the merit of the erection of one lakh of *Tathāgata-caityas* (Ghosh 1941-2: 173). It was with hopes such as that that the Buddhist monks of the Pāla period made exquisite seals, with which they stamped out the *dhāraṇī* sealings.

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GOURISWAR BHATTACHARYA

The Newly Discovered Buddhist Temple at Nālandā

The excavations of the Buddhist ruins at Nālandā started as early as 1915-16 and continued as late as 1953 (*Ancient India* 1953: 148-9)¹. The results of these excavations are well-known to the scholars. In 1975-76 the Mid-Eastern or the Patna Circle of the Archaeological Survey of India in following up the clearance work of 1973-74 completely exposed a rectangular, brick-built temple-complex of great importance at a place called Sarai Mound, within the compound of the vast excavated area (*Indian Archaeology* 1975-76: 8-9)². It is to the right as one enters through the gate (see plan in Ghosh 1971: pl. IX; here fig. 1 — the location of the newly-discovered Buddhist temple on the plan is ours). The rectangular temple, which is badly damaged, and of which the upper portion is completely demolished, measures 31.70 × 22.70 m (*Indian Archaeology* 1975-76: pl. XA; here fig. 2).

The central, rectangular temple was surrounded by four smaller temples, one at each corner, of which the plinths are remaining. Hence this was a *Pañcāyatana* type of temple. Remains of cells, perhaps used by the worshippers, are still visible in the compound of the temple. The whole area was surrounded by a brick-wall, a portion of which at the back, still remains. All along the wall there was a drain to release the accumulated water.

¹ I am thankful to Dr Debala Mitra, retired Director-general, Dr H. Sarkar, Director, Mr K.P. Gupta, Superintending Archaeologist, Dr B. Nath, Asstt. Superintending Archaeologist, Mid-Eastern Circle, Archaeological Survey of India, for their kind help.

² Actually the excavation was started as early as 1947 by the late Vijayakant Mishra, the then Superintending Archaeologist of the Mid-Eastern Circle (Nath 1983).

NĀLANDĀ: DISTRICT PATNA, EXCAVATED REMAINS

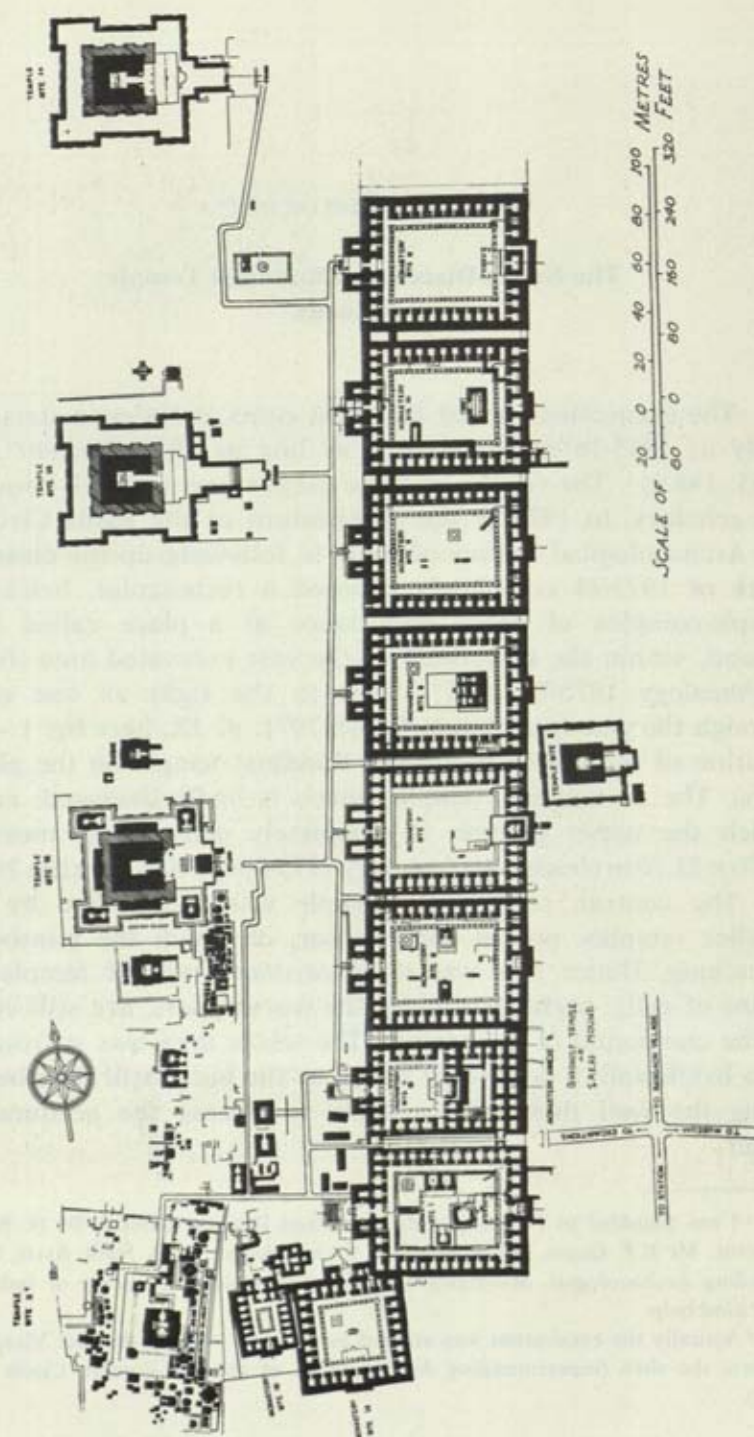


Fig. 1 — Plan of the excavated area at Nalanda.



Fig. 2 — A view of the excavated Buddhist temple at Sarai Mound.



Fig. 3 — Front view of the temple, right wing.

The external façade of the temple-structure is of plain brick masonry and the basement is found plastered with lime-mortar. The temple faces East. The entrance to the temple is flanked by two projecting arms (6.50×5.35 m) having moulded decorations, pilasters and niches which contained images of deities and other figures (*Indian Archaeology* 1975-76: pl. XB; here fig. 3).

Such figures were found at the time of earlier debris clearance. The forecourt between the projecting arms screened by a low wall (7.75×1.21 m) is approached by a flight of steps, in between which a corbelled drain (60×25 cm) is to be met with. A heavy stone slab (2.50×0.75), probably used as a door-sill of the entrance to the sanctum, was recovered from the entrance (*Indian Archaeology* 1975-76: 9).

What is very striking is the sanctum of the temple. Above a huge stone pedestal, measuring 8 m in length (Nath 1983), inside the sanctum, on a large, stucco double-petaled lotus of light red colour the damaged feet of a huge standing figure, no doubt of the Buddha, are to be seen. The lotus is badly damaged and the feet are upto the ankles of the legs, there being no trace of the rest of the figure (fig. 4). Each foot measures nearly a metre. From this fact one may well guess that the huge stucco Buddha figure was nearly seven metres high. We do not know the existence of such a huge figure of the Buddha or any Buddhist deity from any part of India.

What is very interesting, there are remains of paintings in blue lines over white-washed lime plaster, of continuous scrolls and a series of rosettes on the northern, southern and western walls inside the sanctum (*Indian Archaeology* 1977-78: 16, pl. XIII A — the colour is not black as mentioned in the Review). But still more interesting are the paintings in front of the pedestal in two panels, one above the other³.

The length of the panels is about 4 metres and the breadth about 2 metres. The colours used are blue, red, ochre and black on white background. Although the paintings are in a badly damaged condition, especially the figures of the upper panel, we are in a position to identify the central figure of the upper panel

³ About these paintings the Review says, 'the figures in two rows depicted a seated lady (Jhambala?) with her one hand raised (pl. XI A), an unidentified human figure and a standing elephant (pl. XI B)' (*Indian Archaeology* 1975-76: 9).



Fig. 4 — The huge stucco feet of the standing Buddha.

and most of the figures of the lower panel. The panels are demarcated by rows of eight-petaled flowers (Nath 1977; 1983). The figures of the lower panel are much bigger than those of the upper panel and stylistically they are also different. (For a full view of the two panels, Nath 1983: pl. III).

In the upper panel (fig. 5) the two-armed, seated male figure in the middle shows *varada-mudra* with the right hand and holds the stalk of a full-blown lotus in the left hand. He is no doubt the well-known Bodhisattva Avalokiteśvara. The central figure sits in a niche made of two pillars. The other figures on both of his sides are difficult to be identified. In the lower panel there are

several figures. The central, corpulent male figure, also seated, holds in his right hand a fruit-like object and in the left hand an animal-like object as a money-bag (fig. 6). He is also shown seated in a niche.

To his proper right there is another seated male figure, the attributes of whose hands are difficult to ascertain. Close to this figure there is a trotting horse (fig. 7). The small object beyond the horse is difficult to be seen. Similarly, to the proper left of the central figure (fig. 6), there is a seated female figure holding a circular object in her right hand, which seems to be a mirror. And close to her there is a beautiful, majestic figure of an elephant (fig. 8). And at the extreme end there is perhaps a circular object. These seven figures are no doubt the well-known Seven Jewels or *Sapta Ratnāni* of the Buddhist literature⁴. Now, the Buddhist scholars know well that Prince Siddhartha had two choices before him. He could have been either a Universal Monarch, *Rājacakravartin* or a Great Monk, *Mahāśramaṇa*. The Buddhist literature further informs us that a *Rājacakravartin* should possess Seven Jewels or Treasures, *Sapta Ratnāni*. They are the Jewel of Wheel, *Cakra-ratna*, the Jewel of Elephant, *Hasti-ratna*, the Jewel of Woman, *Strī-ratna*, the Jewel of House-holder or Treasurer, *Gṛhapati-ratna*, the Jewel of Minister, *Parīṇāyaka-ratna*, the Jewel of Horse, *Aśva-ratna* and the Jewel of Gem, *Maṇi-ratna*. In our case *Gṛhapati* in the centre has assumed the form of Jambhala, the Buddhist deity of fortune, and this is a special development in Eastern India, generally represented on art objects, during the Pala period⁵. We illustrate a socle fragment of a Buddhist figure (fig. 9). The object is from South Bihār, now preserved at the Museum of Indian Art, Berlin, No. MIK I 580⁶. In the middle of the socle recess the corpulent Jambhala is shown seated on a lotus. He holds a fruit (*Jambhara* or *Mātu-lūṅga*) in his right hand and perhaps the money bag in the shape

⁴ For the Seven Jewels, *Dīgha-Nikāya*, XVII 1.7: *Mahā-sudassana-suttanta* etc., and for an elaborate story on the Jewels, *Lalitavistara*, ch. 3: *Kulapariśuddhiparivarta*.

⁵ Unfortunately Nath could not identify these important figures of the panel excepting Jambhala.

⁶ I am thankful to Prof. Dr H. Härtel, Director of the Museum of Indian Art, Berlin, for his kind permission to publish it.



Fig. 5 — Central portion of the upper panel.



Fig. 6 — Central portion of the lower panel.



Fig. 7 — Left side of the lower panel.



Fig. 8 — The majestic elephant at the right side of the lower panel.



Fig. 9 — Socle fragment from South Bihar. Museum für Indische Kunst, Staatliche Museen Preussischer Kulturbesitz, Berlin (West).

of a female mongoose (*nakulikā*) in his left hand. Two pots are hanging on top, one at each side, with mouth downwards, perhaps dropping down jewels. At the proper right of Jambhala sits a male figure holding a sword in his right hand. He is no doubt *Pariṇāyaka-ratna*. *Pariṇāyaka-ratna* mobilizes the army of the *Cakravartin*; therefore, he is represented here with a sword. Close to him is *Cakra-ratna*, and at the extreme end the caparisoned *Hasti-ratna*. Similarly, at the proper left of the central figure sits a young woman in a very graceful attitude holding a mirror in her right hand. She is *Strī-ratna*. Close to her is the Jewel of Gem on a lotus, *Maṇi-ratna* and beyond that a caparisoned horse, *Aśva-ratna*. Unfortunately, we cannot say definitely which was the deity seated on this socle, most probably the Buddha Śākyamuni. The fragment should be dated in the 11th century AD.

Strangely enough only in Eastern India the Buddha is shown with the Seven Jewels on the pedestal. We refer to the well-known relief from Ujāni, Faridpur District, Bangladesh, now preserved at the Dacca Museum (Bhattacharya 1929: pl. VIII 30). In the relief the Buddha is shown seated in *bhūmisparśa-mudrā* on a double-petaled lotus, which in its turn is placed on a throne (fig. 10). The back-rest of the throne has leogryphs and ornamental ducks. Above *prabhamaṇḍala* there are branches of the Bodhi-tree and *Vidyādhara*s carrying garland. Below the lotus on the pedestal, in the middle, there is *vajra*, an element which encourages the art-historians to identify this Buddha as Tathāgata

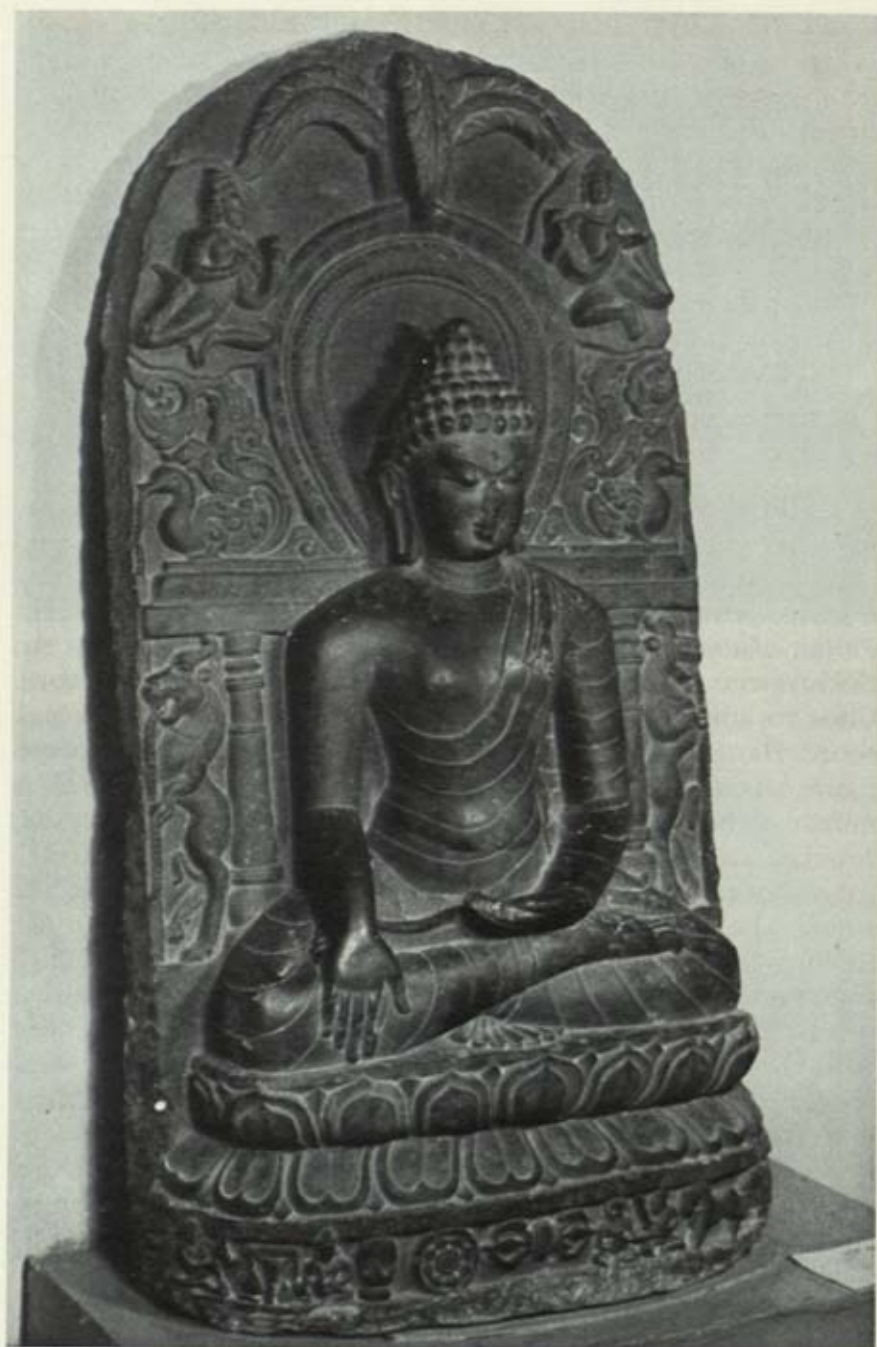


Fig. 10 — The seated Buddha from Ujani. Dacca Museum.

Akṣobhya⁷. But the identification may not be certain. We should rather assume that the presence of *vajra* is to indicate the seat of the Buddha as *vajrāsana*. On both sides of *vajra* the Seven Jewels are illustrated like this: from left to right, the second corpulent male figure with a crown on is *Gṛhapati-Jambhala*, the next object on lotus is *Maṇi-ratna*, which is followed by *Cakra-ratna*. After *vajra* sits a female figure which is surely *Strī-ratna*, the male figure after her holding a sword is *Parīṇāyaka-ratna*, then follows *Aśva-ratna* and finally *Hasti-ratna*. The relief should be dated in the 10th century AD.

But in our case are the Seven Jewels connected with the missing, huge Buddha figure? It is difficult to say. They may as well be connected with the seated Avalokiteśvara figure painted on top. For, in Eastern India, during the Pāla period, Avalokiteśvara also is shown with the Seven Jewels. We refer to a beautiful, six-armed stone figure of Avalokiteśvara from the Site Museum at Mahāsthāngarh, Bogra District, Bangladesh (fig. 11). The relief should be dated in the 9th century AD. Unfortunately, this beautiful figure is partially damaged. The deity stands in *abhaya* position on a lotus placed on a pedestal. He wears *jaṭā-makuṭa* with a tiara on his head and has perhaps the third-eye on the forehead. Besides various jewelries, a long *upavṛtta* stud with pearls (*muktāhāra-yajñopavṛtta*), he has the skin of a black antelope (*kṛṣṇamṛga-carma*) as his *uttarīya*. He holds the following attributes clock-wise: *varada-mudrā*, a jewel, *akṣamālā*, a manuscript (damaged), the stalk of a full-blown lotus (damaged) and *kamaṇḍalu* (damaged). Avalokiteśvara is attended upon, at the proper right, by four-armed Tārā and Sūcimukha (damaged), and at the proper left, by Hayagrīva and Bhṛkuṭi (damaged). Below the lotus, in the recess of the pedestal, in the middle, there is *Cakra-ratna*, to its left there are three seated human figures, which may be *Gṛhapati*, *Parīṇāyaka* and *Strī-ratna*, and to its right there are *Maṇi*- and *Hasti-ratna*; perhaps *Aśva-ratna* is hidden behind it. For another Avalokiteśvara with *Sapta-ratna* on the pedestal, see the inscribed British Museum figure, No.

⁷ Generally wrongly called by most of the art-historians as Dhyāni-Buddha Akṣobhya. The term *Dhyāni-Buddha* does not occur in any Buddhist Sanskrit text.



Fig. 11 — Six-armed standing Avalokiteśvara. Site Museum, Mahāsthāgarh, Bogra District, Bangladesh.

1872/7.1.29, originally from South Bihār. (For another figure, Saraswati 1977: no. 91).

The wall-paintings are unique, because from Bihār-Bengal we don't have any such other example⁸. Quite interesting is also the fact that at least three names are to be found written on the lower panel of the paintings at the extreme left on the trotting horse and the *Pariṇāyaka* figure. The first name on the top is quite illegible, but the second name is quite clear and it reads *śrī-Pracāṇḍa-hastī*, while the third name, which is not quite clear, appears to be *Prthvīcāṇḍa* (Nath 1983: pl. V). The script of this writing is *Siddhamātrkā* of about the 8th century AD. The names are most probably not of the artists who painted the panels, but perhaps of the pilgrims who visited this temple⁹. In any case they create a problem by their presence on the paintings. Until further inquiry on the nature of their writing, no positive conclusion can be drawn now. There are perhaps two or three phases of paintings. The earliest one is the lotus-scroll in blue on the walls and on the flat upper portion of the pedestal. The two panels containing human figures in front of the pedestal belong to a later and two different phases. We know that during the period of the Pala ruler Mahīpāla I (c. 977-1027 AD) (Sircar 1975) the Buddhist monk-artists started illustrating the Mahāyāna texts with miniature illustrations (Saraswati 1978: 37) and that the centre of their activity was Nālandā. Perhaps the earliest such manuscript is dated in the 6th regnal year of Mahīpāla I.

These miniature illustrations have a close parallelism with the paintings of the panels of the Nālandā Buddhist temple. We illustrate two such miniature paintings. Fig. 12: This miniature

⁸ Similar paintings were observed on some bricks in Monastery No. 14 by Shri A. Ghosh long back but unfortunately they are not traceable (Nath 1977: 269).

⁹ Nath reads the two names as 'Prachandahasti' and 'Karabha chanda'. He calls the script wrongly as Nāgarī and dates the writing to the 10th-11th century AD (Nath 1983: 64). Most probably he thinks that the names are of the artists of the paintings. The names Pracāṇḍa-hastī and Prthvīcāṇḍa remind one of the similar names of pilgrims appearing in the temples at Jāgeśvar in the Almora District of Uttar Pradesh. Sircar (1961-62) writes, 'on palaeographical grounds, these inscriptions, which are written in the North Indian (*Siddhamātrika*) characters, may be assigned to dates ranging between the eighth and tenth centuries A.D.'

painting depicting the scene of the birth of the Buddha belongs to the 6th regnal year of Mahīpāla I (c. 943 A.D.) and was painted at Nālandā (Saraswati 1978: 35). Fig. 13: Perhaps the Buddhist female deity Uṣṇīṣavijayā is painted here. The manuscript is dated in the 9th regnal year of Rāmapāla (c. 1081 AD) (Saraswati 1978: 74).

Niharranjan Ray was perfectly right when he commented while writing on Eastern Indian Painting in the following way, 'These miniatures, it is important to remember, do not represent a separate style of book-illustration; they are, in fact, mural paintings in reduced dimensions [...]' (Ray 1957: 690).

S.K. Saraswati heard about the discovery of the Nālandā wall-paintings but had not the opportunity to see them. But he rightly guessed that the style of these mural paintings would surely correspond to that of the manuscript miniatures (Saraswati 1978: 181).

Now the second very important but at the same time quite problematic fact is the discovery of an inscribed stone slab measuring 74×45 cm from the debris of the temple. It was fixed on the front wall of the temple, and is now preserved at the Site Museum in Nālandā. The inscription contains 14 lines and is written in the transitional script of late *Brāhmī* and early *Siddha-mātrkā* of the 6-7th century AD and in beautiful Sanskrit verse (with a short prose at the end). But unfortunately it is not dated (Mishra 1972: pl. VIII; here fig. 14). On this record the Archaeological Survey of India reported, 'It may be recalled here that an inscription of the seventh-eighth century A.D., mentioning *the bronze images of Buddha, being installed by king Purnavarman*, also corroborated by the description by Hieun Tsang, was discovered at the site earlier' (*Indian Archaeology* 1975-76: 8; *italics ours*).

The Chinese pilgrim, Hsüan-tsang, who visited Nālandā in 637 AD, remarked, 'Next to the eastward 200 paces or so, outside the walls, is a figure of Buddha standing upright and made of copper. Its height is about 80 feet. A pavilion of six stages is required to cover it. It was formerly made by Pūrṇavarman-rāja (Mwan-cheu)' (Beal 1976: 174).

About this king Pūrṇavarman Hsüan-tsang referred to also in connection with the Bodhi-tree at Bodh-Gayā, 'In late times Śasāṅka-rāja (She-shang-kia), being a believer in heresy,



Fig. 12 — Birth of the Buddha, miniature painting of the 6th regnal year of Mahāpāla I, c. 943 AD.



Fig. 13 — Buddhist deity, perhaps Uṣṇīṣavijaya, miniature painting of the 9th regnal year of Rāmapāla, c. 1081 AD.

slandered the religion of Buddha, and through envy destroyed the convents and cut down the Bôdhi-tree [...] some months afterwards, the king of Magadha called Pūrṇavarṃā (Pula-na-fa-mo), the last of the race of Aśôka-râja, hearing of it, sighed [...].

This Pūrṇavarman is further said to have nourished the roots of the Bodhi-tree and 'fearing lest it should be cut down, surrounded it with a wall of stone 24 feet high. So the tree is now circled with a wall about 20 feet high' (Beal 1976: 118).

Only from the statement of Hsüan-tsang the historians took for granted that Magadha was ruled after the Imperial Guptas and Śaśāṅka by king Pūrṇavarman, before it went under the rule of Harṣavardhana¹⁰. Unfortunately, from no other sources the presence of a ruler over Magadha, called Pūrṇavarman, is corroborated.

The Archaeological Survey of India also prepared their report fully relying on the statement of Hsüan-tsang and not trying to read the relevant portions of the inscription.

Now let us examine the text of the inscription and see what information we can gather from it¹¹ (fig. 14)¹².

The record opens with a *Siddham* symbol followed by a verse in adoration of the feet of the Buddha marked with auspicious symbols such as, *cakra*, *svastika*, *vajra*, *mṭna*, *kalaśa*, *chatra* and *dhvaja*. Then it refers to a 'king of Mathurā', called Bhāśiva, who belonged to the mixed (*Brahma-Kṣatriya*) caste. His son and successor was Rāhula, who was followed by his younger brother, Bhāvi. But the most powerful of these kings was Prathamaśiva, the son of Bhāvi, who installed a huge image (but no mention of

¹⁰ Cunningham (1969: 165-6) was the first scholar to mention Pūrṇavarman of the Maukhari race as a ruler of Magadha and a contemporary of Harṣavardhana. Pires (1982: 129-33) dates Pūrṇavarman in 612-628 AD (see his chart at the end). But his discussion is not at all convincing. Mishra misunderstood the text of the record completely and took the sculptor Pūrṇavarman, surely under the influence of Hsüan-tsang's remark, to be the Maukhari prince ruling over Magadha for a short while when Śaśāṅka, the lord of Gauda, is said to have damaged the Bodhi-tree at Bodh-Gayā (Mishra 1972: 183).

¹¹ I am thankful to Prof. Dr D.C. Sircar for supplying me the necessary material from the text of the record.

¹² I thank Dr K.V. Ramesh, Chief Epigraphist for India, for sending me a brilliant photo of the record.



Fig. 14 — Nalanda Buddhist temple inscription of Prathamasiṃha of Mathurā.

copper!) of the Buddha in the monastery or temple, the image which looked like the Himālayan mountain. Only at the end of the record it is said that the name of the sculptor of this image (*tasy aitat-kṛttikāriṇaḥ*), Pūrṇavarman did not only rest on this earth, but was also written on the moon. That means his fame as an artist reached the heaven also.

So we see that the huge image of the Buddha in question was not installed by a king of Magadha, called Pūrṇavarman, but by a king of Mathurā, called Prathamaśiva. Pūrṇavarman was only the sculptor. We don't know if king Prathamaśiva personally came to Nālandā to pay his homage to the sacred spot and to install the image of the Buddha as a pious gift, or if Pūrṇavarman was an artist of Mathurā, who came to Magadha in accompaniment of the king, or whether he was a famous artist of Magadha to get the royal commission.

Now the problem is when actually has this record to be dated? It appears that Hsüan-tsang had no knowledge of this record, but nevertheless he knew about the huge Buddha figure mentioned in this record. The noted epigraphist, D.C. Sircar assigns this record on palaeographical grounds to the 8th century and remarks, 'This Prathamaśiva belonged to a ruling family of Mathurā and either visited Nālandā on pilgrimage and installed the image carried from Mathurā on that occasion or performed the deeds through his agents whom he had sent to Nālandā for pilgrimage to be performed on his behalf as we know in other cases. His own visit to Nālandā from Mathurā is not improbable since he appears to have been a feudatory of King Yaśovarman (c. 725-753 AD) of Kanauj, whose dominions must have included in both Mathurā and Nālandā regions'.

If we accept the dating of D.C. Sircar, we have to face a great difficulty, namely, in that case, Hsüan-tsang (637 AD) did not have the possibility to see the huge image of the Buddha installed by king Prathamaśiva! The Nālandā record under discussion should therefore be placed earlier to 637 AD. If we agree with the historians that Pūrṇavarman was a ruler of Magadha mentioned by the Chinese pilgrim, before he came to Nālandā, we cannot but have to admit that he saw the huge Buddha figure which was *made* by the sculptor Pūrṇavarman! To the scholars we may point out with certainty that Pūrṇavarman of the Nālandā inscription was a sculptor and not a king of Magadha of

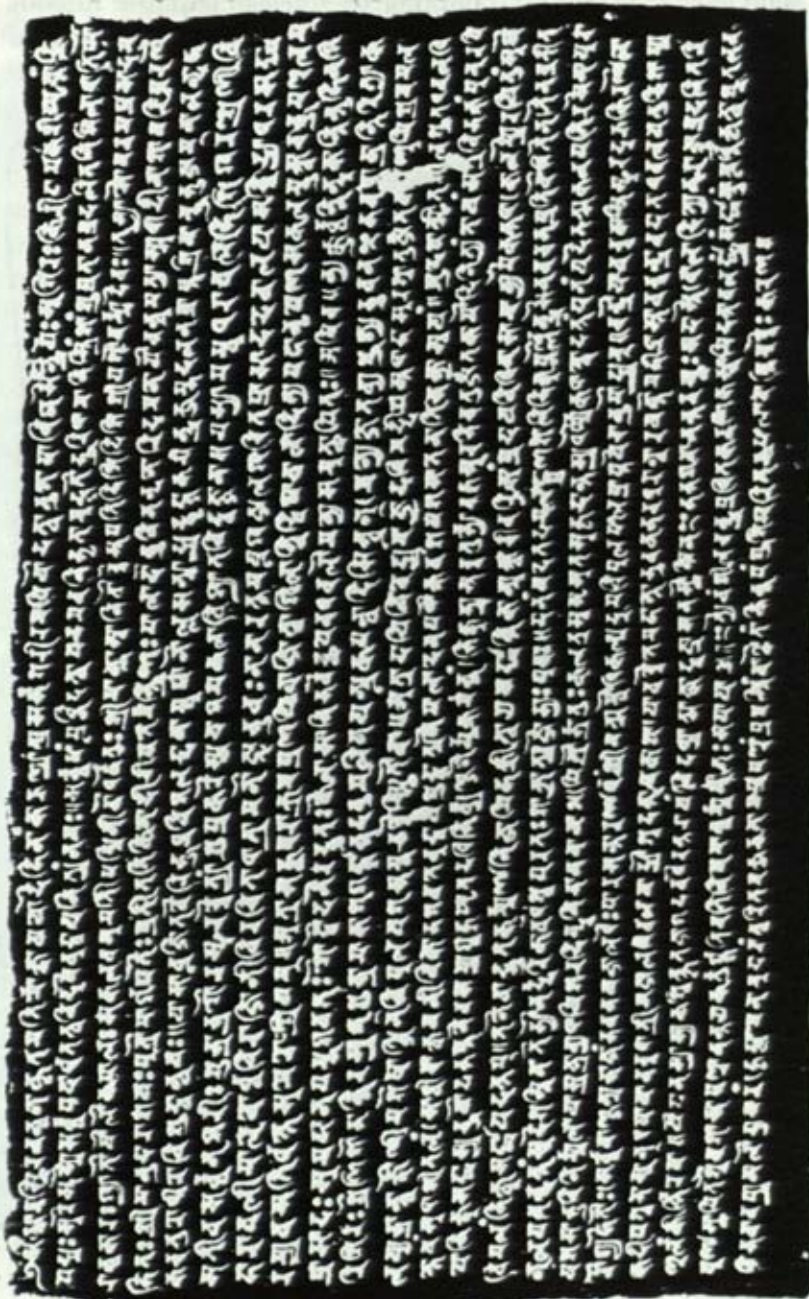


Fig. 15 — Nalanda stone inscription of the time of Yaśovarman of Kanauj.

the Maukhari race¹³. It is tempting to suggest that the famous sculptor Pūrṇavarman, who in most probability was a native of Magadha, became a pious Buddhist king of Magadha in the local tradition before Hsüan-tsang visited Nālandā!

There is a stone inscription from Nālandā of the time of Yaśovarman of Kanauj referred to by D.C. Sircar (Sastri 1929-30) (fig. 15). If we compare the characters of writing of our record (fig. 14) with those of the record of Yaśovarman, we find that they are not similar. The style of writing, the medial vowel signs and the palatal *śa* of the two records are different. The characters of writing (*Siddhamatṛka*) of the record of Yaśovarman are later to those of our record.

On the other hand, if we compare our record with the Bodh-Gayā inscription of Mahānāman (Fleet 1963; here fig. 16), we find that the characters of writing of both the records are almost similar, and similar is also the style of writing. Now, the Bodh-Gayā inscription is dated in the Gupta year 269, i.e. 588-89 AD¹⁴. This should also be the date of the Nālandā inscription of Prathamaśiva. That means the huge Buddha image, made by the sculptor Pūrṇavarman, was installed approximatively about fifty years before the arrival of Hsüan-tsang at Nālandā. King Pūrṇavarman of Magadha, solely mentioned by the pious Chinese pilgrim, will remain a mystery, unless corroborated by sound archaeological evidence. The Nālandā inscription of Prathamaśiva is by no means a support to the existence of a Maukhari prince of Magadha called Pūrṇavarman!

¹³ I don't understand how Mishra and the Archaeological Survey of India date this record in the 8th century and at the same time are convinced that the Chinese pilgrim had referred to the huge Buddha image mentioned in the record. Perhaps they ignore the fact that the record mentions the installation of the image in question.

¹⁴ And with these two records we should compare also the Kudārkoṭ stone inscription (Kielhorn 1892) as regards the characters of writing.

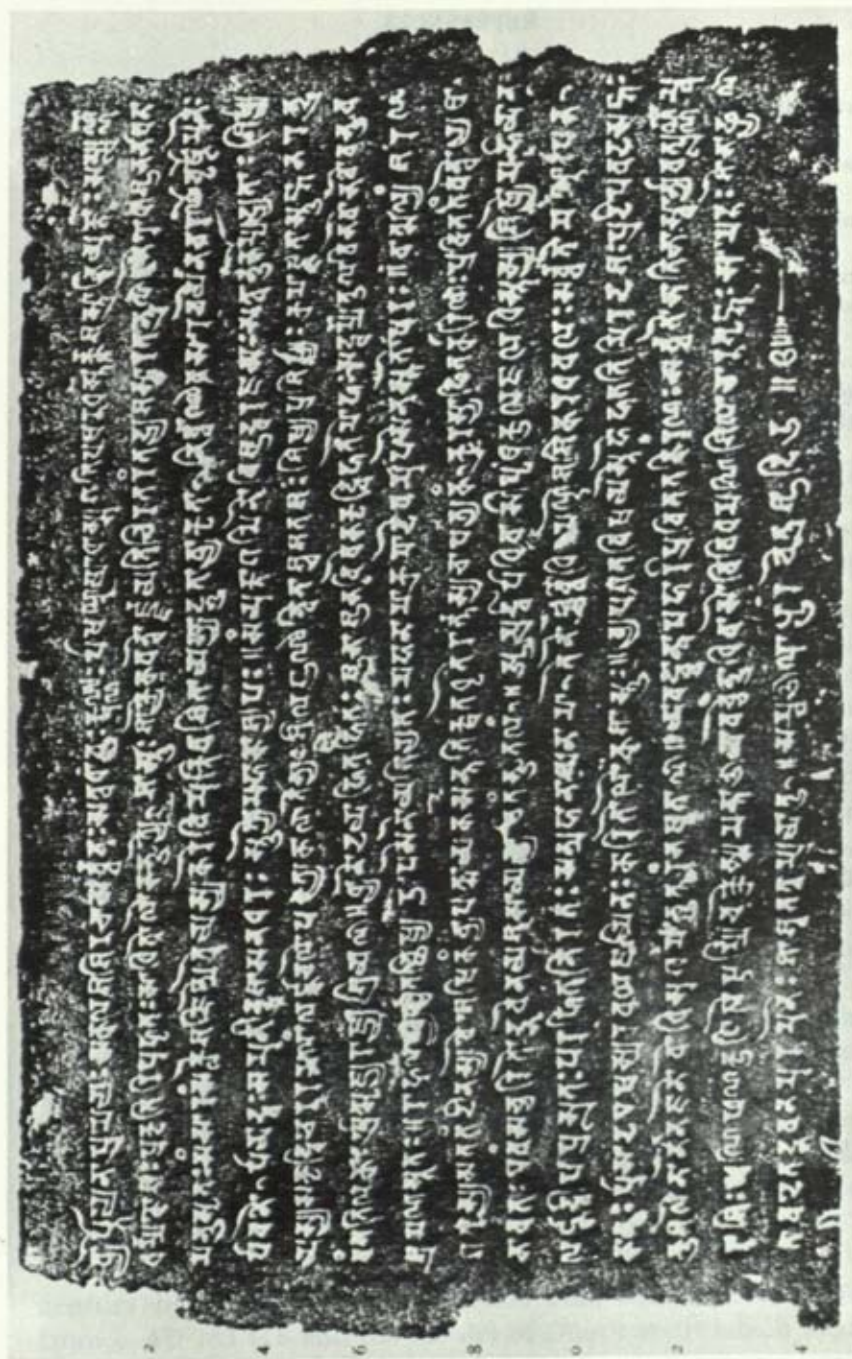


Fig. 16 — Bodhi-Gaya stone inscription of Mahānāman of the year 269.

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The Recent Excavations at Pāhārpur

The ruins of the Buddhist monastery of Pāhārpur are located in the North-West of Bangladesh in the Dinājpur district not far from the village of Pāhāpur. They lie in an idyllic, rural surrounding which is probably still much the same as in former days. The village takes its name from the high mound or *pāhar*, which constituted the remains of a huge shrine in the centre of the complex. In ancient times the establishment was called Somapura Mahāvihāra or the Great Monastery Moontown. Such religious institutions were usually founded at a suitable distance from large towns so as to ensure peaceful surroundings for the monks. At the same time they were reasonably accessible. The location of Somapura half-way on the old road between Puṇḍravardhana (present Mahāsthān), the former capital of Varendra, and the secondary capital at Koṭīvarṣa (modern Bāngarh), may well have seemed ideal to the founder of the monastery.

In the middle of the 8th century the dynasty of the Pālas rose to power. They were all devout followers of Buddhism which through their efforts now once more became the most important religion of Bengal and Bihār. As their power increased, they founded a number of monasteries throughout their growing empire. Some of these *viḥāras* became great centres of learning and their reputation quickly spread throughout the length and breadth of Asia. Pious pilgrims, especially monks, from as far away as China and the islands of South-East Asia, flocked to these scholarly establishments located in the homeland of Buddhism.

Somapura Mahāvihāra was founded in the end of the 8th century by Dharmapāla, the second Pāla monarch, who ruled from c. AD 783-818 and the hamlet of Dharmapurī which adjoins the great monastic complex of Pāhārpur, was almost certainly

named after this patron of the establishment. He was also the founder of Vikramaśīla, another famous monastery, the remains of which have been excavated at Antichak, not far from Pāharpur, just across the Indian border. The dimensions of the ruins at Antichak are slightly larger than those of Somapura, but the latter are in a far better state of preservation and undoubtedly constitute the grandest monastery anywhere in the whole of South Asia. Hence Pāharpur is now, as in the past, of international importance. In ancient days its fame spread far and wide and as late as the 17th century — long after it had ceased to exist — its memory still lingered on in Tibet and other Buddhist countries.

Located in Varendra, the native land of the Pālas, Somapura obviously enjoyed considerable royal patronage. Its close relationship with the ruling dynasty implied that it shared the political ups and downs of its benefactors. Towards the end of the 9th century the Pālas were defeated by the mighty Gūrjara-Pratīhāras but roughly a century later the dynasty flourished again. It was during this period that Atīśa, who was born in Bengal in AD 980, stayed for many years at Somapura Mahāvihāra. After going to Sumatra and completing his studies there, he travelled to Tibet where he became the reformer of Tibetan Buddhism and where he is still worshipped as a great saint. In the course of the 11th century the Pāla empire again suffered a set-back and was devastated by wars. However, towards the end of the century prosperity returned once more.

In the 12th century the Senas, who were followers of Hinduism, replaced the Pālas and from this time onwards Somapura gradually declined and was finally abandoned. In my opinion there are several reasons for believing that the monastery was probably not destroyed by the Muslims in the early 13th century during their conquest of Bengal, as is generally believed. Not only was Pāharpur's location even more isolated than that of any of the other great monasteries, but apart from a few small antiquities, hardly any images or ritual objects and no relics whatsoever in any of the funerary *stūpas* have been discovered in the last occupation layer. This stands in sharp contrast to the vast amount of sculptures excavated in the remains of the other great *vihāras* and might well indicate that before the Muslim armies

swept Bengal, the monks had long left Somapura taking all their belongings and religious treasures with them.

Pāhārpur was discovered and with great foresight recognized as the remains of a Buddhist monument by Buchanan Hamilton who visited the site between 1807 and 1812 whilst surveying this part of the country for the East India Company. Sir Alexander Cunningham — often called the father of Indian archaeology — intended to excavate the ruins in 1879 but was denied permission to do so by the local landlord. Consequently he confined himself to clearance of the jungle and a superficial excavation on top of the central mound. Throughout the 19th and early 20th centuries the site remained the habitat of leopards and other wild animals, who lived in the dense vegetation which had swiftly reconquered the hill.

It was only in 1919 that the ruins were finally placed on the List of Protected Monuments and at last excavations were started in 1923. Initially it was a joint venture of the Archaeological Survey of India and the Varendra Research Society. From 1926-7 onwards K.N. Dikshit — one of the senior officers of the Survey — was in charge of the operations, which continued till 1933-4. The result of this work was astounding for it uncovered one of the largest Buddhist monasteries anywhere in South Asia. When the campaign was closed down the last occupation layer of the complex had almost completely been brought to light. Over the past fifty years the site has, however, suffered considerable damage, not only due to the wear and tear of visitors and the robbing of bricks and antiquities by vandals, but also due to sulphate attack on the walls and especially the water-logging during part of the year.

After World War II the lower levels of a few monk cells on the eastern side of the complex were excavated by R. Mughal but the results were never published. In preparation of the forthcoming campaign to rehabilitate, with the help of Unesco, this extremely important site, the Department of Archaeology and Museums of Bangladesh carried out excavations between December 1981 and the middle of March 1982. The main purpose was to establish the three major rebuilding phases of the cells which Dikshit mentioned in his excavation report. These were indeed encountered on all four sides of the complex. In view of the history of Varendra it would seem to me that these three occu-

pation levels can tentatively be attributed to the end of the 8th century, the late 10th to early 11th and the period between the late 11th and early 12th centuries. However, further work will have to be undertaken in order to confirm this. In future the relation between these three periods in the cells and the reconstruction phases of the temple in the centre of the courtyard, should also be investigated for, in contrast to the monastic cells, Dikshit found not three but four building phases in the central monument. If I may venture a guess, the first and last phases of the central shrine could perhaps coincide with periods I and III of the cells, but this too has to be clarified in future.

Apart from confirming Dikshit's findings in the cells, the recent excavations brought to light several new and unexpected facts. In the first place it was discovered that the size of the monastic cells belonging to the earliest occupation level was reduced in the second rebuilding phase resulting in a considerable increase in the total number of cells. Secondly, in a restricted area the remains of a structure underlying Dikshit's earliest period were brought to light. Its alignments bear no relation whatsoever with those of the monastic plan of period I. We shall return to this intriguing discovery further on.

Finally, I should like to report an exciting discovery among the various antiquities which came to light during these recent excavations. It is the torso of a large and highly important bronze Buddha image. Due to damage by fire only the upper half down to the thighs has been preserved. However, it is still possible to make out that the figure once represented the Master in a standing attitude. The surviving part of the image measures roughly 1.27 m, so that total height of the original must have been about 2.40 m. In view of its style and the layer in which the bronze was discovered, I would attribute the sculpture to about the 9th or 10th century. The only other known bronze Buddha figure from about the same period and of roughly equal size is the famous image from Sultāgañj in Bihār, now in the Birmingham Museum and Art Gallery. In view of all this it is obvious that the recent excavations have shed a considerable amount of new light on several aspects of Somapura Mahāvihāra.

The plan of the monastery can be described as a large quadrangle measuring approximately 276 m square with an elaborate entrance gateway on the North. The outer walls of the com-

plex are formed by rows of cells facing inwards towards the main shrine in the centre of the courtyard. In the last building phase there were 177 cells in all. Outside the southern wall Dikshit excavated the remains of a bathing *ghāt* and of a building which he believed to be a platform 'for the purpose of ablutions'. I am, however, firmly convinced that the chutes on the outside of this structure were toilets. This building was connected with the monastery by a bridge. Its vaulted construction is of the utmost importance to our knowledge of the ancient architecture of the subcontinent for it is one of the earliest and very rare examples of this type of construction, proving that vaults were known in ancient India before the advent of the Muslims. The fine floor of the other structure outside the complex — the bathing *ghāt* — was in an excellent condition in Dikshit's time. My recent photograph shows, however, how badly it has deteriorated in the past 50 years. It is clear even now that a small stream formerly ran along the southern wall of the monastery. It obviously carried away the dirty water from the toilets and the bathing *ghāt* and it explains why a bridge was needed in order to connect the toilets to the main complex.

Faced with the terrific problem of water-logging during part of the year, Dikshit cut several drains in the courtyard which he hoped would carry away the surplus water through a breach which he made in the southern courtyard wall. Apart from causing considerable damage to several cells, this solution to reduce the water-logging also proved to be ineffective, for the compound is still full of water during several months after the monsoon. Searching for a better solution I came to the conclusion that there seems to have been no water problem in ancient days, for Dikshit repeatedly mentions in his annual reports that he did not discover any drains in the courtyard, except one along the refectory hall. At the same time several of his reports mention the fact that there seems to have been a natural gradient in the compound sloping roughly from the South-West to the North-East. This we checked during our work at Pāhārpur last year by way of trenches in all parts of the quadrangle and indeed, the last occupation level of the courtyard does show this slope. We therefore have to conclude that the surplus water formerly flowed to the North of the quadrangle. An additional proof for this conclu-

sion is the fact that Dikshit found that most of the drains in the central shrine also ran in a northerly direction.

Everything therefore points to the fact that there was some device in the northern part of the courtyard which solved the water problem in former days. In my opinion this can only have been the pond which lies just in front of the entrance to the central shrine. The same thought occurred to Dikshit but he left the matter undecided as he believed that the present pool had been dug out only recently. Unfortunately, this area was never excavated by him, probably because he assumed that the archaeological evidence had been disturbed too much by the recent digging of the pond. However, for several reasons it is quite likely that this pool was not made recently but that it belongs to the original layout of the courtyard. For, a pond just inside the entrance and in front of the main shrine is a well-known element throughout the subcontinent in the layout of religious establishments, both past and present. Moreover, nowhere else inside the quadrangle would a pool where those entering the monastery could clean themselves before proceeding to the main shrine, be more appropriate. Apart from this utilitarian aspect, the pond undoubtedly also greatly enhanced the temple surroundings as those who have seen the ruins of the central monument reflecting in the present pool can well appreciate. It is in addition more than likely that those who recently dug out the pool again, did so in a low lying area which was already collecting water. Perhaps these people even remembered, or had been handed down the tradition, that there once was a pond at this spot. The fact that the present pool does not lie exactly in the axis of the whole complex cannot be brought forward as an argument against the former existence of a temple pond at this place, for those who recently dug it out once more were undoubtedly not concerned about such sophisticated ideas as alignments and the axial layout of a monastic complex.

In view of all this it has now been decided to tackle the water problem by: 1. excavating the courtyard everywhere down to the last occupation layer so that its original gradient from South to North will be restored; and 2. by excavating the pool area and restoring the original pond so that it can once more receive the rain water from the entire compound. If need be, a

pump will remove the surplus water and carry it to a nearby *bīl* or small lake.

The central shrine has a cruciform ground plan and terraced superstructure. The building measures about 27 m square in plan and rises in three terraces to a height of about 21 m. The upper level is a massive rectangular block above which nothing survives. In view of the fact that Cunningham discovered some wedge-shaped bricks at the top, I am inclined to believe that the spire of the edifice consisted of a large round *stūpa*. Representation of similar monuments crowned by a *stūpa* occur in several illuminated Pāla manuscripts. The intermediate terrace is a circumambulation path which runs right round the shrine passing the chapels on each of the four sides of the building. The walls of this terrace are decorated with two bands of terracotta plaques roughly half of which survive. At the base there is another row of plaques. Some of these are very charming but unfortunately many have disappeared since I visited the site for the first time in 1956. However, measures are now going to be taken to stop the continual robbing of these interesting plaques.

Originally, a circumambulation path — screened off from the courtyard by a wall — ran right round the building at the former ground level. In the course of his excavations Dikshit discovered 63 stone reliefs inserted in the base of the central temple. As the annual water-logging threatened to damage them, he decided to cover them up again. In the following years a few of these reliefs were annually re-excavated during the dry season so as to enable visitors to see them and indeed, it was in this way that I saw them for the first time. However, more recently they have all remained covered up throughout the year.

Various arguments can be brought forward to prove that many — if not all — of these sculptures were not specially made for the central shrine of Pāhārpur but that they originally belonged to several other, earlier buildings which were probably destroyed as a result of some calamity. Moreover, the style of many of these reliefs indicates that they belong to a period preceding the late 8th century when the central monument was erected. As sculptures dating from the late 7th or early 8th centuries are extremely rare in Bangladesh and as some of these reliefs are very beautiful indeed, the Department of Archaeology and Museums is anxious to expose the original floor of the circum-

ambulation path so that all these important sculptures in the base will remain visible throughout the year. We have therefore now proposed to re-excavate this path right round the shrine and to reconstruct the wall which once screened it off from the courtyard. In this way we will achieve that 1. the rain water running down from the central temple can be collected and brought to the pond by drains; 2. the sculptures will remain visible throughout the year and 3. the row of terracotta plaques which are now near ground level, will be out of reach and consequently better protected against pilferage.

Apart from measures to be taken against water-logging, vandalism and the destruction of the brick walls due to sulphate, several archaeological problems will have to be clarified during the coming campaign. We already mentioned that the date of the three occupation levels in the cells and their relation to the four building phases of the central shrine should be determined. A more interesting problem is the identification and date of the structural remains discovered during the recent campaign in a confined area below the cells of period I.

Dikshit believed that there originally was a Jaina monastery at Pāhāpur of which no traces have survived. This Jaina institution would then have been succeeded by the Somapura Mahāvihāra founded by King Dharmapāla in the end of the 8th century. This hypothesis of Dikshit has been accepted by all subsequent authors. It could therefore now be suggested that these recently discovered remains belong to this former Jaina establishment. However, the matter is not as simple as it would seem to appear. In support of his opinion Dikshit brought forward three arguments. The first was based on the wrong belief that the cruciform plan of the central shrine at Pāhāpur was unknown elsewhere in India. In order to explain it he suggested that there formerly stood at this place a Jaina temple of the *caturmukha* type — i.e. a square shrine with entrances on all four sides. Subsequently, this Jaina structure would have been copied by the Buddhists. Apart from the fact that the cruciform groundplan is by no means exclusively Jaina but also occurs in Hindu temples, the excavations at Antichak have made it perfectly clear that this type of building was equally common among Buddhists. It can therefore not be considered 'an entirely novel development' at Pāhāpur, as Dikshit put it. In fact, this cruciform layout became

quite popular in several parts of South-East Asia, which not only indicates that Bengal exercised considerable influence on some of the neighbouring countries, but also that the cruciform groundplan was quite well known throughout India.

The second argument which Dikshit brought forward in support of his opinion that Pāhārpur was once a Jaina site, is an inscription dated in AD 479 which was found in the central shrine of Somapura Mahāvihāra. It records a gift of land to a religious community which Dikshit believed to be Jainas in view of the titles of their spiritual leader. However, a few years ago Asher pointed out that none of these titles are typically Jaina and in fact, most of them 'if anything, sound more appropriate to a Buddhist than a Jaina'. Dikshit was obviously worried by the disturbing fact that the inscription was discovered in the central temple of Somapura and he tried to explain this away by suggesting that the Buddhist monks might have been given royal permission to appropriate the land belonging to the Jainas and therefore in Dikshit's words: 'kept the original charter in their possession. This supposition can alone explain the find of the plate among the ruins of the Buddhist vihāra'.

His third argument was that the Chinese pilgrim Hsüen-tsang who visited India in the 7th century, did not mention the Buddhist monastery at Pāhārpur, the lofty temple of which 'could hardly have escaped him'. Dikshit therefore concluded that there did not yet exist a Buddhist establishment at Pāhārpur in Hsüen-tsang's days and that the earlier institution referred to in the inscription consequently *had* to be a Jaina monastery. However, in the first place Hsüen-tsang did not enumerate in his itinerary all the Buddhist establishments in India; and secondly, there is no reason to assume that the earlier monastery — whether Jaina or Buddhist — already had a 'lofty' temple in the centre of its courtyard which Hsüen-tsang should have seen from afar.

Summing up, none of Dikshit's arguments in favour of the existence of an earlier Jaina establishment at Pāhārpur is valid. It would actually be far more logical to assume that the earlier institution was a Buddhist monastery. The fact that the clay sealings discovered at the site call Somapura 'the great monastery of Dharmapāla' does not necessarily imply that it was *founded* by this ruler, as is generally assumed. Monasteries were

often refounded by royalty after which the establishment was called after the king who had rebuilt and lavishly endowed it. The possibility that an earlier Buddhist settlement at Pāharpur was refounded by Dharmapāla should therefore not be excluded.

In this connection it is interesting to recall some passages in the *History of Buddhism* by Tāranātha, the well-known Tibetan historian. At one place he mentions that '[...] this famous Somapurī is also called the new Somapura' and elsewhere he informs us that during Dharmapāla's reign the monastery of Somapura was restored and that of Vikramaśīla (the present Antichak) built. These passages imply that the Buddhist institution at Pāharpur already existed before Dharmapāla began to reign. In view of all these arguments it seems to us that there is every possibility that the remains recently discovered under Dikshit's period I, are not those of a Jaina establishment but that they belong to a Buddhist monastery which already existed at this place before King Dharmapāla decided to rebuild and endow it.

KARL JETTMAR

Non-Buddhist Traditions in the Petroglyphs of the Indus Valley

My intention is to summarize the results of several expeditions in the mountains of Pakistan, in the so-called Northern Areas and in the northernmost part of the Indus Kohistan. Intense fieldwork started after a series of unexpected discoveries in 1979. Since the German members of the team (always including Dr Thewalt and myself) as well as their counterparts, Prof. Dani and Dr Qamar, were not allowed to carry out excavations, the task was delimited to further exploration and documentation of rockcarvings and inscriptions. Even for that more campaigns will be needed in the future. The collaboration of colleagues from different disciplines will be necessary for the final publication.

In the meantime, we know more than 20,000 drawings and at least 1,500 inscriptions in many languages and writing systems, almost matching the overwhelming diversity typical for the manuscripts collected in sand-buried ruins of Eastern Turkestan.

As for the circumstances of the discoveries, I refer to my synoptic reports (Jettmar 1980a, 1980b, 1982a). I also do not deal with the highly interesting contributions to the history of Buddhism in Central Asia and to the problems of its iconography in this paper. This part of our report has been assigned to Dr Thewalt. A selection of Sogdian inscriptions was published by Humbach (1980). Some recurring motifs connected with them shall be treated elsewhere.

My intention is to deal here with some conclusions which can be derived from the material available so far in respect to the interethnic system, and to the indigenous religious heritage of the area. I regard this as my chosen field for good reasons. My earlier studies were devoted to the archaeology of Central Asia which is an essential background. Moreover, I made an

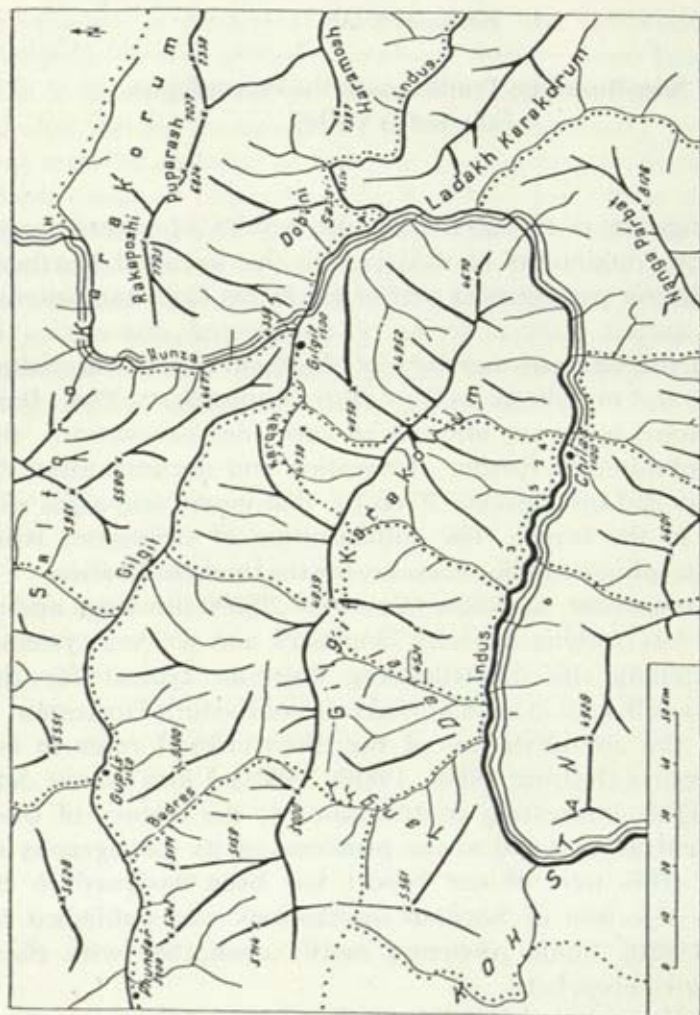


Fig. 1 — Map of the Sites - in the sequence as they are mentioned in the text. 1 - Shatial Bridge; 2 - Thalpan Ziyarat; 3 - Thor, Northern Bank; 4 - Thalpan; 5 - Hodor; 6 - Minargah; A - Alam Bridge; H - Hunza-Haldeikish
 ——— Karakoram Highway; traditional routes, now partly replaced by jeep-roads. (After K. Wiche).

attempt to sum up all previous studies on the pre-Islamic traditions of the local population (Jettmar 1975). During the last years, I tried to compile a re-appraisal of the written sources as far as they are accessible to a scholar who is not an orientalist himself (Jettmar 1977). The results were in full accord with a synopsis presented at the same time by Prof. Tucci (1977). Therefore, I think that I can base my interpretation on more substantial evidence than even contained in the pertinent works of Sir Aurel Stein (1907, 1921, 1928, 1944), our eminent precursor in this difficult field.

I discuss here the petroglyphs in the Indus valley below Chilas, on both banks of the river, spread over a distance of almost 60 kilometres (fig. 1). I arrange my observations in a chronological order:

1. Some rockcarvings seem to me to be definitely *earlier* than the main body of petroglyphs forming almost a continuous sequence starting in the 1st millennium BC. (The upper limit of this sequence corresponds to the advent of Islam — with a few exceptions, mostly simple drawings of wild or domestic goats). My indeed problematic dating is based on the observation, that such early carvings show an unusual high degree of repatination. The lines and the areas filled in by pecking are as dark as the surrounding rock covered by desert varnish and can only be recognized under certain light conditions. (I hope that geochemical analyses shall be available in the next years). Buddhist drawings are definitely brighter. But mainly the 'early carvings' are differentiated from the late pre-Buddhist and the main Buddhist stock by their motifs, stylistic peculiarities and rather rare palimpsests.

We are able to discern several traditions made by artists of different origin, hardly contemporaries even when their works are located on the same boulder. Some of the traditions show semantic and stylistic similarities with petroglyphs in other regions of Eurasia. We shall mention only these, here.

1.1. The heavily patinated picture of a horned animal, located near Shatial Bridge, would have been called 'subnaturalistic' elsewhere, and put into the Epipalaeolithic horizon (Anati 1976: 59). The head is too small in comparison to the body, a trait



Fig. 2 — Heavily re-patinated carving of a horned animal with a small head. Sub-naturalistic style (pre-Neolithic period?). Height of the figure approximately 30 cm. (Photo Jettmar).



Fig. 3 — Animal carvings made in the 'bitriangular style'. Other figures are made in a different manner. Their bodies are rendered by simple lines. They seem to belong to a later period since they fill the gaps between the more careful executed motifs. Rock on the rim of the site Thor, Northern Bank. Dimension of this segment 60 × 100 cm. (Photo Jettmar).

typical for early carvings in Southern Siberia (Šer 1980: 190-3) (fig. 2).

1.2. Šer observed that the so-called 'bi-triangular style', i.e. the principle to depict animals and sometimes humans with a narrow, even waspy, waist, is typical for many rockcarvings of Middle Asia. It was brought in from the Near East, where painted pottery shows the same mannerism due to by still enigmatic cultural contacts (Kohl 1981). This style is amply attested along the Indus river below Chilas, even in carvings of late periods. But some of them evidently belong to an early period, especially those of the sites Thalpan-Ziyārāt and Thor, Northern Bank (fig. 3).

1.3. In one of my papers (Jettmar 1982a: 298-302) I tried to show that some pictures concentrated at the site Ziyārāt (fig. 4) on an elevated terrace opposite Chilas are similar to those of the Okunev culture studied by Soviet archaeologists in Southern Siberia and dated there not later than the 2nd millennium BC (fig. 5). (Vadeckaja et al. 1980; Dēvlet 1976, 1980, 1982).

Of course there is no full coincidence, but there must have been 'Okunoid' cultures in intermediate areas. Related rockcarvings were observed in Mongolia (Maringer 1950: 82-4). The relevant motifs are schematic human figures with their heads surrounded by radiating lines, mask-like human faces intersected by straight or curved lines, rings or circles surrounded by triangular points, schematic animals, mostly horned cattle. This means a confirmation of or even an explanation for a thesis maintained by B. and R. Allchin (1982: 111-21) and Stacul (1977: 250-2) as well. These scholars saw that the assemblages of the so-called 'Northern Neolithic' between Swat and Kashmir have several features in common with the Neolithic cultures of China and Manchuria. We may propose that cultures of the Okunoid type, i.e. transhumant cattle-breeders, may have acted as mediators.

1.4. I discovered the drawing of a chariot followed by a man holding a bow, at the site of Thor, on the northern bank. The wheels have four spokes. We know that related carvings were spread throughout the whole of Inner Asia from the Caucasus to the frontiers of China (Novgorodova 1978; Šer 1980: 194-215).



Fig. 4 — Carvings of 'jumping horses' observed in the site Ziyārāt together with other carvings of Okunev-like appearance. Height c. 30 cm. (Photo Jettmar).

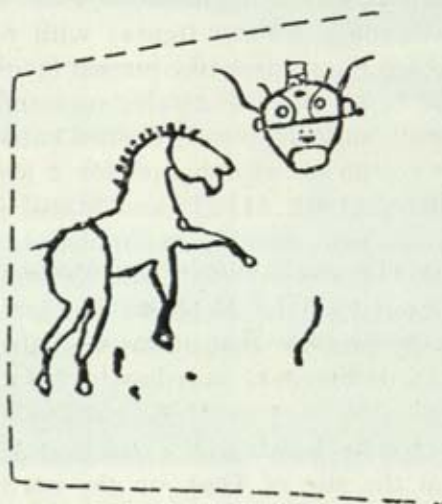


Fig. 5 — Drawing of a jumping horse carved in a stone slab together with other motifs typical of the Okunev culture. Site 'Sulekskie devki'. (After Vadeckaja-Leont'ev-Maksimov 1980: pl. LIII 127).

In the famous complex of Sejmalı-Taş spotted already in 1902 in a hidden valley of the Ferghana range (more than 3,000 m above sea level) there are also cars with small solid wheels, evidently the schematic transformation of a picture already far from reality (Bernštam 1952: fig. 4; Šer 1980: 105-11). A similar explanation must be given for discs visible in Thor (fig. 6). They are connected with animals by a short line. Like in Sejmalı-Taş, in Thor the drawings were made in an area completely inaccessible for wheeled vehicles.

The complexes presented so far have all parallels in Middle and Innermost Asia. This is seemingly a hint to the origin of the earliest settlers in the Trans-Himalayan valleys. But I am fully aware that petroglyphs on Soviet territory are better studied and published than those outside. Here is my field of interest. Certainly, there existed connections with the South, as well. Some carvings show the humped bull. But a systematic comparison with rock-paintings in India still remains a task for the future.

2. Near Thalpan Bridge, on a barrier of rocks facing a place well-adapted for religious meetings, I found carvings which most probably represent the next stage, the start of the continuous sequence. They show definitely West Asiatic affinities. We observe stylistic traits evolved in Transcaucasia and West Iran since the end of the 2nd millennium BC but still fashionable in the Achaemenid Empire (fig. 7). Animals are depicted in typical poses with a knee and dots or curved figures on shoulders and haunches. Figures of warriors with broad belts on the same rock were explained to me as Late Parthian by Prof. Porada, but I am now convinced that they should rather be brought into the same context.

One of my articles dealt with this problem (Jettmar 1983a: 161-2), so I only want to add that once more a statement of the Allchins turns out to be true. They maintained (B. and R. Allchin 1982: 240-1) that a golden stag, now in the Peshawar Museum which was originally found in the Hazara District, has nothing to do with the Eurasian Animal Style but must be a derivation (8th or 7th century BC or earlier) from an area South of the Caspian Sea. This line of diffusion is now clearly attested.



Fig. 6 — Carvings on a boulder, site Thor, Northern Bank.

To the left: A man with a bow, standing behind a chariot, wheels with four spokes. The draught-animals are standing above each other (not symmetric like seen in a mirror) indicating a relatively late date. To the right: Two animals with horns each connected with a round object. Perhaps the original motif was a cart with two solid wheels. Size: 60 cm broad. (Photo Jettmar).



Fig. 7 — Two marching animals, an ibex and a beast of prey. The decoration on the body of the second animal — blanks with a dot in the centre — indicate the influence of Achaemenid or proto-Achaemenid art. Site Thor, Northern Bank. (Photo Jettmar).

3. There is no doubt that some of the rockcarvings observed along the Indus river were made according to the rules of the so-called Scytho-Siberian Animal style. They do not belong to the same regional group, and they represent more than one chronological horizon. The last doubts were dispersed by a bronze plaque which I could buy from a man in Kandia who had fixed it to his bandoleer (fig. 8). Every single feature can be traced back to objects found in graves of nomads in the Pamirs¹. I already published several rockcarvings of this type and the plaque acquired in Kandia with comments (e.g. Jettmar 1980a, 1980b, 1982b, 1982c, 1983a).

We may conclude that long before the southward migration of Saka hordes pushed by the Yüeh-chih (according to the history of the Former Han Dynasty), similar movements of the Northern Nomads took place.

4. Let us turn to the carvings of the Buddhist period starting in the 1st century AD. According to our learned colleagues who dated the *kharoṣṭhī* inscriptions found on the same precipitous rocks, we may propose that mounted warriors who are shown as venerating the Buddhist monuments were members of a barbarian detachment, maybe of Saka origin, posted along the Indus river after a long stay in the plains. There they had learnt the principles of Buddhist iconography and mixed it with Achaemenoid survivals and other elements. Dani (1983: 91-128) presented his decipherments and interpretations; a volume with contributions of Fussman, Thewalt and myself shall be devoted to this remarkable sanctuary.

5. The heyday of Kushan rule was apparently not attested near Chilas. However, inscriptions of this period (1st and 2nd centuries AD) were found near Alam Bridge (Fussman 1978; Humbach 1980b), later on in Hunza-Haldeikish.

¹ There is one exception: the bird's head connected with the horn is that of a monal, not occurring in the Pamirs. So the piece was a local product, made by immigrants from the North.

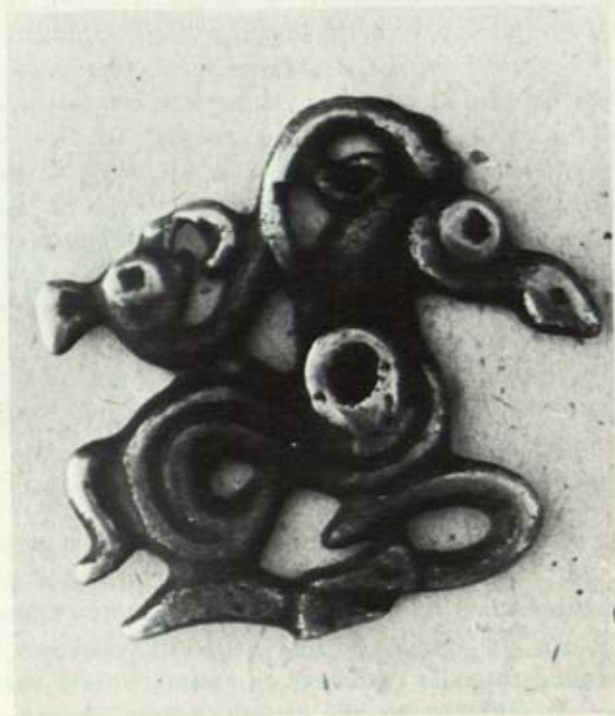


Fig. 8 — Bronze plaque: ibex. The prototype was the figure of a stag. One part of the antlers was transformed in the ibex-horns, the rest became the head of a local bird, the monal. Size 45×42 mm. Strayfind acquired by Jettmar in the Kandia valley, now National Museum, Karachi.

6. Later Buddhist carvings are to be seen almost in every site, the latest may belong to the 11th or 12th centuries AD.

During this long period, but especially between the 4th and 7th centuries, the early routes of migration were used by merchants building up a network of pan-Asiatic trade. They are also frequented by intrepid pilgrims from foreign lands as well as by diplomatic missions.

The connection between China and India across the 'hanging passages' is well attested in Chinese sources (Petech 1950: 15-19), but certainly there was another shortcut through the mountains between Western Turkestan and Kashmir, too.

The traffic is now confirmed by inscriptions made by Indians from various regions, but also by Sogdians, Chinese, Bac-

trians, and Parthians. Certainly, a considerable portion of the rockcarvings from this period were made or inspired by foreign passengers favouring the stylistic tendencies of their homelands.

In several studies I discussed the importance of such transit passengers and their impact on the local cultures (Jettmar 1980a, 1980c, 1980d). I tried to explain why it was necessary for these travellers to break the journey in a certain area, to settle down and wait for a while. Coming from the North, their best seasons were late autumn and early winter: then the water in the rivers was low, their discharge is less than 5% of the summer maximum, so that they could easily be crossed. The passes were still free due to the dry climate. However, when the travellers reached the last ranges to the East and to the West of the Nanga Parbat, they found all passes closed by heavy snowfall and avalanches. Therefore, it was advisable to stay for a while, time enough to produce religious inscriptions and carvings. (See my forthcoming paper « Prähistorische Wanderrouen in den zentral-asiatischen Hochgebirgen », *Smolla-Festschrift*).

But not all persons documented in our material should be explained as participants of this 'international transit system'. Others were evidently inhabitants of the Trans-Himalayan valleys, either locals or visitors from the neighbourhood.

After the printing of Dani's daring synopsis of the situation around Chilas (1983) and the painstaking readings of O. v. Hinüber covering the southern part of this area, it became much easier to formulate my thesis which I expressed in vague terms in the original text of my lecture prepared for the conference at Brussels (4-8.7.1983).

From September 16 to 22, and again from September 28 to October 2, 1983, O. v. Hinüber studied no less than 380 *brāhmī* inscriptions of different lengths and discerned the following categories of content:

1. proper names;
2. name, with the short comment 'arrived here';
3. names and titles;
4. devotional texts according to Buddhist tradition;
5. names of Buddhas, sometimes of a rather uncommon type.

An unobtrusive inscription on a low rock hidden between maize fields which I came across by sheer luck, turned out to be

the name of the otherwise well-known king *surendrādityanandi*, here called '*sri palolaṣāhi*'. We know that he was the ruler of a large area encompassing most probably Baltistan and the Gilgit region but not necessarily the Indus valley near Chilas where the inscription was discovered near the mouth of the Hodar river.

What the deviant form of the title (instead of *paṭola ṣāhi*) means will be explained by v. Hinüber who found here an argument for an assumption uttered long ago. In this connection, it is remarkable that this king does not appear here in full pomp and glory as a victor or conquerer but in a rather discrete attitude, maybe as a pilgrim or a pious visitor of the sanctuaries or monasteries which were certainly situated nearby. The same can be said in respect of two men bearing the title *Kṣatrapa* (observed in Hodar and Gichigah).

Almost in the centre of the site Chilas I there is a rock with many inscriptions. On one side we see the names of another ruler and several members of his staff (published by Dani 1983 as No. 63; a preliminary translation of the text is given on p. 84). This is certainly no official edict. The names and titles were inserted under a *stūpa* drawing of a peculiar type (with a large dot in the centre of the *aṇḍa*) and had the task to testify a pious disposition. Other arguments cannot be discussed in full details here but I want to submit the hypothesis that the Indus valley between Shatial and Chilas was considered to be an area of special sanctity where visitors from far and wide, people of high rank but commoners as well proclaimed their devotion after their happy arrival.

The Chinese sources mention such a place, they tell of a huge statue of Maitreya located in Ta-li-lo. Aurel Stein, who discussed the information given by the Chinese pilgrims (1928: 21-23) firmly claimed that Ta-li-lo means Darel, a large valley North of Shatial as already Cunningham proposed. I am rather convinced that this name in fact covered a much larger area (Jettmar 1977: 148). Hsüan-tsang mentioned turmeric and gold as export products (Beal 1884/1969: I 134). Turmeric in fact comes from the side valleys including Darel, gold is also washed along the Indus. Bīrūnī in the 11th century AD still had heard of an 'idol of Shamil' situated near the place where the Indus leaves the high mountains — evidently the Maitreya statue. Moreover, Shamil was certainly a large area, because Shamilan was the

name for the ranges West and East of the Nanga Parbat where the Kunhar and the Kishanganga have their headwaters (Bele-nickij 1963: 221; Mandel'stam 1967).

If my idea turns out to be correct, then the petroglyphs in the Indus valley would help us to get a glance into the inter-ethnic and intercultural system of Trans-Himalayan highlanders in the 1st millennium AD. Certainly this system was intricate.

6.1. Much of its complexity was veiled because Sanscritic names from the prestigious Great Tradition were taken over. Still we can discern names of Iranian origin belonging to more than one language. O. v. Hinüber found a similar diversity attested by the names mentioned in the colophones of the Gilgit manuscripts (1980: 57-80). Most probably some of them were immigrants, attracted by important positions in the administration and in the army of the local rulers. Maybe they established themselves as landlords. The Hodar valley was the basis of such a powerful family. Their heraldic symbol, a lion with raised paw and a star-shaped sign on his shoulder, is depicted on the rocks. The lion with such a shoulder decoration was a favourite motif of the Sogdian artist, maybe an astral symbol of long standing (e.g. Maršak 1971: 23, 120). If there was a king residing at Chilas, this family must have been feudatories. The distance between the two places is hardly more than 15 km.

Another part of population used names which cannot be explained on the basis of any well-studied and identified language. It is possible that some groups of the so-called Iranian Huns had similar names (Dani 1983: 82-90). Formerly I took an invasion of Hephthalite adventurers into consideration (1977: 438), but we should be careful because even the names mentioned in the modern 'Dardic' genealogies withstand every attempt of etymological interpretation. What we know about the prehistoric past of the area would be compatible with several pre-Indo-European infiltrations which were later on absorbed by Dardic settlers.

Some of the visitors presented themselves as Jāṭs or Khaśās. This means that they were not totally integrated in the system of the statelets. They were proud to remain tribesmen.



Fig. 9 — Carving on one of the rocks in the site Minargah, on the left bank of the Indus. Animal-carving made according to the rules of the Achaemenoid tradition which maybe persisted here. (Re-patination indicates a later date). (Photo Thewalt).



Fig. 10 — 'Site of the Adorants', Indus valley West of Thor. Footmarks were used as religious symbols long before they became Buddhist emblems (*paduka*). Here decorations were added. We note humans with venerating gestures, and animals, some of them definitely secondary additions. (Photo Jettmar).

6.2. The site Minargah is highly important for the reconstruction of the interethnic system. Rockcarvings were found near the mouth of this side-valley with a small but permanent rivulet. They cover a long period from the middle of the 1st millennium BC down to the end of the 1st millennium AD, i.e. even through the time of Buddhist preponderance. An important monastery was situated only a few miles away on the same bank of the Indus in the valley of Thor. In spite of that, Minargah has almost no Buddhist symbols (fig. 9). One gets the impression that they were intentionally avoided: the local population remained faithful to their own inherited iconography. Motifs derived from the Eurasiatic animal style may indicate the origin of the first settlers. A 'devious' iconography was also observed in the so-called 'Site of the Adorants' (fig. 10) and near Chilas II (fig. 11). Maybe such carvings were made by hunters and herdsman (fig. 12). This way of life, reluctantly permitted by the Buddhist monks, branded them as outsiders. But to stress the exceptional position by sanctuaries with non-Buddhist petroglyphs needed a certain degree of political independence not excluding an intense exchange of products and services.

6.3. Even the tillers of the soil who were able to earn their livelihood in accordance with the requirements of Buddhism, fostered spiritual tendencies of considerable originality as documented by rockcarvings, perhaps influenced by pre-Buddhist traditions.

Such survivals are quite normal among Buddhists both in the past and present. They were attested also elsewhere, e.g. by an examination of the graffiti on the walls of the cave monastery at Kara-tepe situated not far from Termez in Tokharistan (Syčeva & Syčev 1982). Drawings of palms were used as sacred symbols, as they were later on among the Muslims.

Along the Indus river, around and below Chilas, we are confronted with hundreds of carvings which I explained (Jettmar 1980a: 198-9) as primitive renderings of *stūpas*. Normally, they are of rather crude appearance. Most of them are made by picking with a pointed stone. Sometimes, there are splendid *stūpa* carvings on the same rock executed in every detail, probably by using chisels of steel. The difference is so striking that my local



Fig. 11 — Graffito with a hunting-scene near Chilas II. Very close to reality: If started by a dog the mar-khor does not run away but climbs on the next crag — becoming an easy prey of the hunter who lies in wait, as clearly indicated here. Contemporary with Buddhist carvings (?). (Photo Thewalt).

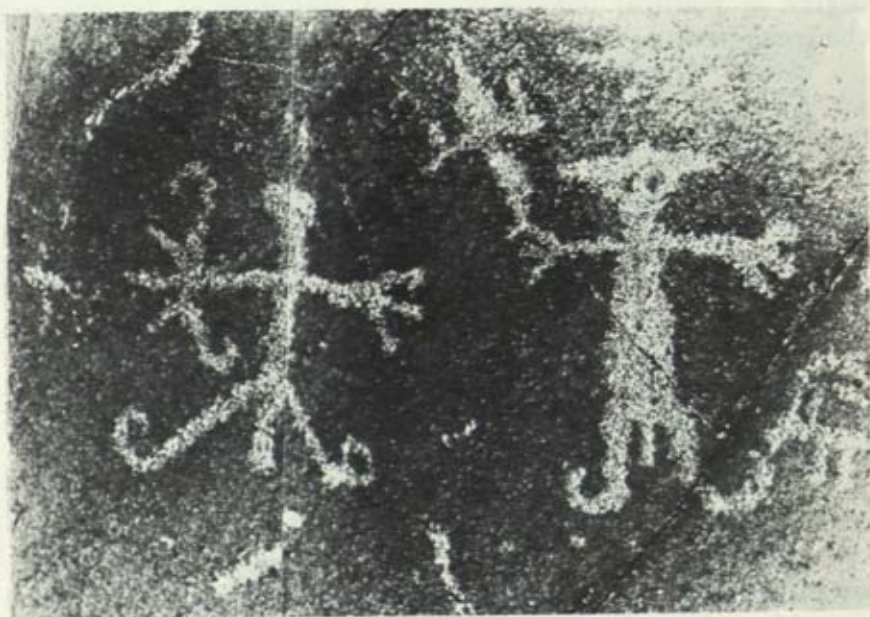


Fig. 12 — In the site Thor, Northern Bank there is a major group of carvings showing highly sophisticated transfigurations of human beings. No reasonable explanation is possible, but they seem to be contemporary with Buddhist graffiti according to the degree of re-patination. (Photo Jettmar).

guides and companions often announced them as 'Pakistani-made *stūpas*' belittling such poor discoveries.

For a while, I called such carvings '*stūpa* derivatives' (Jettmar 1980b). It was evident that in many cases such buildings had been in the mind of the artists. In other cases, characteristic elements were dropped or distorted. V. Thewalt called such constructions 'temples'. Dani used the same term in a more concise way. He had the idea that intruding followers of 'Śiva and Viṣṇu Cults' replaced the umbrellas by a *śikhara* (temple spire) and that a trident was used as topping. Otherwise, there was not too much difference in the realization so that 'sometimes a confusion is created' (Dani 1983: 192-4, 220-9). Dani demonstrates himself that a confusion is indeed imminent. Carvings defined by him as temples have all the specific peculiarities of *stūpas*, i.e. Nos. 183, 184 (right), 185, 187, 190. Whatever derivation the trident has, it must be seen with the Bon-po *stūpa* in mind, having a finial consisting 'of an orb, flanked by two projections rather like

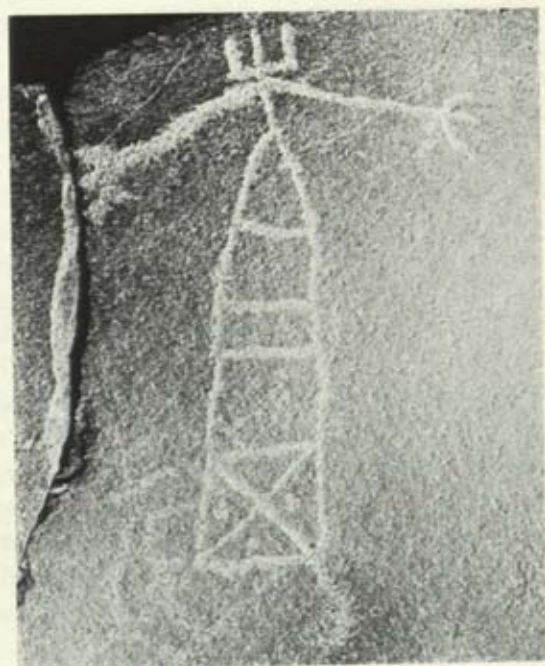


Fig. 13 — Simple graffito of a 'stupa-derivate', but the flags can be seen as 'arms'. Maybe legs are indicated. Site Chilas IV. (Photo Thewalt).

the outerprongs of a trident and topped by a blazing sword' (Denwood 1980: 176, fig. 1). The 'confusion' with the temple is typical for the Bon-pos; it must be mentioned here that they considered the popular religion of Gilgit as a variant of their own beliefs (Hoffmann 1969).

Discussing monuments like these (finally, I preferred this term because it is neutral enough) I stressed the observation that sometimes the toppings and the flags are transformed into a human head and raised or extended arms (fig. 13). Below the basis, lines are added indicating feet and phallus. Sometimes elaborate *stāpas* made by trained artists were disfigured in this way. As an explanation we could assume the influence of a pre-Buddhist deity which is in fact depicted without Buddhist reminiscences, with raised hairs, extended arms, straddly-legged and ithyphallic. In other cases, the body is intersected by horizontal or vertical lines. The flags on the top look like antennae, so we are inclined to see an insect (or an astronaut à la Däniken) (fig. 14).

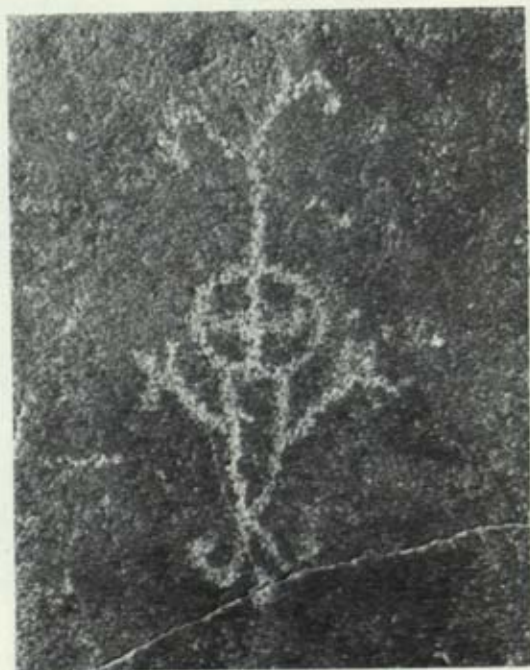


Fig. 14 — Carving of a *stāpa*-derivate at Thalpan, Altar Rock, jokingly called 'the astronaut'. Height 20 cm. (Photo Poncar).

Many times we could suspect that towers are depicted as built of square stones, maybe in a wooden framework. The Kafirs of the Hindukush had shrines of a similar look but always with windows (Robertson 1896: 394-7). The statues of the deities became visible when windows were opened. However, I have never seen anything resembling a window or an entrance, which would be expected to be there if the explanation as temple is correct.

The compact character is more easily explained if we assume that the *central mountain* as abode of supernatural powers, as embodiment of sanctity and purity, was encompassed in the semantic field of such carvings. This idea would correspond to what is well attested among the Bon-pos (Denwood 1980: 179). 'The gods are mountains' (cf. Nebesky-Wojkowitz 1956) seems to be a common conviction in the Himalayas. The flags decorating the top of the construction are sometimes rendered in a most interesting way, on one side only in the form of a hook, on the other side as a long and bulging train. The steady clouds of snow blown up by the storm over the top of the highest mountains could have been the models (fig. 15).

I have seen such clouds many times over the top of the Diamar (Nanga Parbat) and I was told that this was the smoke of the fire when the fairies were cooking.

So we are confronted with several interpretations side by side. None is completely satisfactory. We better shift to a more dynamic concept. The carvings were originally pious but primitive renderings of *stūpas*. Other ideas were incorporated, the view of menhirs and altars built of rough stones — I saw them still in 1958 (Jettmar 1961: 88-9) — had some influence (fig. 16). After a while, the icon lost connection with the architectural reality. Other explanations were substituted and discarded again. Finally, the development took its own independent way leading to the emergence of a magic configuration intended to spread sanctity and blessing. We may assume that not only the rocks were covered with the more and more ambiguous image, but also the mud-plastered walls of the buildings and the soil during religious ceremonies. The best term for such drawings is *yantra*, explained as 'diagram representing and activating cosmic powers' (Rawson 1973: 180).

At the site of Shatial Bridge there is the archaic rock-carving



Fig. 15 — More elaborate group of monument-carvings, maybe to be explained as mountain symbols, with adorant and early inscriptions. Chilas, Soniwal. (Photo Thewalt).



Fig. 16 — Altar built from heaped-up rocks, just opposite Mt Haramosh. Part of a still venerated non-Muslim sanctuary. Juniper branches are inserted between the stones. Maybe the last survival of a tradition starting with more elaborate mountain monuments. (Photo Jettmar, 1958).

of a *yantra*, maybe 5th or 6th century AD, belonging to a different tradition still preserved among the Buddhists of South-East Asia (Bizot 1981) (fig. 17). Letters are inserted in a framework of intertwined lines. But evidently the different traditions — network and *stūpa*-derivate — sometimes converge. In Hodar I observed the carving of a monument with double outlines combined with isolated letters. Cloud (or smoke) is to be seen on one side, the celestial bodies on the other. Horns are fixed, like on the graves of Muslim saints (fig. 18). The fusion of ideas is extreme (fig. 19).

More primitive carvings of 'monument *yantras*' were produced in a large area, along the Indus between Shatial Bridge and Chilas, in Hunza-Haldeikish, and near the confluence of the Gilgit and Hunza rivers. They are almost as common as animal drawings which had perhaps a similar meaning in a later period persisting in some places to the present day (Siiger 1956: fig. 4).

7. Another symbol is frequently used but only in a restricted area between Ges and Thor. It is a circular figure, a disc or shield, with manifold decorations, sometimes with a dentate outline. In the same context appear battle-axes and warrior figures, in some cases standing on the back of a horse. They are armed with an axe of the same kind or holding a bow or shield. 'Monument *yantras*' still occur but in a somewhat depressed position, literally put under the axe. Ibex pictures with two exaggerated horns belong to the same, apparently late, period.

Dani explains the complex as the emblems of conquerors and credits to this 'battle-axe people' the replacement of the *stūpa* by the Hinduistic temple (Dani 1983: 187-231).

In my earlier reports I already mentioned this complex interspersed by martial symbols (Jettmar 1980b: 188, 194). It is impossible to overlook them in Chilas II were they date almost a millennium later than the artistic drawings made during the Partho-Scythian period. But I was not sure whether they were made by conquerors or rather were the expression of a 'locally coloured nativistic reaction'. Maybe the area around Chilas was dominated by an anti-Buddhistic movement, for a while backed by one of the mountain tribes which had never accepted the 'Great Tradition'. This would explain the mixture of traditional and newly acquired elements.

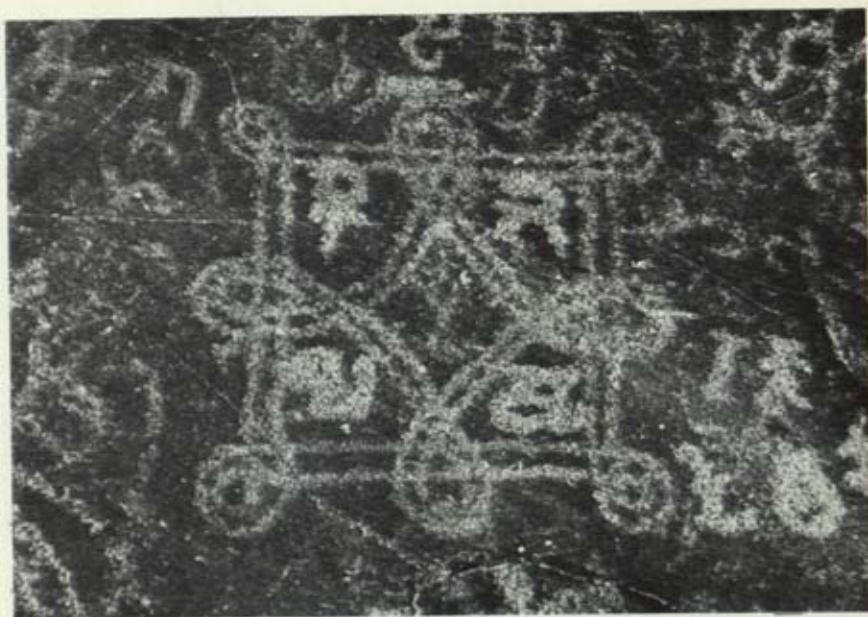


Fig. 17 — Graffito of a *yantra*, site Shatial Bridge. Size c. 20 × 20 cm. (Photo Thewalt).



Fig. 18 — *Stupa-yantra*, site Hodar. Height 80 cm. With stars (?) and cloud. The horns were certainly added later. In the same way horns are fixed to Muslim shrines. (Photo Jettmar).



Fig. 19 — Tower-like structure, next to it a he-goat. Maybe the structure is the connecting link between the *stupa*-shaped monuments (fig. 15) and the altar (fig. 16). In the Haramosh-valley we were told that a female deity came down to her altar in the shape of a goat. Maybe the visiting male god is depicted here as buck. Site Chilas III. (Photo Poncar).

In a recent paper (Jettmar 1984) I tried to examine the pertinent carvings and to explain them in the frame of the political development at the end of the 1st millennium as revealed by the written sources. This need not be repeated here.

* * *

Let us summarize: Down to the first millennium BC a variety of artistic styles documented on the rock indicate several waves of immigrants (cultural diffusion being less probable). A part of their descendants was not integrated in the states established under Buddhist dynasties. Maybe they preserved their way of subsistence and a tribal organization.

Even the newcomers of later periods were of mixed origin. Many of them were Iranians. They occupied important positions

in administration and army. The result was an interethnic and intercultural system of considerable complexity similar to what we can grasp today in the central part of the Himalayas, esp. in Nepal. But we need not go so far. In Chitral we still meet a dozen of separate ethnic groups. Here, the Iranian influence, stratified in itself, was disclosed by Morgenstierne when he studied the dominant language Khowar (1973: 241-55).

In the areas to the east of Chitral, the new Darada kingdom, a powerful state, arose at the end of the 1st millennium AD and initiated a process of assimilation and integration (Jettmar 1984). The capital was now in Gilgit. It controlled all the mountain valleys down to the Nilum (Kishanganga) and to the northern fringes of the Hazara District. The state made many attacks against Kashmir. It was mentioned by the Saka itinerary, the writings of Bīrūnī and the author of the *Ḥudūd al-Ālam*. The pre-Indo-European idioms disappeared (except Burushaski). The earlier Dardic languages mixed with Iranian loan-words were replaced by Shina, the language of the last wave of southern immigrants. Enigmatic terms for mountains and rivers, animals and plants are the last survivals of the earlier idioms.

Territorial units with a mixed economy replaced the former symbiosis of specialized groups. Remaining differences were understood as a caste system. Islamic missionaries tried their best for a farther unification.

However, in the last centuries there was a tendency to build up a new multi-ethnic system. Gujars infiltrated as specialized herders as well as Pashtu-speaking craftsmen. Southern immigrants occupied the bazaars, now they are employed in the many offices needed for modern administration.

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VOLKER THEWALT

Rockcarvings and Inscriptions along the Indus The Buddhist Tradition

Besides the petroglyphs of an earlier date and those of a more local character like hunting scenes, the rockcarvings and inscriptions of the Buddhist period form a main portion of the carvings in the Northern Areas of Pakistan.

Buddhist rockcarvings have been found mainly following the old routes of trade and pilgrimage along the Indus, the Ghizr (Gilgit) and the Hunza river (fig. 1). In the area of Chilas a tremendous concentration of Buddhist carvings and inscriptions has been discovered (fig. 2 shows the distribution of sites in Chilas area) and is being documented in subsequent campaigns¹. Apart from the inscriptions written in Indian scripts (Kharoṣṭhī, Brāhmī, Proto-Śāradā), many others have been found to be in Sogdian, Bactrian, Tibetan, Chinese and even in Hebrew characters. These inscriptions, when read and translated fully, will help in dating and interpreting the connected rockcarvings.

The carvings themselves display a vast variety of Buddhist iconology and of the development of architectural forms and designs, especially connected with the *stūpa*. The oldest representations of *stūpas* very closely resemble the types in Central India (e.g. in Sāñcī and Bhārhut) and some monumental *stūpas* in Gandhāra as well. Later on, the carvings of *stūpas* reflect a development in *stūpa*-architecture similar to that in Gandhāra towards terraced plinths, stairways leading up to the raised *pradakṣiṇāpatha* and a tendency towards slender elongated forms.

¹ From 1979 through 1983 research has been made possible by the generous financial aid of the German Research Society (DFG) and the foundation Volkswagenwerk; in future the project will be promoted by The Academy of Arts and Sciences in Heidelberg.

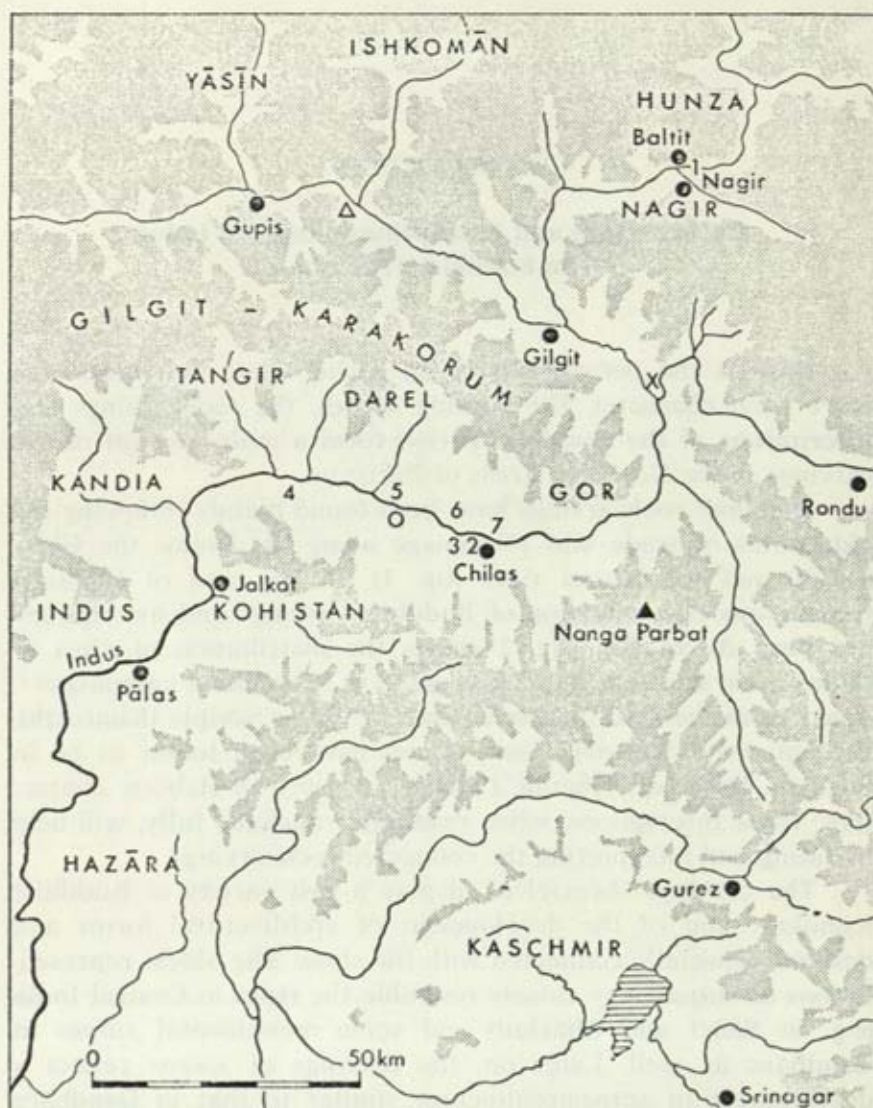


Fig. 1 — Northern Areas of Pakistan. Distribution of main sites
 1. Hunza-Haldeikish; 2. Chilas; 3. Gichigah; 4. Shatial; 5. Thor-North;
 6. Hodar; 7. Thalpan; Δ. Gakuch; X. Alam Bridge.
 (After Jettmar 1980a: fig. 1).

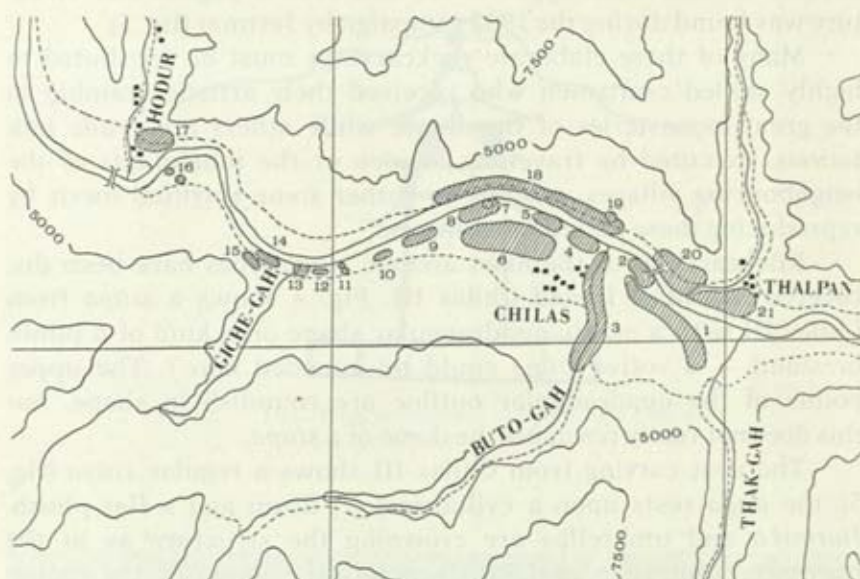


Fig. 2 — Rockcarvings in the area of Chilas, main complexes:

- | | |
|------------------------|--------------------|
| 1 Thak-Weg | 12 Gichi-Weg |
| 2 Chilas I | 13 Gichigah |
| 3 Butogah | 14 Campsite-Weg |
| 4 Chilas-New Colony | 15 Campsite |
| 5 Chilas-Soniwal Payin | 16 Hodar-Süd |
| 6 Chilas-Terrasse | 17 Hodar |
| 7 Chilas II | 18 Thalpan-Weg |
| 8 Chilas III | 19 Thalpan Ziyarat |
| 9 Chilas IV | 20 Thalpan-Bridge |
| 10 Chilas V | 21 Thalpan-Village |
| 11 Chilas VI | |

Several Central-Asian types occur and even a pagoda-like structure was found during the 1982 campaign by Jettmar (fig. 3).

Many of these elaborate rockcarvings must be attributed to highly skilled craftsmen who received their artistic training in the great monasteries of Gandhāra, while others are crude imitations, executed by travelling laymen or the inhabitants of the neighbouring villages, wishing to gather some spiritual merit by reproducing these sacred monuments.

Rockcarvings of the most archaic *stūpa*-types have been discovered in Chilas II and Chilas III. Fig. 4 shows a *stūpa* from Chilas III with a nearly quadrangular shape on a kind of a plinth or stand — a votive *stūpa* could be intended here². The upper points of the quadrangular outline are roundish in shape, but this does not really resemble the dome of a *stūpa*.

The next carving from Chilas III shows a regular *stūpa* (fig. 5): the *aṇḍa* rests upon a cylindrical (?) drum and a flat plinth. *Harmikā* and umbrellas are crowning the structure as in the previous example; a garland decorates the dome of the monument. Quite a number of such simple *stūpas* have been found at Chilas II as well.

A drawing from Chilas II (fig. 6) shows the next stage of the development³: the *stūpa* raises on a rectangular plinth. It seems that corner-pilasters are indicated on the plinth. A staircase — given in the simplified form of a ladder — leads up to the platform; a doorway with a triangular pediment gives access to the circumambulatory platform (not to the *stūpa* itself), that is surrounded by a railing. The cylindrical drum and the dome of the *stūpa* are markedly separated by a flat horizontal band; the dome is again decorated by a garland, here given in a zig-zag line. The *harmikā* in the form of a small *vedikā* and three umbrellas are topping the monument (Dani 1983: nos. 82, 84). To the left of the *stūpa* two devotees are shown wearing long and heavy coats, and above them a kind of column is depicted with peculiar indications of a base (or floral leaves?) and a capital, the whole thing crowned by an animal, which cannot be determined precisely.

² Some *stūpas* from Chilas II also resemble very closely the shape of votive *stūpas* (cf. Dani 1983: nos. 86, 87).

³ For other examples, see Jettmar 1980a: pl. 5.2; 1980b: frontispiece; 1980c: pl. I; 1982a: pl. 5.2; Dani 1983: 91 ff.; Thewalt 1984: figs. 2-4.



Fig. 3 — Thak-Weg, monument resembling a pagoda.

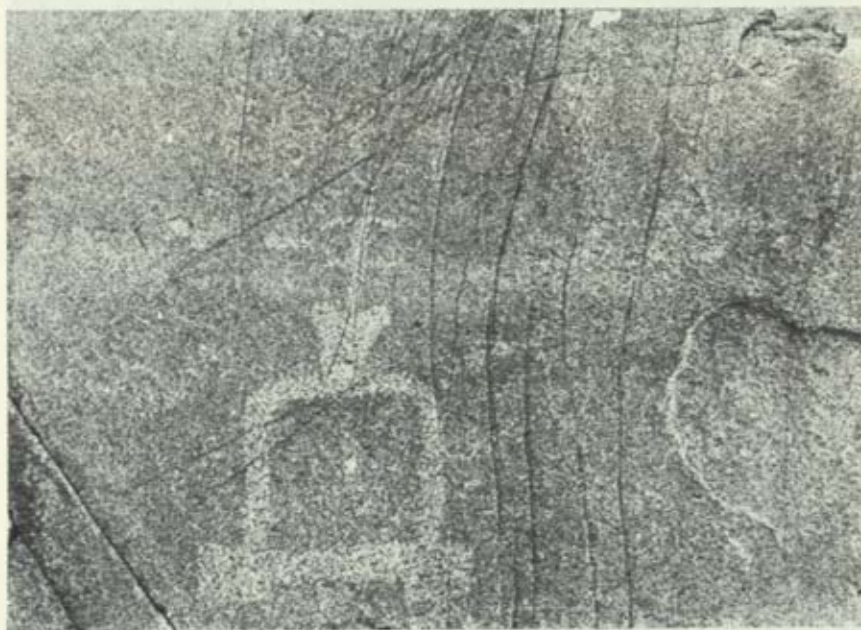


Fig. 4 — Chilas III, Stūpa. THE82N44-74.



Fig. 5 — Chilas III, Stūpa. THE82N47-7/8.



Fig. 6 — Chilas II, Stūpa, column and devotees. PO81N40-20.



Fig. 7 — Chilas I, Stūpa, devotees and Vyaghrtjataka. PO81N6-27.

Such columns, standing by the side of a *stūpa*, have been found rather often in Chilas II as well as in the later carvings from Thalpan Bridge (Jettmar 1980b: frontispiece; 1980c: fig. 2; 1982a: fig. 11; Thewalt 1984: fig. 3). Stylistically the column and the second person to the left are somewhat different from the main *stūpa* and the tall devotee — they might be additions by another person.

A highly advanced form of the *stūpa* is seen in a famous carving from Chilas I (fig. 7), which was already made known to Sir A. Stein during his short visit to Chilas (Stein 1944: 20 f.). Here a big *stūpa* together with two devotees is depicted beside a marvellous representation of the *Vyaghrtjataka* (Thewalt 1983). The dome of the *stūpa* rests on five storeys and a broad torus. It seems that the trapezoid element with sloping sides (similar to the umbrellas) was carved later over the fifth storey; the reason for that is unclear. The lowest storey is decorated by an alternation of beautiful floral scrolls (cf. here fig. 19) and simple pilasters with rectangular blocks indicating the bases and capi-

tals. The second storey shows three tribolate niches; these niches are empty as is the niche decorating the *aṇḍa*; presumably the niches were left empty due to the rather small size of the niches and the fact that the carving was obviously executed by means of a coarse stone implement that did not allow for extremely fine lines. The *stūpa* is crowned by a *harmikā* in form of an inverted stepped pyramid and by nine umbrellas, and on top of them there is a crescent and a round disk representing the sun⁴; streamers in a stiff stylized form and small bells hang down from the top and from the lowermost umbrella.

Two more highly interesting features are to be noted in this rockcarving of a *stūpa* presumably of the 6th or 7th century: the umbrellas are connected with each other by means of small oblique supporting elements and the lowermost umbrella is fixed with longer staffs to the dome, that has a special foothold for that purpose on its shoulders. This and other carvings showing the same details may give important hints at how to reconstruct actual votive or monumental *stūpas*. The second unusual feature about this carving are the two figures of soldiers in long robes, standing on top of the *aṇḍa* besides the *harmikā*, holding long spears in their hands. This motif is uncommon in the art of Gandhāra and is known till now only from much later wallpaintings in the Alchi monastery.

The next rockcarving from Chilas II shows a more simple form of the *stūpa* (fig. 8). The *stūpa* rests on three platforms of diminishing size and presumably quadrangular groundplan, carrying a round (?) drum that is smaller in diameter than the crowning dome of the *stūpa*. *Harmikā*, umbrellas and the other topping elements are given in the usual manner.

Another *stūpa* from Thalpan Bridge (fig. 9), executed with a sharp metal chisel in very delicate lines, shows the same scheme of construction. The topping elements above the umbrellas are still more elaborate than in the previous examples; the streamers are shown flowing symmetrically in wavy lines from the top to both sides. The posts supporting the umbrellas are given here in a somewhat different manner: the lower posts resting on the *aṇḍa* show indications of bases and capitals, while the smaller

⁴ The various crowning elements deserve further investigation.



Fig. 8 — Chilas I, Stūpa. PO81N7-19.

ones between the umbrellas are indicated just by round dots, and in the same manner the shaft carrying the umbrellas is stylized. Is this just a decorative form of representation, or did the artist no longer understand the construction of such a monument?

A very small-sized carving from Thalpan Bridge (fig. 10) shows three *stūpas* on a common base that is decorated by trilobate niches. To each of the *stūpas* leads a staircase. Even these miniature *stūpas* show the beams supporting the umbrellas and the waving streamers. The carving is very finely done, obviously with a metal chisel too.

Not completely finished are three other *stūpas* from Thalpan Bridge (fig. 11). The left *stūpa* with a beautifully decorated plinth



Fig. 9 — Thalpan-Bridge, Stūpa. PO81N12-17.



Fig. 10 — Thalpan-Bridge, three Stūpas on a common base. PO81N26-29A.



Fig. 11 — Thalpan Bridge, three Stūpas. PO81N17-13.

is lacking the usual streamers, as is the case with the smaller *stūpa* in the middle. The *stūpa* on the right shows only one streamer, but here the bells are missing and the decoration of the plinth is not finished. All three *stūpas* are very similar in design. The plinth consists of 5-6 storeys, the *aṇḍa* shows a trilobate niche and above the dome rises the *harmikā* in form of an inverted stepped pyramid; the umbrellas are supported by beams. While the umbrellas at Chilas I were of a trapezoid shape with pointed edges, here the edges of the umbrellas are rounded.

The next beautiful *stūpa* is also from Thalpan Bridge (fig. 12). The three lower storeys are again decorated with floral ornaments. The dome shows three tribolates, two of them in a lateral view and the central one in frontal view. Of course these niches on the dome of the *stūpa* do not indicate openings in the structure, but they resemble the false gables depicted in many of the *stūpas* from Gandhāra⁵. The front niche shows a Buddha,

⁵ Cf. Foucher 1905: 70, 72, 77, figs. 3, 4; Ingholt 1957: fig. 471. Concerning the shape of the niche, cf. Thewalt 1982: 171 ff.



Fig. 12 — Thalpan-Bridge, Stūpa and Buddha. PO81N20-23.

sitting crosslegged in *dharmacakramudrā*, the gesture of preaching. In the two lateral niches the Buddha figures are hardly recognizable. The dome of the *stūpa* is topped by the usual elements of *harmikā*, umbrellas, bells and streamers, crescent and disk. Very similarly to the big *stūpa* at Chilas I (fig. 7), three persons are shown standing on top of the *aṇḍa* — but obviously these persons are not meant to be guards since they are not holding any weapons at all. They could represent figures of Buddhas or Bodhisatvas.

Two more *stūpas* from Thalpan Bridge show a different and more simple design (fig. 13). The dome rests on two or three



Fig. 13 — Thalpan-Bridge, two *Stūpas*, PO81N33-5.

storeys. While these storeys are left blank in the case of the left building, the three storeys of the second *stūpa* show decorations consisting of commonly known architectural elements: the first storey is decorated by trilobate niches of an unusual shape alternating with pilasters; the second storey has an arcade consisting of simple vaulted niches; and the third storey is decorated by a row of pilasters only. The *harmikā* is missing in both carvings and the curvilinear umbrellas seem to consist of a wooden struc-

ture decorated with many bells — very similar to the representation of a big *stūpa* at Shatial (Jettmar 1980: 6; 1980d: pl. 3; Dani 1983: no. 54).

A simplified *stūpa* from Chilas I (fig. 14) consisting of a triple plinth, the *aṇḍa* and five umbrellas (Stein 1944: 21, pl. Vb) depicts a type that has been repeated over and over again along the ancient routes by those travellers who had no artistic training but just depicted simple imitations of the more sophisticated prototypes. The rockcarvings of this kind are all done with simple stone implements, leaving aside all the fine details. Even the streamers are just given as a long wavy line.

On a kind of stamped clay medals or seals from Skardu (fig. 15) the common *stūpa* forms are repeated. Over a multistoried substructure, accessible by a staircase, raises the *aṇḍa*, which is surmounted by the umbrellas and the streamers. Miniature *stūpas* of a similar construction have been found in the vicinity of Gilgit too, as well as stamped seals containing the Buddhist creed (Fussman 1978: 5 ff.).

Quite another type of building is depicted in rockcarvings from Chilas III and Chilas IV (figs. 16, 17). On top of a multi-storied structure very often a kind of triangular roof is shown, in many cases crowned by a *triśūla*, streamers and other decorative elements. The several storeys as well as the roof very often are depicted as a kind of framework with wooden layers strengthening the stone construction. Whether the triangular structure on top represents a roof or a decoration of symbolical meaning derived from the umbrellas of the *stūpa*, is still an open question. In many cases devotees (fig. 16) or vases of abundance (fig. 17) are combined with this type of monuments, which show no traces of doors or windows.

A very late stylized form of *stūpas* has been discovered at Chilas-New Colony (fig. 18). The *aṇḍa* here makes a perfect circle and rests on a substructure of several platforms with roundish outlines. *Aṇḍa* and umbrellas are covered by a kind of veil; and right on top the uppermost part of the shaft and two short stiff streamers are depicted (Dani 1983: 88, no. 66) *.

* Dani's description makes no sense at all — e.g., no *triśūla* is visible in this particular rockcarving, and *stūpas* of a very similar type, with veiled *aṇḍa* and umbrellas, are depicted in the murals of Alchi (cf. Goepper 1982; Pal 1982).



Fig. 14 — Chilas I, Stūpa and inscription. PO81N2-35.



Fig. 15 — Skardu, clay-stamps showing Stūpas. THE82N56-57.

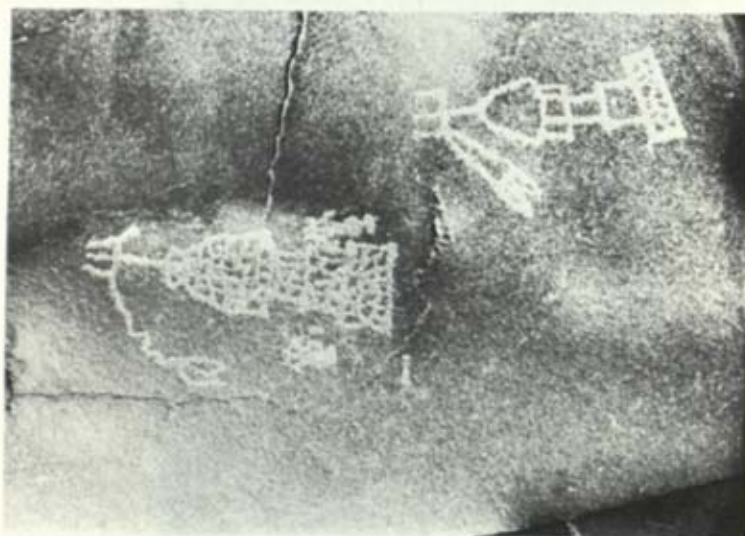


Fig. 17 — Chilas IV, two monuments and vases.
THE82N22-28.



Fig. 16 — Chilas IV, Monument and device.
THE82N65-28.



Fig. 18 — Chilas-New Colony, Stūpa. THE82N49-54.



Fig. 19 — Thalpan-Bridge, Floral Ornament. PO81N60-21A.

At Thalpan Bridge a marvellous carving of a floral ornament has been discovered (fig. 19), resembling the floral decorations on some of the *stūpa* bases (figs. 7, 11, 12). Of course this small carving does not depict a conch-shell⁷. Similar carvings have been found at different sites — they have not yet been published.

Beautiful carvings of horses have been found at Thalpan Bridge, one of them (fig. 20) with saddle-cloth and bridles, the other with the same special form of bridles only (fig. 21). This kind of bridles — the *cavesson* — can be traced in Sogdian wall-paintings as well as in Sasanian works of art (Thewalt 1984); the murals of Alchi show a slightly modified form of such bridles. Except the tail of the first horse, there is nothing in them to compare to the horses of the T'ang dynasty, as Dani did (1983: 238, nos. 194, 195).

Both horses are depicted without a rider in an imposing movement.

Besides the representations of architectural features, of animals and decorative designs, many carvings have been discovered depicting the Buddha himself and several Bodhisatvas (Jettmar 1980a: pls. 2-4; 1980b: 7; 1980c: pl. 2; 1983: fig. 1; Dani 1983: 129 ff.) as well as a number of Jātaka-scenes (Thewalt 1983) and some stories of the life of the Buddha.

In Thalpan Bridge for example, the First Sermon of the Buddha in the deer-park at Benares is depicted (fig. 22) (Jettmar 1983: fig. 7; Dani 1983: 142, pl. 6). The Buddha is sitting cross-legged among his first disciples, holding the hands in *dharmacakramudrā*, the gesture of teaching. Both his shoulders are covered and the folds of his robe are rendered in circular parallel lines. Below the Buddha the *dharmacakra* is shown on a column and two deers on both sides of the wheel indicate the site where the First Sermon took place.

Another rockcarving from Thalpan Bridge shows the legend of the Buddha's temptation by the daughters of Māra (fig. 23). Unfortunately, this picture is very dim and worn-off by the erasing force of the daily sandstorms. In the centre of the compo-

⁷ As it was interpreted by Dani (1983: 224, no. 181); but it seems to be a kind of exercise of a travelling artist. Similar carvings have also been discovered in other places — they will be published later on.



Fig. 20 — Thalpan-Bridge, Horse. THE82Min-14.

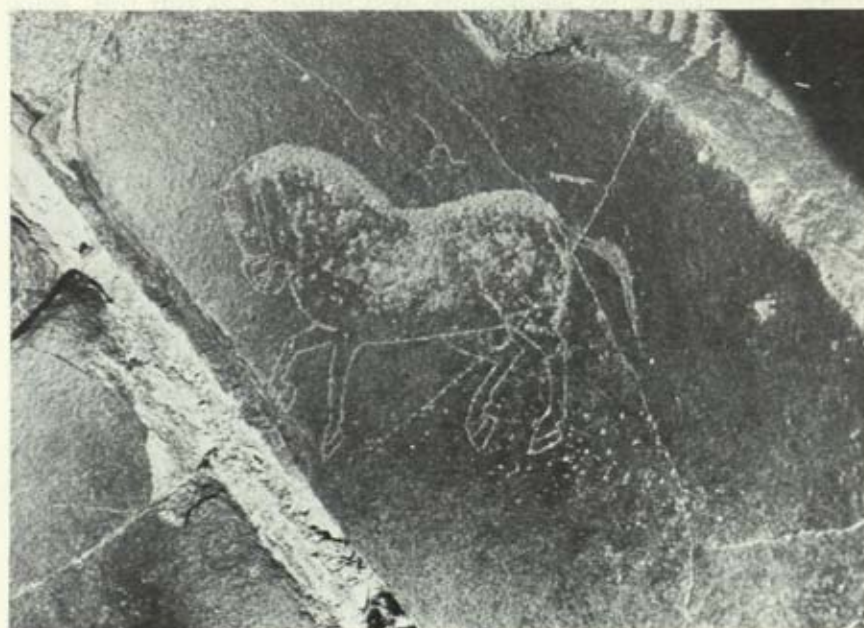


Fig. 21 — Thalpan-Bridge, Horse. PO81N20-5.



Fig. 22 — Thalpan-Bridge, The first sermon. PO81N29-21.



Fig. 23 — Thalpan-Bridge, Buddha's temptation by Māra's daughters. PO81N31-19.

sition the Buddha is depicted, sitting in a crosslegged fashion in a rocky landscape, indicated by angular meandering lines (Thewalt 1983: fn. 7, fn. 34). He is shown in a meditating pose, the left hand being covered by the garment and the right hand touching the earth in *bhūmisparśamudrā*, while two half-naked daughters of Māra are shown dancing in seducing and lascive postures on both sides of the Buddha who, of course, is completely unimpressed by these temptations. In this carving the right shoulder of the Buddha remains uncovered, while the rendering of the folds is very similar to the scene of the Buddha's First Sermon and a number of other representations of the Buddha (Dani 1983: nos. 111, 113, 116), but these features need further investigation, which will be carried out in future.

While representations of *stūpas* and other monuments of different faiths abound in nearly all the sites where carvings have been discovered, figures of the Buddha and Bodhisatvas have been found nearly exclusively in the sites of Chilas I and Thalpan Bridge with a few exceptions at Thor-Nord, Chilas II and Shatial. The distribution of the various types of carvings and of the different themes will be shown later on in the maps of the sites. But this is a future task and cannot be undertaken before the rockcarvings and inscriptions in the Northern Areas of Pakistan are completely documented.

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O.M. STARZA-MAJEWSKI

New Light on the Origin of the Jagannātha Image at Puri

There have been various attempts to trace the source of the cult and iconography of the polychrome Jagannātha figures (fig. 1) worshipped at Puri. In the last century Cunningham (1879: 111) was convinced that they were of Buddhist derivation and in 1927 Ananda Coomaraswamy (1927: 115, fn 1) noted that 'the crude Vaiṣṇava trinity which forms the principal icon bears a strong resemblance to a modified triratna symbol'. However, contemporary scholars generally accept that the cult of the God Puruṣottama-Jagannātha involved the adoption of a folk deity into the



Fig. 1 — The Puri icons photographed before January, 1969.

brāhmanic pantheon. Thus Elwin (1955: 29) believed that the Purī images in their curiously stunted form, look as if they might have come down from the Ganjām Hills. Kramrisch (1968: 80, fn 104) notes that the figure of Jagannātha is in the form of a log and that such a shape also serves the aboriginal Muria and Maria Gond of Central India as the nucleus of their clan divinity called Pen, and underlies the form of the Goddess Kālī as painted by the Kālīghāṭ patuas of Bengal. Geib (1975: 119) suggests that at Purī a primitive pillar was covered and painted and thus obtained, outwardly at least, a Hindu gloss. However, without the colouring, the figure could not be distinguished from the idols worshipped by the tribesmen. Mildred Archer (1977: 106) concludes that the most convincing proof of the origin of the Jagannātha images is the continuing existence in parts of Orissa, Bihar and Central India of figures in closely similar geometric styles. According to Eschmann, Kulke and Tripathi (1978: 175, 185) the Purī icon of Kṛṣṇa developed from the amalgamation of a tribal sacrificial stake with the head and arms of the God Narasiṃha. They believe that the Sudarśana cakṛa (which stands next to the figure of Jagannātha on the main altar) was originally the *calantī pratimā* of the early Jagannātha-Narasiṃha icon.

At first sight the tribal theory may seem to receive some support from the presence of the *daitās* in the great temple and of the *kālapithias* near Purī. Thus Rajendralal Mitra (1962-63: 350) pointed out that the actual operation of taking the icons to the cars was carried out by the aboriginal *daitās*. That of dragging the cars during the *rathayātrā* is 'performed by a body of 4,200 coolies, called Kālābetiyās, who enjoy rent-free lands in the neighbouring villages for this service'.

Another such group, the *suddhas*, were mainly settled cultivators but at least at the beginning of this century showed traces of tribal descent (O'Malley 1908: 82). However, the presence of the low castes in and immediately outside Purī is not surprising. According to Mahalingam (1967: 32), the Eṇṇāyiram inscription of Rājendra Coḷa refers to the gods of the *seris* or slums. Even today, the deities of the Little Tradition often co-exist in the same town with the gods of the Great Tradition.

It is true that the *Puruṣottama Māhātmya* of the *Skanda Purāṇa* mentions the Soras or tribals who lived in the forests enclosing the Blue Mountain at Purī. However, the slightly ear-

lier *Brahma Purāṇa* contains no reference to the aboriginals nor does it identify Jagannātha with Narasiṃha. In fact there is no mountain at Purī (which is surrounded by sand). The Blue Hill is the name given to the huge platform of the Jagannātha temple. The idea that the god was formerly worshipped by the tribals seems to have been largely promoted by the *daitās* who take care of the annual restoration and periodical renewal of the icons. However, none of the *Purāṇas* or later texts from the period of Caitanya refer to the total renewal of the Purī images but only to their partial restoration after the bathing ceremony. This suggests that the periodical renewal of the figures took place only after the icon of Jagannātha was burned by the Afghans in the 16th century. According to the *Skanda Purāṇa* (Mohapatra 1979: 411, 336)¹ this image 'was made in very remote times', wrapped with bark-cloth and painted by skilled craftsmen. Yet every year for the sake of decoration, the old bark-covers had to be removed and replaced by fresh ones which were coloured properly. The king appointed the sons and grandsons of a Hinduized tribal 'for painting at the time of different functions'. It is well known that the making and decorating of images was traditionally regarded as a craft of the *śūdras*. The *daitās* still have no real connection with the Sudarśana cakra and there is no evidence to suggest that they were its original guardians.

The advocates of the tribal theory have conspicuously failed to mention that up to the 19th century the Soras lived mainly in the jungle between Banpur and Cuttack. The tribals were also found in the forests of Atgaṛh, Daljora and other woods North of the Mahānadi (Stirling 1846: 51-2). It is therefore evident that the aboriginals lived in the forests near Bhuvaneśvara and the Banpur and Khurda Hills rather than in the low lying delta zone which was civilized before the time of Aśoka.

It is a fact that the actual Hinduization of the area which stretched from Purī to modern Dhaulī near Bhuvaneśvara occurred at a very early period in the history of Orissa. First of all, it is clear that Puruṣottamatīrtha is located near an estuary of the Vaṅki, a former branch of the Mahānadi and that the town stands on the ancient coastal pilgrims' route from the Ganges in

¹ *Puruṣottama Mahatmya*, XXXI 50; XIX 33-4.

the North to Mahendragiri in the South, a path frequented by travellers in the period of the *Mahābhārata*. This early text (see Geib 1975: 22-6) contains probably the first reference to the cult of Svayambhū Śiva and the Earth Goddess at Purī. It mentions a sand dune *vedī* at the mouth of a river along the same coastal pilgrim route between the Baitaranī river on the North and the Mahendra Mountain on the South, where Yudhiṣṭhira, the eldest brother of the Pāṇḍavas, pronounced a benediction. The *vedī*, a form of the Earth Goddess, is associated with the Vedic worship of Agni, Mitra, the celestial waters and Viṣṇu's seed. The sacrificial altar is described as in the *kṣetra* of Svayambhū Lokeśvara Śiva. Geib (1975: 24-5) has identified this god with Svayambhū Lokanātha Śiva of Purī whose ancient *tīrtha* is also found near an estuary where pilgrims still come to perform the rites of ancestor worship.

The sacred Puruṣottama lies within the agricultural delta zone which includes the site of the edicts of Aśoka at Dhauī and that of the Jain cultural and religious centre at Khaṇḍagiri-Udayagiri which flourished in the 1st century BC. An inscription in one of the caves at Khaṇḍagiri-Udayagiri reveals that the Emperor Khāravela of Kalinga repaired the gateway and defensive wall of his capital at Kaliṅganagara. No fortified town of comparable date except Śiśupālgaṛh is known to have existed at Khaṇḍagiri. Excavations carried out there in 1948 did reveal a collapse and subsequent repair of the southern gateway flank of the wall around the period of Khāravela. No megaliths have been discovered in the neighbourhood of the town (Lal 1949: 71).

Numerous Hindu temples were built at Bhuvaneśvara near the jungle where the Soras lived, and in the Prāci valley from the 7th century onward. The whole delta tract was clearly intensively settled and enjoyed considerable wealth based on agriculture and trade. It is therefore not surprising that the *Viṣṇudharma* includes Puruṣottama (*oḍre tu puruṣottamaṃ*) in a list of holy places associated with the worship of Kṛṣṇa (Hazra 1958: 123, fn 43). Another reference to Orissa, where Viṣṇu 'remains as Puruṣottama' (*udreṣu puruṣottamaṃ*), is found in the *Viṣṇudharmotara* (Hazra 1958: 191, fn 187). The *Matsya Purāṇa* mentions Puruṣottama in a list of *śrāddhatīrthas* (Agrawala 1963: 113), and the Goddess Vimalā of Purī among the Devīpīṭhas. Finally the later *Puruṣottama Māhātmya* of the *Skanda Purāṇa* preserves the tra-

dition that Puruṣottama-Īrtha was once set up by Śiva (Geib 1975: 43-5). There is no doubt that the oldest temples at Puri are Śaivite. The foundations of the shrines of Lokanātha, Kapālamocana, Yameśvara and even to some extent of the Mārkaṇḍeśvara, are buried deep below the present level of the town (the main part of the Govardhana Śaṅkara monastery is also on much lower ground).

The first known inscription which refers specifically to the God Puruṣottama in Orissa belongs to the 10th century AD, and records the death of a young brahmin pilgrim from Madhya Pradesh who drowned in the sea at Puri. It reveals that the youth Dāmodara left his parents and resolving to set out on pilgrimage, reached in due course the sea-shore where he saw the God Puruṣottama and went back to the world of Brahman (Sircar 1971: 77 and fn 3). As the Puri god was decorated and lighted by AD 1114 (*ibid.*: 72-6), perhaps in the Narasiṃha shrine on Nilācala (which is associated with an inscription of AD 1127 but is probably much earlier)², Dāmodara could not have seen the 12th century icon now worshipped in the Lion temple or the images installed in the main sanctuary around AD 1147. However, the *Brahma Purāṇa* preserves the tradition that men desiring *mokṣa* should by all means give up life at Puruṣottamakṣetra (Kane 1973: 701). In this light the epigraph probably means that Dāmodara saw the cosmic form of Viṣṇu in essence (sight is consciousness — forms the subject and the object) and attained *mukti* on drowning in the sea.

The Nāgpur inscription of AD 1104-1105 (Kielhorn 1894: 180-95) identifies King Lakṣmadeva Paramāra with Puruṣottama near the Eastern Ocean who as Vāmana protected the universe by subduing Bali and who supported the earth. This record shows that already before the Eastern Gaṅgas conquered Orissa, the Paramāra monarch was compared to Puruṣottama who is clearly identified with the Vāmana Avatāra of Viṣṇu in connection with his victorious march in Eastern India.

² The fourth of seventeen inscriptions (A.R. No. B of 1978-79, Puri Tahsil, Puri District, Orissa. To be published in the *Epigraphia Indica*) engraved on three sides of a pillar in the southern wall of the Narasiṃha shrine on Nilācala.

The present temple of Puruṣottama is the creation of the political genius of Anantavarman Coḍagaṅga who had his capital at Mukhaliṅgam but around AD 1112 annexed Orissa and conquered lands up to the Gangetic Delta. By AD 1135 he had consolidated his power over an empire which stretched from the Godāvarī to the Bhāgirathī. He chose Purī as the symbolic royal centre associated with the cult of Vāmana. There Coḍagaṅga — in an attempt to rival his relations the Coḷas — was the first to build a temple for Puruṣottama and Lakṣmī (Sircar & Sharma 1956-57: 249 ff.) on the only elevated piece of ground which almost certainly occupied the site of an earlier altar in the *rāja-kṣetra*. Coḍagaṅga was evidently a *smārta* who was devoted to the worship of Īśvara or Śiva whom he identified with the cosmic form of Viṣṇu (the God Puruṣottama). He realized that the cult of Nārāyaṇa is closely associated with royal consecration ceremonies and with *śrāddha* rites. In this period even Śaiva monarchs carried out the *abhiṣeka* ceremony according to the prescriptions of the *Viṣṇudharmottara* and the *Brahma* and *Nilamata Purāṇas* (Inden 1978: 39). There is no doubt that the coronation of Kāmārṇava VII, the eldest son of Coḍagaṅga which was performed in AD 1147, took place in the symbolic royal centre connected with the cult of Puruṣottama (where Kāmārṇava and his successors observed the *hiraṇyagarbha* and *tulāpuruṣadana* ceremonies).

It is clear that Coḍagaṅga ruled for about seventy years and died in AD 1147. He seems to have attained the abode of Brahman while staying at Purī. It was the custom in this period for an aged monarch to attain *mokṣa* by dying at a *tīrtha*. This was sometimes done by committing religious suicide. According to the *Śaivagāmas* those who receive *dikṣā* and are transformed into the very being of Īśvara on dying are not cremated but buried. Coḷa inscriptions mention the erection of sepulchral sanctuaries over the remains of kings and princes. The *liṅga* in the sanctum was often called after the deceased monarch. An epigraph shows that Anantavarman Coḍagaṅga, the son of Rājasundarī (the daughter of Virarājendra Coḷa) worshipped the God Rājarājeśvara who was called after his father the Eastern Gaṅga ruler Rājarāja I (Fleet 1889: 165). Coḍagaṅga seems in turn to have been deified and adored in the form of Kṛṣṇa and Īśvara. Here reference may be made to the legend of Jagannātha which relates that the first wooden Purī icons were made from the tree-shaped

lord of the Sacrifice who resulted from an *aśvamedha* sacrifice performed near the Indradyumna Lake which equals the Ganges in sanctity. Kane (1973: 539) notes that in 'numerous works some verses called *gāthās* sung by the *pitṛs* are set out one of which expresses the yearning of the *pitṛs* as follows: « one should desire to have many sons; since if even one (of the sons) goes to Gayā (and offers *śrāddha* after his father's death) or if he performs a solemn horse sacrifice or lets loose a dark coloured bull (the man having such a son will secure final release) ». In this light the *aśvamedha* of King Indradyumna at Purī seems to refer to the death ceremony of *vṛṣotsarga*. This explains why the Indradyumna Lake became a centre of *śrāddhas* which yielded greater results than those observed at Gayā. The Jagannātha myth links the *aśvamedha* with the death of King Indradyumna who is worried up in heaven that 'the servants may not be attending properly to the construction of the temple I had started building' (Mohapatra 1979: 352)³. This legend suggests that the Purī images are of *śrāddha* derivation, and that the sanctuary where they were consecrated was completed after the passing away of its founder. This is supported by a study of the wooden icons on Nīlācala.

The Purī Sudarśana cakra which is carried out first to the car during the great festival preserves the form of a *liṅga* (fig. 2). It is associated with the cult of the triad — Viṣṇu-Kṛṣṇa, Balabhadra-Śiva and Subhadrā or Brahmā, and is of course related to that of the sacred *vṛkṣa* from which it is not, however, derived. The legendary *aśvattha* (*Ficus religiosa*) on Nīlācala has been replaced by a *vaṭa* (*Ficus indica*), while the *cakra* is made of neem wood and evidently originated in a movable *dāruliṅga*. According to Gopinatha Rao (1968, vol. II 1: 79), 'No rules need be observed as in the case of *achala-liṅgas* in shaping the *chala-liṅgas*'. It is clear that the Sudarśana is quite distinct in form and decoration from tribal stakes such as the Kond example preserved in the Madras Museum (Thurston 1909, vol. 3: fig. facing p. 377) and the Kuttia Kond and Hill Sora pillars in Ganjam. It is similar in shape, decoration, function and even the colour of flame to the

³ *Puruṣottama Māhātmya*, XXII 23.



Fig. 2 — The Purī Sudarśana cakra photographed before August, 1971.



Fig. 3 — Flaming pillar or aniconic representation of the Cosmic Buddha in a relief from Nāgārjunakoṇḍa. (Photo: Archaeological Survey of India).

motif of a blazing *yūpa* depicted in a relief from Nāgārjunakoṇḍa (fig. 3). Another parallel to the icon is found in the memorial *dāruliṅga* set up over the grave of a Kānpḥata yogi in his monastery at Purī (fig. 4). It is interesting to compare such a commemorative *stambha* with the Sudarśana cakra adored by a kneeling Garuḍa and depicted below the Jagannātha triad in a relief on the eastern *prakāra* of the Liṅgarāja temple at Bhuvaneśvara (fig. 5).

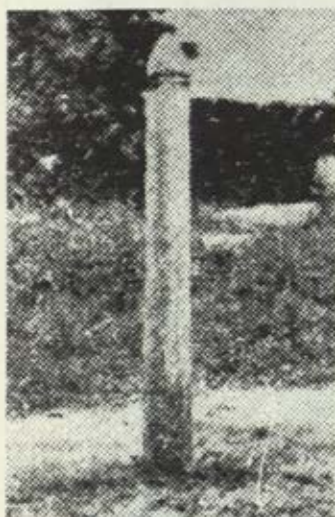


Fig. 4 — Memorial wooden *liṅga* on a *samādhi* in the grounds of the Goraknātha monastery at Purī. (Photo taken by G.W. Briggs in November, 1924).

Fig. 5 — Relief on the eastern *prakāra* of the Liṅgarāja temple at Bhuvaneśvara. The Purī triad with the Sudarśana cakra, here apparently identified with the Śivaliṅga. (Photo: H. Kulke).

The Sudarśana is made from neem wood which was almost certainly originally chosen to neutralize the impurity arising from death and to glorify Śiva and Śakti. The *Liṅga Purāṇa* recommends the neem tree housing crows for the neutralization of evil influences arising from the presence of Alakṣmi (Shastri 1973, 5-6, pt. 2: 622-3)⁴. According to this text the neem tree is

⁴ *Liṅga Purāṇa*, VI 46-51.

the one that Śiva loves best and its flowers, leaves and fruits are prescribed for the decoration of the *liṅga*.

Turning to the earliest representations of the icon of Jagannātha it may be pointed out that in three bas-reliefs from the Sun temple at Koṇārka the god stands before a *liṅga* in one and the same sanctuary (figs. 6, 7, 8). The Goddess Mahiṣāsura-mardinī is depicted in an adjoining shrine. In the carving decorating the platform (fig. 8) all three deities are placed on one *vedī* which is divided into two. In addition a 15th-century representation of the triad on the northern side of the Purī *bhogamaṇḍapa* depicts the *liṅga* in the centre between Durgā and Viṣṇu (on one altar which is also sub-divided (fig. 9). It would appear that the *liṅga* in the Koṇārka reliefs represents the immovable icon of Īśvara on Nīlācala which had disappeared into the *pātala*. The latter may be identified tentatively with the *liṅga-on-yoni* in the Pātaleśvara Śiva temple which is found about 15 feet below the level of the inner enclosure. This shrine was sufficiently important to be associated with the only known epigraphs from the time of Anaṅgabhīma III at Purī which record endowments for offerings to the God Puruṣottama (Sircar 1953-54: 197 ff.). The small sanctuary is probably memorial in nature for it is restricted in size and placed on the northern side of the temple near the cemetery of Jagannātha. The location of the artificial cave at the base of the Blue Mountain suggests that the icon may be the original stone image of Nīlamādhava.

Turning to the wooden image of Viṣṇu himself, it is clear that in the Koṇārka reliefs (figs. 6, 7) he is represented by a slender tapering *yāpa* practically square in section. He has a shield-shaped head with distinctive facial features such as distended circular eyes and a curved mouth. At first sight the icon has some resemblance to a Bhairava Ekapāda figure of Śiva but it is distinguished from it by having a very large head. Jagannātha of Purī has the emblems of Viṣṇu (the *cakra* and the *śankha*) and his body is not provided with a foot but rests on a *pīṭha* or pedestal of the *padmāsana* type. Likewise, his facial features are quite distinct from those of Narasiṃha. The true explanation of his appearance is found in the copper-plate grants of the successors of Anantavarman Coḍagaṅga (Sircar 1971: 66, fn 3). There the God Puruṣottama is equated with the *viśvarūpa* form of Viṣṇu, whose head was heaven and whose eyes were the sun and the

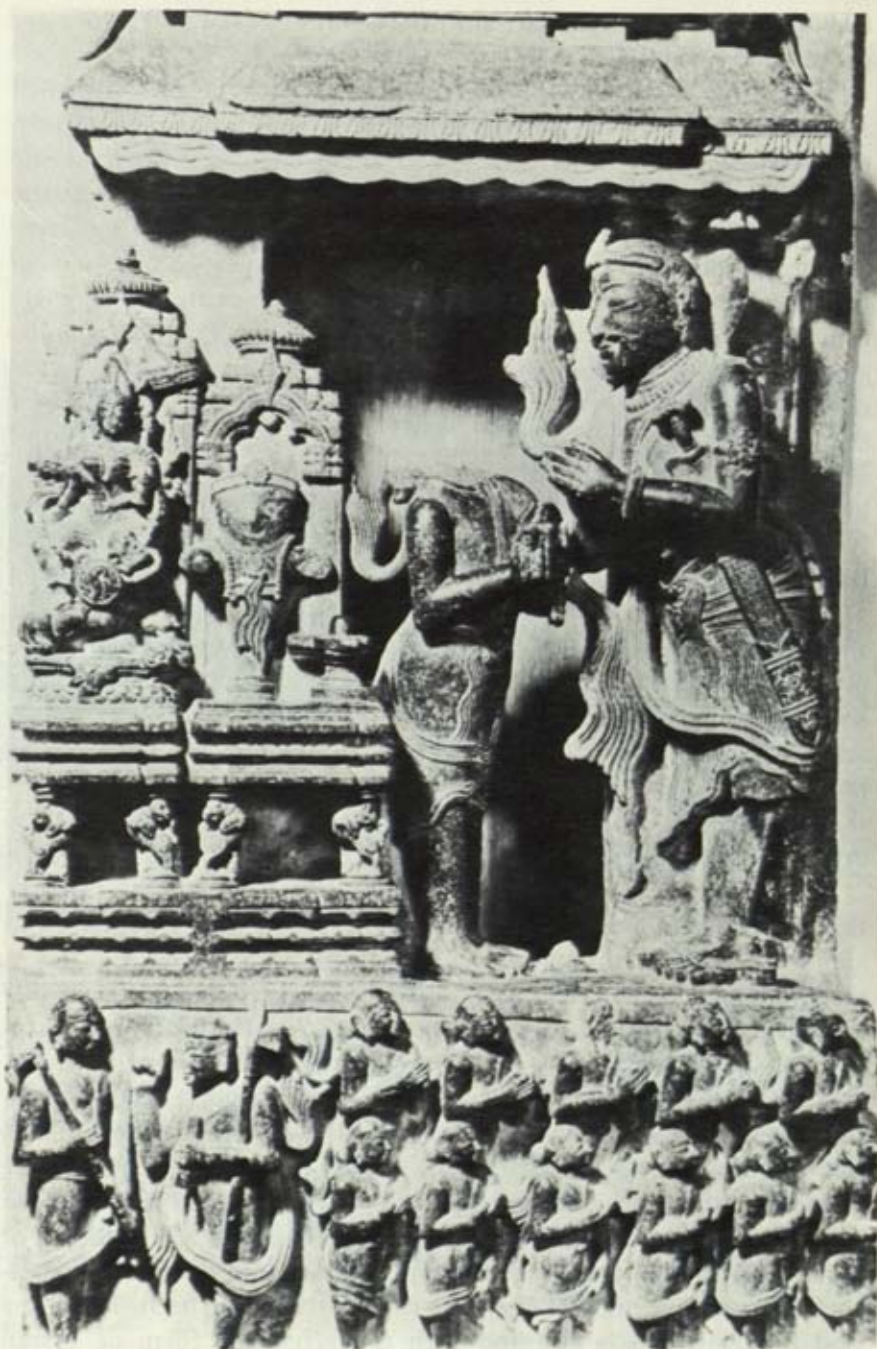


Fig. 6 — Bas-relief from the Sun temple at Konârka. King Narasiṃha I worshipping Durgâ, Jagannâtha, and Śiva; c. 1250 AD. National Museum, New Delhi. (Photo: National Museum, New Delhi).



Fig. 7 — Relief from the Sun temple at Koṇārka: detail showing King Narasiṃha I adoring Durgā, Jagannātha, and Siva; c. 1250 AD. Koṇārka Museum. (Photo: O.M. Starza).



Fig. 8 — Bas-relief depicting King Narasimha I worshipping Durgâ, Jagannâtha, and Siva; c. 1250 AD. Sun temple, Konârka.
(Photo: Archaeological Survey of India).



Fig. 9 — *Bhogamaṇḍapa*, Jagannātha temple, Puri: detail of northern side. (Photo: India Office Library, London).

moon. The same idea had already appeared in the *Bhagavad-Gītā* where the cosmic shape of Kṛṣṇa as Puruṣottama is identified with Īśvara (Śiva) and Kāla (Time)⁵. He has the sun and the moon for his blazing distended eyes, and a flaming mouth which consumes the ephemeral universes⁶. He is also likened to the Cosmic Tree with roots above and boughs beneath⁷.

⁵ *Bhagavad-Gītā*, XI 3, 8, 32.

⁶ *Ibid.*, XI 19, 24.

⁷ *Ibid.*, XV 1, 4.



Fig. 10 — Stone icon of Dadhivāmana-Jagannātha in the Liṅgarāja temple at Bhuvaneśvara: western side of the Liṅgarāja sanctuary, to the North of the *bhogamandapa*; late Eastern Gaṅga period. (Photo: Archaeological Survey of India).

It is significant that in the Koṅārka carvings Puruṣottama is depicted with large glowing eyes which combine the symbolism of the sun with that of the moon. His mouth is wide and curved like a flame. The lower part of his image very closely resembles the *yūpa* which glorified Viṣṇu, the personification of the sacrifice. The proportions of the figure of Puruṣottama would seem to be those of an inverted tree-trunk tapering downwards from the top of the head to a narrow base. This appears to reflect the symbolism of the cosmic Tree whose roots are in heaven. The head of the Purī god in the Koṅārka reliefs was apparently influenced by the motif of the solar orb which was bisected so as to preserve its resemblance to a *stambha*. Fortunately, an examination of the single, late Eastern Gaṅga stone image of Dadhivā-



Fig. 11 — Sudarśana cakra at Mahendragiri, Ganjām Dt, Orissa; possibly early mediaeval period. (Photo: Archaeological Survey of India).

mana-Jagannātha in the Liṅgarāja temple at Bhuvaneśvara (fig. 10) accords with the identification of Kṛṣṇa as Puruṣottama with Kāla in the *Gīta*. This icon, which is probably the earliest one extant, has a large head which resembles the lower half of a bisected wheel and rests on a *stambha*. The face lacks carved features for the god has innumerable characteristics and the 'sun and moon' eyes are painted. The whole figure may be compared with the archaic stone *cakra* at Mahendragiri in Ganjām (fig. 11). This non-personified form of the disc dates perhaps from the early mediaeval period, and may be memorial in function. It is partly anthropomorphized, for the pillar is provided with a neck.



Fig. 12 — Wooden image of Varadarāja formerly worshipped in the main shrine of the Varadarāja temple at Kāñcī. (Photo: Varadarāja temple, Kāñcī).

The centre of the wheel, which is based on the solar symbolism of Viṣṇu, was considered as the gateway into his heaven.

The *Puruṣottama Māhātmya* of the *Skanda Purāṇa* traces the Purī image of Jagannātha from the tree-shaped lord of the Sacrifice, and associates it with the *yantra* of Narasiṃha (Mohapatra 1979: 331-2, 385)⁸. It is clear that the icon of Kṛṣṇa as depicted in the Koṇārka reliefs is derived from a *vṛṣakaṣṭha* which is transformed into a likeness of the God Puruṣottama. He has arm-stumps to which hands may be added in the manner of the wooden figure of Viṣṇu (fig. 12) formerly worshipped in the main shrine of Varadarāja at Kāñcī. The Purī icon is distinct from the composite Sudarśana-Narasiṃha image of which no medi-

⁸ *Puruṣottama Māhātmya*, XVIII 17; XXVIII 18.



Fig. 13 — Kāṃsa in the form of memorial pillar: bas-relief, Gundīcā temple, Purī. (Photo: W. Ruben).

aeval examples are known to us⁹. We have seen that even the Eastern Gaṅga stone figure of Jagannātha in the Liṅgarāja temple at Bhuvaneśvara reflects the idea of the non-personified form of the *cakra*.

An interesting parallel to the Purī icon of Puruṣottama is found in the depiction of the death of Kāṃsa, King of Mathurā in a relief from the Gundīcā *maṇḍapa* (fig. 13), the birth-place of

⁹ One of the earliest examples of a composite Sudarśana-Narasimha icon dates only from the late 16th or early 17th century (Begley 1973: figs. 62-3).

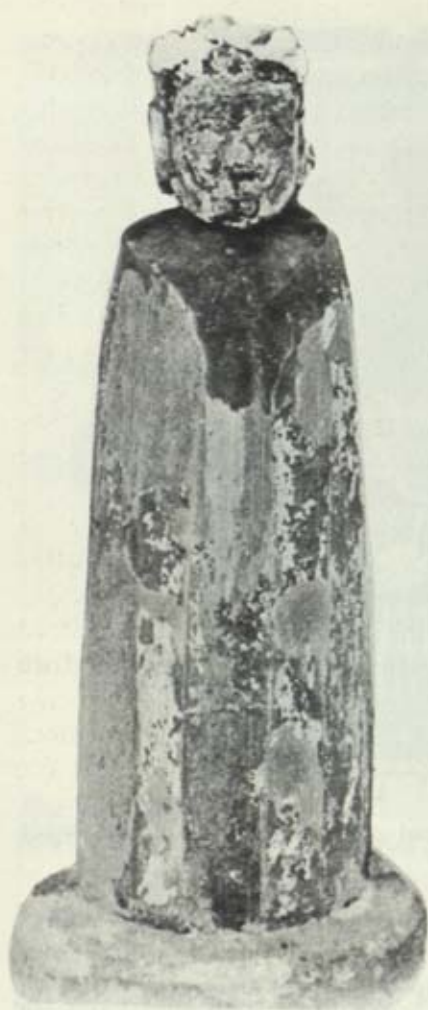


Fig. 14 — *Stambha* with superimposed head: Rāmeśvara temple, Sonpur; probably 11th century. (Photo: R.F.V. Smith).



Fig. 15 — *Stambha* with superimposed head: Somanātha temple, Sonpur. (Photo: R.F.V. Smith).

Jagannātha. In this panel Kṛṣṇa is shown killing Kāṃsa and the monarch is represented by a memorial pillar with the superimposed head of Kālanemi with whom he was identified. This reminds us of the *stambhas* in the enclosures of the Rāmeśvara (fig. 14) and Somanātha (fig. 15) shrines at Sonpur and the

Kapileśvara temple in Bīṅkā (Kulke, n.d.: fig. 6)¹⁰. The heads which surmount them represent Rāhu. One shows the eclipse demon with the third eye of Śiva, of whom he is supposed to be a manifestation, and who like Kālanemi was also destroyed by the Sudarśana cakṛa (Viṣṇu struck off his head). Ray of the Archaeological Museum at Bhuvaneśvara who examined the Rāmeśvara pillar informed us, that it was until recently identified as the Goddess Stambheśvarī (and is similar in form and height to the *liṅga* installed in the Rāmeśvara shrine), and the head appears to be a later addition. There is no doubt that the Kapileśvara, Rāmeśvara and Somanātha *stambhas* are associated with the propitiation of the *pitṛs* during the eclipse of the moon since this brings all kinds of blessings to the sacrificer. They are all connected with the cult of Kālī and that of Kāla who is the presiding deity of Rāhu.

The representation of Kāṁsa as Kālanemi in the Guṇḍīcā relief symbolizes the destruction of the king's evil propensities and his attainment of bliss. Anantavarman Coḍagaṅga simply passed through the doorway of the Sun, there where beyond death dwells the Puruṣa, the imperishable One. He was therefore depicted on Nīlācala in the form of a memorial pillar with the superimposed head of Kṛṣṇa as Puruṣottama-Vāmana. This mask evidently originally personified the god-head attained by the founder of the Jagannātha temple.

In the Koṇārka carvings the figure of Viṣṇu-Kṛṣṇa is placed near an immovable Śaiva icon to remind us that he is identical with Īśvara who grants the supreme peace. This recalls the *chāyās* or effigies often accompanied by lamps which stood before the principal deity in a temple. An epigraph reveals that such an image holding a perpetual lamp lit Śiva Mārkaṇḍeśvara in his sanctuary at Purī in AD 1114 (Sircar 1971: 73). Another inscription records a gift made by a female donor to the priests of the shrine of Śiva at Kālahasti in South India in AD 1119 which was intended to cover the cost of burning a perpetual lamp in a light-stand cast in the likeness of a deceased brother (Aravamuthan 1931: 38). In an earlier period Kuṇḍavai the sister

¹⁰ Unfortunately fig. 6 was replaced by a different illustration in the later published version of this work (Kulke 1973).

of Rājarāja I set up the effigies of her parents Parāntaka Sundara Coḷa II and Vanavan Mahādevī in the famous shrine of Rājarājeśvar at Tanjore. Balasubrahmanyam (1975: 42) points out that 'the extent of her devotion to her parents is shown by the unusual use of the expression *tirumeni* with reference to the icons of her parents'. This term which occurs in the epigraph which records the endowment was usually applied only to images of gods.

The *chāyās* did not commemorate the death of a hero but rather the person — the citizen or king — in a general way. The actual funeral images were often made in a form indistinguishable from that of a deity to whom an ancestor was dedicated in life. According to Śukrācārya's *Śukranttisāra* (IV 4.76) the making of likenesses of mortals even with their characteristic features accurately depicted is called *asvargya* or 'not leading to heaven' (Aravamuthan 1931: XI). This tradition explains the abstract appearance of the wooden figure of Jagannātha. His iconography was based on the archetypal motif of the cosmic Tree in human form, and developed from the amalgamation of a *yūpa* with a *chāyā* made in the image of the God Puruṣottama. It glorified the essence of the king not his human form. The icon of Kṛṣṇa such as that represented in the Koṇārka reliefs is quite distinct from tribal grave images.

Already in the last century Chakravarti (1897: 333) pointed out that in his manuscript copy of the *Virajā Mahātmya* the first *adhyāya* refers to the temple of Jagannātha at Purī, and 'in one passage the pilgrims are advised to pay their respects at the shrine of Gaṅgēçvara. From the name and description, I take this to be a Liṅga established by Gaṅgēçvara which was another name of Coḷagaṅga'. Could it have been that the king was worshipped originally in the form of Coḷagaṅga-Mādhava and Coḷagaṅgeśvara on Nīlācala, and did this cult of the god-king spread to Āndhradeśa?

It is clear that an inscription dated AD 1150 shows that Anantavarman Coḷagaṅga's wife Kasturikāmodinī built a temple for the God Dadhivāmana at Tekkali in Āndhra Pradesh, probably in memory of her husband (Stietencron 1978: 77-8). At first sight the worship of Dadhivāmana seems to have no connection with the cult of Jagannātha. However, the legendary memorial

Nīlamādhava who is now represented on the main altar in the temple at Purī by a miniature image of Jagannātha is identified with Dadhivāmana! King Indradyumna the mythical founder of the great sanctuary (who may be equated with Anantavarman Coḍagaṅga) is at present depicted by a four-armed figure of Kṛṣṇa-Nīlamādhava of no great artistic value in a small shrine beside the Indradyumna Lake. The façade of this sanctuary bears not only a clear inscription, 'indradyumna rāyā', but also the word 'nīlamādhava' in faded Oriya characters.

An epigraph also dated AD 1150 and from the village of Dvārapureddipalem in the Vizianagaram Taluka of the Vizagapatam District mentions the temple of the God Coḷagaṅgeśvara at Dharmapura (Rajaguru 1961, vol. 3, pt. 2: 261). Another record, dated AD 1154 and inscribed on a pillar located in the vicinity of the village of Rellivalasa in the Tālāṇḍi District of the same Vizianagaram Taluka, speaks of the deity Coḷagaṅga-Mādhavadeva and identifies him with Coḷagaṅgeśvaradeva (*ibid.*: 278-9). Yet another epigraph from the same locality but dated AD 1159 refers to the temple of Coḷagaṅga-Mādhavadeva in the Tālāṇḍi District (*ibid.*: 290, 323). These inscriptions suffice to establish that divine honours were accorded to Coḍagaṅga who appears to have been equated with Hari-hara. There is no doubt that this worship of the god-king had its source in the royal symbolic centre at Purī where the *cakravartin* laid the foundations of the *mahāvedī* with its various shrines and where he almost certainly passed away. It is significant that to the present day the founder of the temple of Jagannātha is annually commemorated there with *śrāddha* rites and the offering of lamps. These ceremonies are performed on the 14th day of the black fortnight of the month of Mārgaśīrṣa.

It is of course difficult to know precisely how many principal icons there were in the shrine of Puruṣottama or what their exact temple worship was. According to the *Rāmānuja Divya Caritāi* and the *Prapannāmṛta* of Anantācārya the sage failed to introduce the Pañcarātragāma rites at Purī because the priests of Jagannātha objected to his teaching (Joshi 1959: V-VII). First we have seen that there are certain indications that the main processional image and the immovable one were in *liṅga* form. Thus the Sudarśana cakra which is mentioned in the *Skanda* and other *Purāṇas* (and as a pillar in the *Kapila Saṃhita*) (Mohapatra

1979: 6-7, 64, 380-1), is still in *dāruliṅga* shape, while the legendary memorial Nīlamādhava may be identified tentatively with the *liṅga-on-yoni* in the shrine of Pātāleśvara. Secondly, according to Kulke (1979: 230), no evidence has so far been found 'for the existence of this trinity (Jagannātha, Balarāma and Subhadra) before the year 1237. All earlier sources report only on the single Puruṣottama, sometimes together with his wife Lakṣmī'. He concludes that Balabhadra was introduced there about AD 1230 after Lakṣmī's transformation into Subhadra. This he maintains is because there is a contemporary Oriya convention, according to which the younger brother's wife (Lakṣmī) could not have lived in the same house with her husband's elder brother (Balarāma). In fact the worship of Kṛṣṇa and Balabhadra was already flourishing at Purī in the last decade of the 12th century. It is clear from the Madanapāḍā copper-plate grant which was issued in AD 1218, and lately examined by Sircar (1959-60b: 315 ff.)¹¹, that the Senas claimed to have raised pillars of victory on the coast of the Southern Ocean where there is a *vedī* on which Musaladhara (Balabhadra-Saṅkarṣaṇa or Śiva) and Gadāpāṇi (Viṣṇu-Kṛṣṇa) dwell. According to Sircar this referred to a time considerably before King Lakṣmaṇasena (AD 1179-1206) had lost the western half of his dominions to the Turkish Muslims.

Thirdly Kulke (1979: 231) suggests that Anaṅgabhīma III's ritual reforms were 'deeply influenced or even guided by the Vaiṣṇava Pāñcarātra theology which emphasizes the dominant position of Kṛṣṇa (= Jagannātha) in his relation to Ekānāmśa (= Subhadra) and Balarāma (= Balabhadra). Since Ekānāmśa is interpreted as Durgā and Balarāma as Śiva, the Pāñcarātra system was ideally able to incorporate the most important cults of Orissa (Durgā-Virajā and Śiva-Liṅgarāja) in the new state cult of Jagannātha and, at the same time, to subordinate them under Jagannātha — and his earthly deputy'. However, the Kāñcī record of AD 1230 reveals that Anaṅgabhīma 'has attained the supreme bliss of Brahman by constant devotion to and practice of the meaning of the *Mahāvākya*' (Mahalingam 1955-56: 97). It would appear therefore that the king was a Vaiṣṇava who fol-

¹¹ See also Kulke 1981: 38-9, fn 24, whose view would appear to be based on a misinterpretation of the epigraphic evidence.

lowed the Advaita teaching of Śaṅkara which believes in the complete oneness of Śakti with Viṣṇu and Śiva. There is no doubt that his son Narasiṃha I was dedicated to the worship of Śrī Vidyā in the Jagannātha temple and identified Maheśvara and his consort Durgā with the God Puruṣottama (Sircar 1959-60a: 43). It is clear that the general position of the Purī triad in the three Koṇārka reliefs, two male figures on one side and one female on the other, is quite distinct from the composite icon of Puruṣottama worshipped in the purely Vaiṣṇava sanctuary of Ananta-Vāsudeva at Bhuvaneśvara.

In conclusion, it is almost certain that the worship of the Jagannātha figures was influenced by the prescriptions of the *Vāmana Purāṇa* which were observed by King Anaṅgabhīma III (Sircar 1949-50: 244). This text declares the complete identity of the cosmic form of Viṣṇu with that of Śiva (Agrawala 1964: 128). It declares that Vāsudeva is beyond time but assumes the form of Brahmā, Śiva and Viṣṇu who are identified with the *guṇas* — *rajas*, *tamas* and *sattva*. The *Vāmana Purāṇa* associates the Sudarśana cakra which was given by Śiva to Viṣṇu with that of the Trimūrti — Rudra, Viṣṇu and Brahmā. Maheśvara explains that this trinitarian pattern is one of his aspects, he himself remaining beyond the triad (*ibid.*: 171). At Purī we find that the Sudarśana cakra is in *liṅga* form. In addition it is linked with the cult of Balabhadra-Śiva, Viṣṇu-Kṛṣṇa and Brahmā-Subhadra.

At first sight the worship of the Trimūrti with three males — Śiva, Viṣṇu and Brahmā — should be distinguished from that of a trinity with two male figures and one female as in the Jagannātha temple. However, in the cult of the Trimūrti the Śaivas regard Balabhadra as a manifestation of the *guṇa sattva* and they identify the cloud-hued Viṣṇu with *guṇa tama*. This order is of course, reversed by the Vaiṣṇavas who equate Viṣṇu with the *guṇa sattva*. Yet both sects identify Brahmā with *rajas*, the third of the three *guṇas*. (Raghavan 1968: 98) ¹².

¹² It is clear that in the 15th century Śāralādāsa identified the Purī triad with the worship of the Trimūrti, that is of Brahmā, Śiva and Viṣṇu (Geib 1975: 144, 156). Marglin (1981: 166) notes that Subhadra, who stands on Balabhadra's left, is considered as being a sister, not his wife. However, the *Puruṣottama Mahātmya* of the *Skanda Purāṇa* expressly states that Subhadra (Lakṣmī or Śrī) is the sister and the *śakti* of Balabhadra who is identical with Kṛṣṇa. Mohapatra 1981: 13,335-6 (*Puruṣottama Mahātmya*, XIX 11-7).

Summing up, it is clear that the earlier worship of the God Puruṣottama who appears to have been decorated and lighted in AD 1114 (perhaps in the Narasiṃha shrine on Nīlācala which is associated with an inscription of AD 1227), should be distinguished from that of the later wooden icons installed by the Gaṅgas in the main sanctuary which was built around AD 1135-50. The latter appear originally to have commemorated Anantavarman Coḍagaṅga. He was represented by a hieratic polychrome effigy which was derived from the amalgamation of a memorial pillar with an ancestral effigy made in the likeness of Kṛṣṇa as Puruṣottama-Vāmana. The king was also adored in the shape of a perfectly orthodox processional *dārulīṅga* which identified him with Īśvara. Certainly after the passing away of Coḍagaṅga, Purī replaced Virajākṣetra or Jājpur, and Gaṅgāsāgara, where the sacred Bhāgīrathī flows into the sea, as the greatest *mukti-tīrtha* in Eastern India. In the subsequent period of Lakṣmaṇasena the two principal icons on Nīlācala were adored as Gadāpāṇi and Musaladhara or Śiva. Although later cults and accretions have obscured its origin, the Puruṣottama image clearly derived from the memorial polychrome effigy of an apotheosized *cakravartin*.

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JANINE SCHOTSMANS

About a Chola Pillar in the Collection of the *Musées Royaux d'Art et d'Histoire* of Brussels

The first object coming from the South Asian Region acquired by the, at that time, Musée Royal d'Armures, d'Antiquité et d'Ethnologie, was paid 450 Fr. on July 10, 1848. It is a Chola pillar in a grey diorite, 1.42 m high and 47 cm in diameter, bearing a long donation inscription in Tamil and reliefs around its base of the *cakra* and *śaṅkha* emblems of Viṣṇu and of the figures of Garuḍa and Hanumān (figs. 1-9).

It was acquired by the first Director of the Museum, A.G.B. Schayes from the administration of the Hospices Saint-Pierre in Ostend¹ and already published in the first catalogue of the Museum by Schayes, under number 224 (Schayes 1854: 181):

Grandes Indes (Indoustan) — Fût d'une colonne cylindrique en granit. Elle est entièrement couverte d'inscriptions en caractères d'une haute antiquité et porte d'un côté un bas relief représentant une divinité à bonnet pointu et de l'autre la figure d'un singe. Découverte à Ostende en 1793, en creusant un canal.

In the manuscript general inventory of the collections of the Museum of 1893: CI, same description and then,

Elle semble avoir fait partie d'un monument sacré de l'Indoustan. Découverte dans les bassins à Ostende en 1793. Cette colonne qui doit avoir fait partie de quelque temple Indien, fut probablement apportée à Ostende, par un navire venant des Indes qui s'en serait servi en guise de lest. Le célèbre orientaliste français M. Burnouf lui a consacré une savante notice dans les Annales Archéologiques de Gailhabaud.

¹ Ostend: the most important harbour on the Belgian coast at that time.

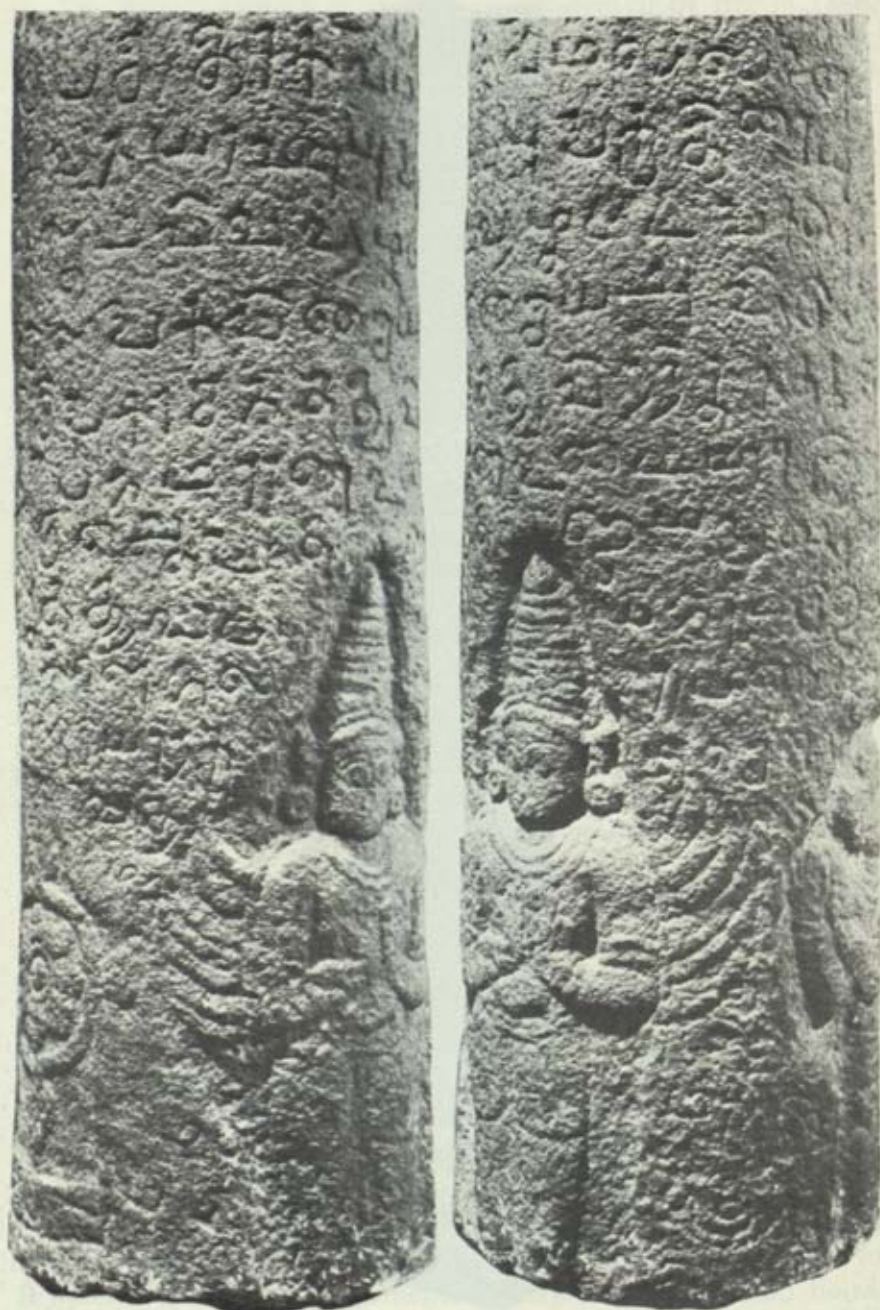
St. Peter's Church in Ostend was destroyed by fire in 1896, only the tower built in 1729 still exists, so no archives are left. During the 1914-1918 war, it was the archives of the town of Ostend which were destroyed but the offices of the Ostend Company were in Antwerpen so their archives were saved. In 1847, the Baron de la Pylaie wrote about the pillar (Pylaie 1847: 456):

D'après les divers renseignements que j'ai pu recueillir sur cette pierre monumentale, placée à Ostende, à côté de l'Ecce-homo de l'église Saint-Pierre, elle fut trouvée en 1793 par les Français, à une grande profondeur en terre, lorsqu'ils creusèrent le canal ou fossé qui passe derrière le moulin à poudre, au pied des nouvelles fortifications. Il est à remarquer que c'était sur l'emplacement qui formait l'ancien port d'Ostende, abandonné depuis bien longtemps, ayant été comblé par les alluvions que la mer y avait apportés et amoncelés. On suppose que cette pierre avait été prise simplement comme lest par quelque navire étranger, et qu'elle fut jetée à l'eau par l'équipage, lorsque celui-ci trouva un chargement complet. Sa hauteur n'est que d'un mètre quarante centimètres sur quatre-vingt-cinq centimètres de circonférence. Comme les étranges caractères dont se compose son inscription, joints à la singularité des figures en bas-relief qu'on voit à sa partie inférieure, durent exciter la curiosité des habitants, ce monument nous a été conservé par un nommé Bollebaert, qui le réclama pour le placer à côté de l'Ecce-homo, Jésus-Christ ayant été attaché à une colonne lors de sa flagellation. La pierre y fut conduite, et depuis elle est restée dans cet endroit. Pour lui donner un aspect plus monumental, on l'a surmontée d'un chapiteau et posée sur un socle, mais on reconnaît au premier coup d'oeil que ce sont des additions récentes: ces parties sont en marbre noir, tandis que le fût est en granit assez fin, d'une couleur gris intense et composé d'éléments uniformes dans toute sa masse. Cette roche n'existe nulle part dans toute la contrée.

As that pillar has been found by 'French', the date of the discovery may not be accurate. Napoleon came briefly to Brussels in 1798 and ordered the harbour of Ostend to be enlarged, to be able to accommodate at least forty ships, due to invade England! and so in 1798, 500 French convicts came from Brest to work at the Ostend harbour; so 1798 and not 1793 (8 read as a 3). It was only on July 1, 1794 that the French general Moreau received the key of Ostend (Obdeyn 1938: 81), so they were no French at all in Ostend in 1793 (Fleurus battle and French victory: June 26, 1794). In 1848, M. Roulez at a meeting of the Royal Academy proposed and advised for the moving of that stone to Brussels: 'ce curieux monuments du brahmanisme ou du boudhisme serait plus convenablement placé dans un musée d'Antiquité qu'à côté du Dieu des chrétiens'.



Fig. 1 — Musées Royaux d'Art et d'Histoire, Brussels: Chola pillar.



Figs. 2-3 — Details of the pillar in fig. 1.



Figs. 4-5 — Details of the pillar in fig. 1.

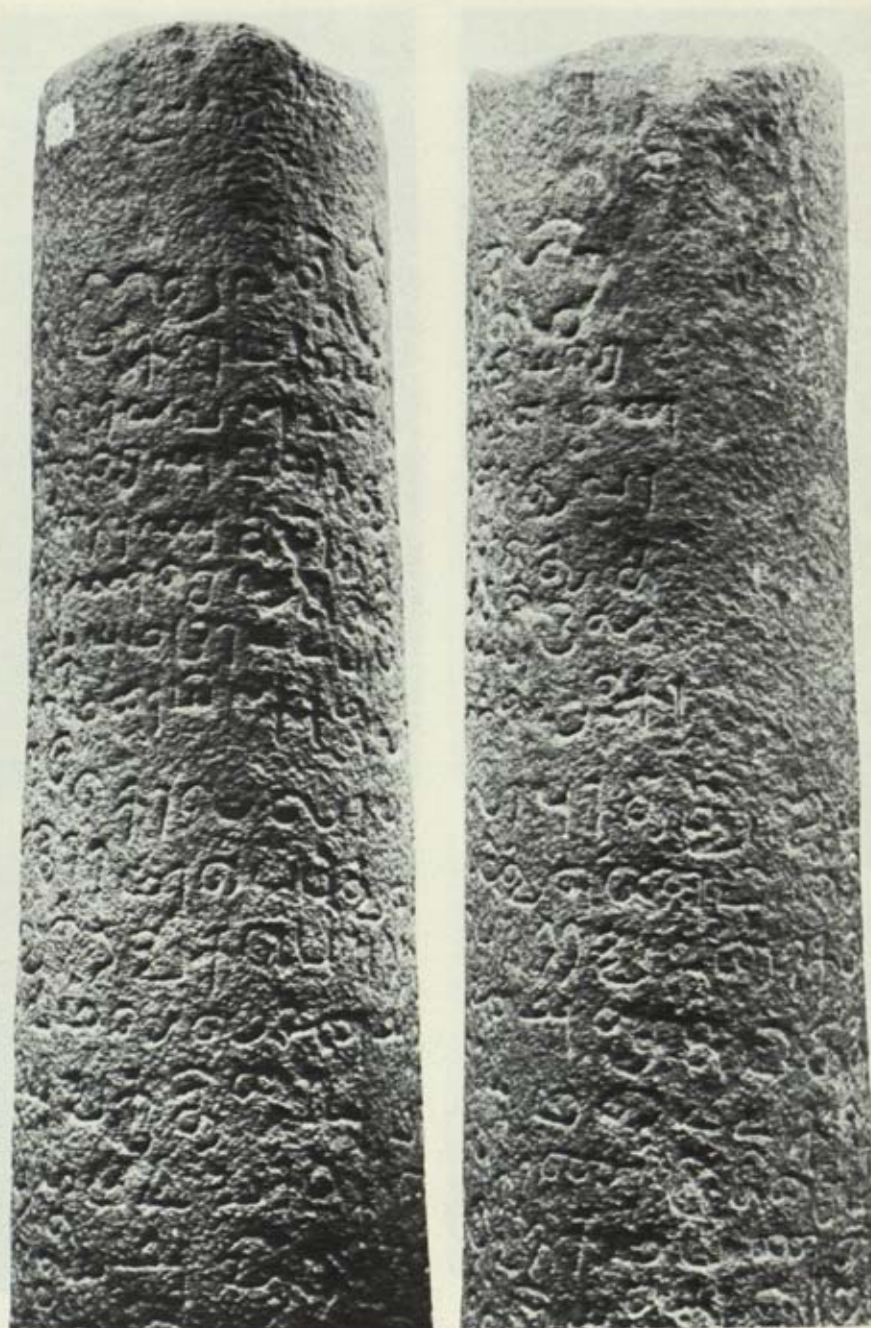
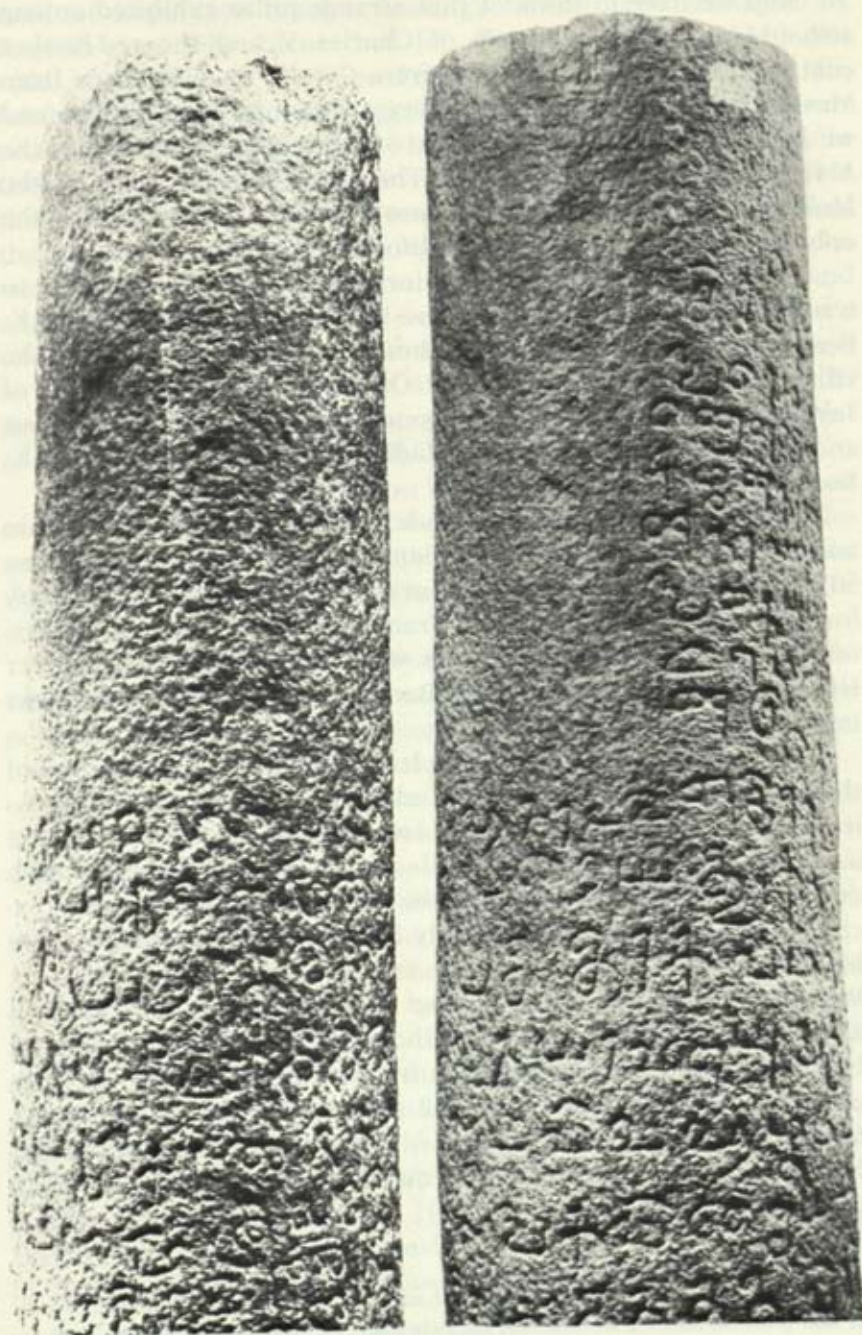


Fig. 6-7 — Details of the pillar in fig. 1.



Figs. 8-9 — Details of the pillar in fig. 1.

And we have to think of that strange pillar exhibited among armours and arms, the crib of Charles V and the red-feather coat, said to be a gift received from Cortez, on his return from Mexico, by Charles V, but in reality a Brazilian feather coat (and we have not the least idea of how or when that coat came in the Arsenal des Ducs de Brabant). The complete collection of the Museum was exhibited on two storeys of the Porte de Hal, the only surviving gate of Brussels (Editorial, SAA 1983).

As it was learned much later, when the first attempt to translate the inscription was done in Leiden in 1952 by Dr D.K. Bosch and Dr B.Ch. Chhabra, the pillar was coming from the village temple of Olukkai (or Olugarai) in Panma-Madu of Jayangondasolamandala, corresponding to portion of Chingleput and South Arcot districts of Madras State (Letter of Dr D.K. Bosch, February 12, 1952).

The distance between the actual Jayamkondacholapuram and Tranquebar on the Bay of Bengal is only a little more than 50 km. So we have to look in the archives of the Ostend Company for the boats sailing between Tranquebar and Ostend. The Ostend company comptoirs in India were Banquibazar on the river Howgly, Balasore on the Bay of Bengal, Cabulon and Tranquebar in the South.

Actually this Pillar is only a fragment of a pillar, the feet of the figures at its base, Garuḍa and Hanumān, being missing. So it seems that the pillar has been cut, to make it of the same size as a discarded gun, used as ballast and kept in a kind of crib down the hull of the ship. To be able to accomplish that exchange, the captain most probably in need of money, had to have his ship nearly empty or nearly emptied for reason of repairs. We first thought that the Ostend Company boat had taken in Tranquebar a full load of South-Indian coffee but coffee has not been cultivated on a large scale in that region before the 19th century. The *Phenix*, 250 tons, 62 sailors ('hommes d'équipage'), Captain Philippe Jacob Perennot², was examined at Tranquebar by S. Brunet on April 18, 1731 'quant à son état', and found in

² Ph. Perennot had already been to India as captain of the ship *Peys (Vrede)* of 400 tons, 96 sailors; he had left on February 15, 1726 and had been back on October 30, 1727.

need of important repairs (leaking), having been damaged by English guns. The *Phenix* had left Ostend on May 6, 1730. We read in a letter of Philippe Perennot dated May 2, 1731: 'En faisant des réparations, je gage le navire capable de pouvoir poursuivre son voyage vers l'Europe'. The *Phenix* was back in Ostend only in July 1732 (Antwerpen, SA: 5809). So it is possible that it was in July 1732 that our pillar was thrown overboard of the *Phenix*, to be found again by French conscripts in 1798, who were clearing the old harbour of Ostend of the accumulated sand and silt, and to be then put near the *Ecce-homo* of St. Peter's church by Bollebaert, because the Christ has been whipped tied to a stone pillar! (Pylaie 1847: 456). It was already studied by E. de Burnouf in 1847, who did not know if the pillar was Buddhist or Brahmanist (Pylaie 1847: 457).

On May 7, 1924, the Count Goblet d'Alviella, first professor of Comparative Religions at the Université Libre de Bruxelles and liberal senator, enquired about the 'hindou pillar' and about the English archaeologist who had requested a plaster copy to be done of the pillar (!?).

In *Bulletin des Musées Royaux d'Art et d'Histoire*, in 1938, V. Obdeyn wrote the first study of the pillar but mostly about the possible localisation of the canal or basin where it had been found, in connection with the actual harbour of Ostend.

Professor Dr J. Vogel received in 1938 from Dr Lavachery, Director of the Museum a rubbing of the inscription (Obdeyn 1938: 82; de Lorm 1941: 21).

The pillar was then published in the Netherlands in 1941, by de Lorm, *Indië in België*, as Hindu and Indonesian.

The pillar was photographed in December 1948 and a rubbing of the inscription was taken at the request of Mr Van Hettinga-Tromp whose father had been Governor of Borneo; at that time the pillar, part of the Ethnographical collection, was exhibited in a corner of the Indonesian room (de Lorm 1941: 20) and thought as coming from that region. Mr Van Hettinga-Tromp gave both photographs and rubbing to Prof. Dr F.D.K. Bosch of Leiden. But only in February 1952 arrived a letter sent by Prof. Bosch with a beginning of translation by Prof. Dr B. Ch. Chhabra of Chandigarh University and Government epigraphist for India:

A tentative examination of the photographs shows that the record is one of the Chola King Rajendra II (1054/5-1063 A.D.) dated the 7th year of his reign and

commencing with his wellknown prasasti Tirumagal Maruviya etc... it mentions a village called Olukka...

I showed these photographs in 1969, in Delhi, to Dr C. Sivaramamurti who was most interested and confirmed: Tamil script from the 11th century; he requested a rubbing to be able to translate the inscription. This was sent by air but never reached the National Museum in Delhi. Philippe Falisse of the Belgian Embassy, New Delhi sent the photographs and some copies I had done from the inscription in 1977 to the Director of the Archaeology Department of the Government of Tamil Nadu who wrote back in July 1977:

The major part of the inscription is the royal pedigree of the Chola Emperor Rajendra II, who ruled in the middle of the 11th Century AD. It records his conquests against his Chalukya adversary at Koppam and Kollapuram. The record seems to relate to some gifts, probably, to Goddess Durga, of Olugarai, a village near Pondicheri.

The village is said to have been in the territorial division Jayankonda Chola-mandalam. The gift seems to have been made by the village assembly of Olugara village.

In 1979, Gregory James from Exeter University, U.K. gave the photographs of the pillar to Dr Subranian, Director of the Institute of Tamil Studies, Madras.

In March 1981, I received a letter from G. Thirumalavan, assistant professor at the University of Madras, who was preparing a Doctorate Thesis on *The History of Cholas during 800 AD-1200 AD*, requesting from the Museum, photographs and slides of the pillar. Then G. Thirumalavan, with the assistance of Dr S. Gurumurthy from the Department of Ancient History and Archaeology, University of Madras and of Mr Krishnan, former Curator of the Epigraphic Office at Mysore, worked on the translation of the inscription. On December 20, 1981, G. Thirumalavan wrote to the Museum:

We are able to read the pillar inscription to an extent. Unfortunately the lower part of the inscription, mentioning various grants, was destroyed by some later days religious zealots and in that place, the images of Garuḍa, Hanumān and Cakra were engraved. It is a real loss to History.

And finally, in October 1982, G. Thirumalavan was able to send to the Museum the copy of the original inscription in Tamil,

the transcription of the inscription and its translation with some most interesting comments: it is not a victory pillar, as it was assumed, it is a pillar inscription wherein there is a mention of a victory pillar erected at Kolhapur.

Svasthi Śrī
 Thirumagal maruviya se
 ngōl Valavan mun
 nen śēnai pinnathu vā
 ga mun (nethirenru) Il
 langaiyum Irattapā
 di yēzharai yilakkamung ko
 ndu
 Kollā puratthu Jayasthambam
 natti (yethiramar porāthu) yendisai
 (paraiyathu karangap) pērayyangaṛaik Kop
 path thāhavamallanai anjuvith thānga
 var yānaiyum kudhiraiyum ottaga niraiga
 lum vivahamum (pendu pandāramum) kondu seithu vila
 nga Vijayābhishēgam panni (vīra)
 singāadhanathu vīrriruntharuliya Kōvi Rājakēsari
 panmarāna Udaiyār Śrī Rājendradēvarku
 yāndu 7 vathu Jayankonda chōla
 mandala
 tthu (...) .. (ya) .. nattu mana
 chōlakērale
 nal ng
 dēviyarku kkum
 ... vathu

G. Thirumalavan translates it as follows:

Hail! Prosperity!

While the army of his elder brother — the king (who wilded) the sceptre (and) embraced by the Goddess of fortune — was at his back, (he) went in front of his army against the enemy and conquered the 'Seven and a half lakhs of Rattapādi and Lanka. He did not meet with opposition in battle, and his war drums were sounding in the eight directions of the earth.

He fought until the whole great army of Āhavamallā, who had proceeded to Koppam on the bank of the Great river to oppose him, perished, and Āhavamallā became afraid, incurred disgrace, and ran away. The king seized his elephants and horses, women and treasures together with camels, and performed the anointment of heroes. He erected a victory pillar at Kollāpuram.

In the 7th regnal year of this king Rājakēsari varmar Udaiyār Śrī Rājendra devā, who was graciously seated on the heroic throne, granted a gift to the temple dedicated to Goddess Durgā of Chōlakērale nallur in Jayamkondacholamandalam.

From G. Thirumalavan commentary we may assume that Rājathirāja I (1018-1054 AD) was accompanied by his younger brother Rājendrā II, whom he had chosen as his heir-apparent when he undertook an expedition against the Chālukyā king Āhavamallā. He was killed during the fight and Rājendrā II was crowned on the very battlefield at Koppam, on the bank of the river Kṛṣṇa, after he had led the Chola from a near defeat to an indisputable victory. The probable date of the battle is between May 1053 and May 1054, based on the inscriptional evidences. Rājendrā II, before going back to his capital at Gangakondacholapuram, erected a victory pillar: Jayastambha at Kolhapur.

The 7th regnal year of the Chola king Rājendrā II corresponds to 1057-1058 AD.

The figures at the base of the pillar have most probably been carved during the period of the Vijayanagara dynasty (1350-1565 AD) as Hanumān represented with his tail raised above his head and a bell tied to the tip of his tail, is a unique and characteristic motive of Vijayanagara art — Visnuite figures on a pillar recording a gift to a temple dedicated to Durgā. It is the witness of the reutilisation during the 16th century of a pillar from a Durgā temple for one dedicated to Viṣṇu, or the reconsecration of an old temple (10th century) of Durgā to Viṣṇu. But a temple already so derelict in 1730, that one of its pillars could be exchanged against a gun by some rāja of the region.

The Musées Royaux d'Art et d'Histoire are most grateful to G. Thirumalavan for the reading and the translation of this pillar inscription which, as Baron de la Pylaie was wishing 136 years ago, has not been lost for science (Pylaie 1847: 459).

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GEORGE MICHELL

Architectural Documentation at Vijayanagara

In our last two seasons of field work at Vijayanagara (1982 and 1983) most of the architectural documentation was done by volunteer architects and photographers, including more than forty students from Indian and foreign schools of architecture. This work was carried out with the gracious permission of the Archaeological Survey of India and the generous cooperation of the Department of Archaeology and Museums, Government of Karnataka, in whose camp we stayed. All measured notes and surveys were converted into plans, sections and elevations in a drawing office improvised at the camp; only later, outside India, were pencil drawings inked for publication.

Due to the vast expanse of the site, and the yet unlisted numerous structures spread all over the landscape, our work has focused mainly on the architecture of the royal centre of the capital, an area of more than one square kilometre. Of great interest here is the wide range of architectural forms: enclosure walls and defensive gateways; temples and small shrines; palace basements and remains of columned halls of different shapes; Islamic-styled pavilions, towers, stores, stables, bath-houses and fountains; and, a whole range of water structures including tanks, wells, aqueducts and drains.

One of our most important studies concentrated on walls and gateways. We noted early in our work that the high enclosure walls of the royal centre, and also the massive fortification walls defining the urban core in which the royal centre is located, were constructed in a characteristic type of masonry; this utilised wedge-shaped granite blocks built into an earth and rubble core. The outstanding feature of this masonry is the elaborate jointing, ranging from finely finished, regularly shaped blocks to crudely fashioned irregular blocks. As yet we have not been able

to determine a precise correlation between this jointing typology and the evolution of the defensive system of the capital, though in some places it is clear that crudely jointed walls are later than those with finer jointing. Even within a single enclosure there is often more than one system. Another characteristic of these walls is their tapering profile in which the two outer stone skins meet at a small mortar parapet. In general, stone sizes diminish as the walls ascend.

Doorways in the enclosure walls tend to be quite simple, with a single lintel spanning the opening. Projecting blocks to take hinges are sometimes found, but the doors themselves, presumably of timber, are lost forever. In contrast, the gateways in the fortification walls are quite elaborate and provide the royal centre with an effective security. Most of these fortified gateways consist of an opening in the wall positioned between two rectangular bastions. This opening is generally covered with beams on corbelled brackets over which a guard-house sits. Traces of these upper chambers are preserved in some gateways. Within the entrance there is a walkway flanked by raised platforms with stone footings to support an open columned structure, now fallen in most examples. Outside the entrance, additional barbican walls are usually added for protection, forcing men, animals and vehicles to make several turns. Such a tortuous entry was evidently considered essential to effectively control the traffic. Some of the gateways are provided with Islamic-styled façades that rise over the entrance; these have pointed arched openings and parapets of battlements. In one gateway to the Southeast of the royal centre, an enlarged dome on four pointed arches is elevated high over the entrance. Also included in most gateways is one or more small shrines where worship could be made on entering or leaving the city. These shrines are usually modest structures and are now often ruined. There is, however, one fairly well preserved example just outside the gateway West of the royal centre. This temple is provided with an epigraph referring to the early 15th-century ruler, Mallikārjuna. As the temple appears to be axially coordinated with the barbican walls of the gateway, there is the possibility that they may be contemporaneous. Thus is suggested an early 15th-century date for the gateway and fortification walls with which it is contiguous.



Fig. 1 — Overall plan of Vijayanagara showing zones — sacred centre, urban core, and royal centre.

Returning again to the royal centre and its architecture, our documentation work was also concerned with recording all the well preserved temples. Plans, sections and elevations were completed for the Rāmacandra (Hazāra Rāma), Tiruvengalanātha and Candraśekhara temples, the so-called 'underground temple' (dedicated to Virūpākṣa), two dated Jaina temples, and a number of unnamed shrines lining the East and Northeast roads leading out of the royal centre. Wherever possible, we made detailed draw-

ings of characteristic basement and column forms, and sometimes also balustrades, pilasters and niches. This work has provided the basis for determining the evolution of temple styles at the capital. Given the almost total absence of dated monuments in this part of the site — with the exception of the two Jaina temples already mentioned — any attempt to classify the temples chronologically is of significance to the overall history of the royal centre.

Probably the oldest intact temple here is the small shrine at the heart of the Virūpākṣa temple (not be confused with the great temple dedicated to the same deity at Hampi). This shrine is built in the traditional style that was popular in Deccan architecture in the centuries immediately preceding the establishment of the city. Pre-Vijayanagara examples in the Deccan style are known at the site on Hemakuta hill and other rocky outcrops overlooking the Tungabhadra river. Characteristic of these Deccan-styled temples are the plain walls, the basement and cornice with sharp mouldings and uncut angled blocks, and the pyramidal stone superstructure displaying a series of similar mouldings. Columns are sometimes lathe-turned and are delicately modelled, especially the double capitals. All these features are found in this small Virūpākṣa shrine which we date to the early years of the empire when the royal centre was first laid out. The shrine is now almost completely engulfed by two centuries of construction. As the sanctuary of the tutelary deity of the Vijayanagara kings, the temple must have had a particular significance as the extensive columned and roofed additions, presumably to shelter a large congregation, suggest.

From the late 14th century and early 15th century date two Jaina temples provided with donative inscriptions. Each of these examples has two sanctuaries and two halls. Though their massive and undecorated exteriors resemble Kadamba-styled temples, these Jaina examples show an increase in the scale of sacred architecture at the site. This preoccupation with monumentality, and to a certain extent with archaism as well, indicates the stylistic evolution that took place at this time: certainly, there is a similarity with earlier temple models seen in the carved columns and pyramidal stone superstructure. Almost no sculpture survives from these early examples.

Possibly also belonging to the early 15th century, according to an epigraph on the monument mentioning Devarāya, is the principal shrine of the Rāmacandra temple. The other structures within this complex, however, are later in date. (The Northeast columned hall, for instance, is provided with a donative inscription of Kṛṣṇadeva Rāya dated to 1521.) We have now measured the plans, sections and elevations of all the structures of this complex, including the two gateways and enclosure walls. The completed drawings clearly communicate the unmistakably southern stylistic characteristics of the temple which is reminiscent of Late Cōḷa and Late Paṇḍya traditions. The basement mouldings, the projecting and recessed walls defined by full-height pilasters, the niches flanked by secondary 'split' pilasters, the cornice with uncut arched motifs, and the stepped brick and plaster superstructure surmounted by a square-to-dome roof form are all typically southern features. Even the inclusion of sculptured blocks in several tiers between the wall pilasters is a southern device. Our detailed studies of the basement and columns of the principal shrine graphically illustrate the outstanding quality of the carved ornamentation. The finest available craftsmen and artisans must have worked on this temple which probably functioned as the state chapel. Outside the temple to the East is a partly collapsed shrine that may have housed a Garuḍa image; in front, is the stump of an elongated monolithic column, broken fragments of which are found lying on the ground nearby.

Less lavishly treated is the Candraśekhara temple, another large sacred complex Southeast of the enclosures of the royal centre, possibly dating from the late 15th century or early 16th century. Our drawings of this building demonstrate an integration of southern elements into a clearly formulated Vijayanagara style. Typical are the low horizontal massing of the hall and porch, and the rather squat brick and plaster superstructures above the two shrines; these superstructures are surmounted by hemispherical and barrel-vaulted forms. To some extent, the towered gateway to the East anticipates the grandiose schemes of the 16th century. Here, the basement has two layers of mouldings; the superstructure rises upwards in a series of storeys to culminate in an enlarged barrel-vaulted form. The towers of both shrine and gateway are covered with exuberantly modelled

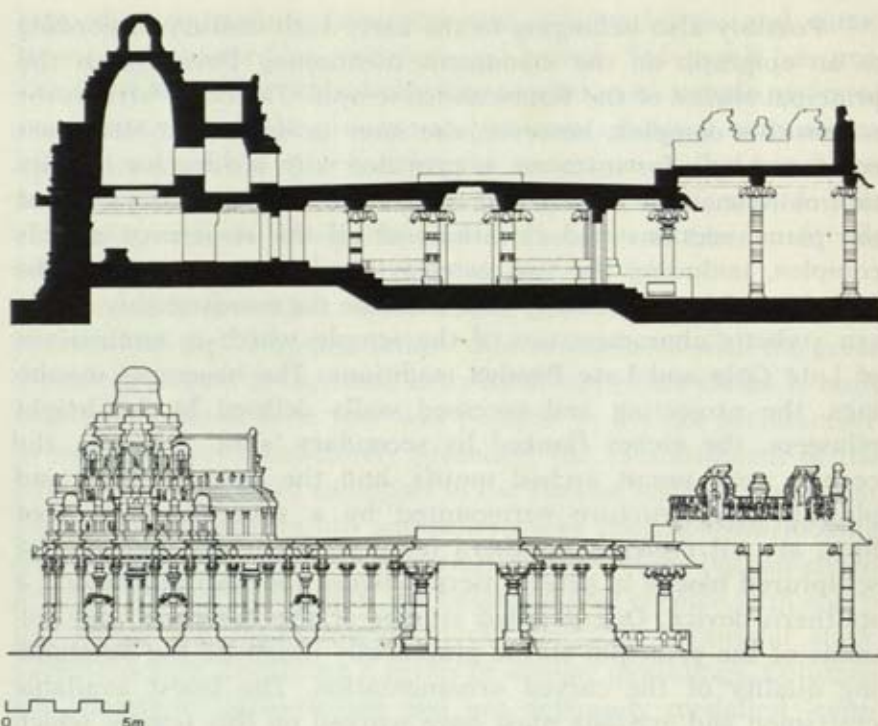


Fig. 2 — Elevation and section of the 15th-century Rāmacandra Temple in the middle of the royal centre. This important temple functioned as a state chapel for the Vijayanagara rulers.

plaster sculpture that frequently conceals the architectural elements.

Similar in style and date, but on a slightly smaller scale, are the shrine and gateways of an unnamed Vaiṣṇava temple facing onto the road leading northeastwards away from the royal centre. This temple displays the unusual feature of a covered passageway linking the towered gateway to the principal shrine. Though now partly ruined and overgrown, this temple is one of the finest examples of sacred architecture in the royal centre.

We have also been documenting several smaller and plainer examples — the Ranga and Tiruvengalanātha temples, as well as a number of unnamed temples, usually of modest size and mostly dilapidated. Quite a large range of styles is detected in these

buildings, particularly in column forms, indicating that these temples belong to various phases, from the 14th century to the 16th. Curiously, there appears to be no large-scale temple construction in the royal centre during the reigns of Kṛṣṇadeva Rāya and Acyuta Rāya in the first half of the 16th century. Despite the fact that these rulers patronised immense temple complexes elsewhere at the site, the only constructions definitely belonging to this era within the royal centre are additions to earlier temples or isolated smaller shrines.

Accompanying our architectural documentation of these temples is a detailed photographic coverage of the principal sculptures on walls and columns. By identifying the various images and decorative motifs it has been possible to provide cult affiliations for some temples with empty shrines. The elaborate series of *Rāmāyaṇa* reliefs which proceeds three times around the hall of the Rāmacandra temple, has also been recorded. Our aim, therefore, is to examine the iconographic programme of each temple; already we have completed a preliminary survey of all the sculptures found on the columns, doorways, ceilings and outer walls.

Our studies of temple basements are closely related to similar studies of the surviving basements of secular buildings. Though almost nothing of the walls, columns, roofs and superstructures of these secular buildings are now preserved, the basements reveal a considerable range of elements and ornamental motifs. Ranging from simple and massive mouldings, as in the one hundred-columned 'audience hall', to complex and finely finished schemes, as in the third phase of the 'great platform', we are able to perceive a chronological sequence. The 'great platform' in enclosure IV, for instance, presents a complete history of the evolution of the basement. On the first and lowest stage of this monument, animated courtly scenes are carved directly onto massive granite slabs constituting the sloping walls. The second stage introduces deeply cut granite mouldings with the occasional use of ornamental motifs in flat relief. The third and final stage, in imported chlorite on the West side only, employs exquisitely sculptured mouldings with miniature niches flanked by colonnettes and surmounted by roof forms. The delicately modelled friezes and the lotus and jewel ornamentation of this third phase resemble in many respects the basements of the

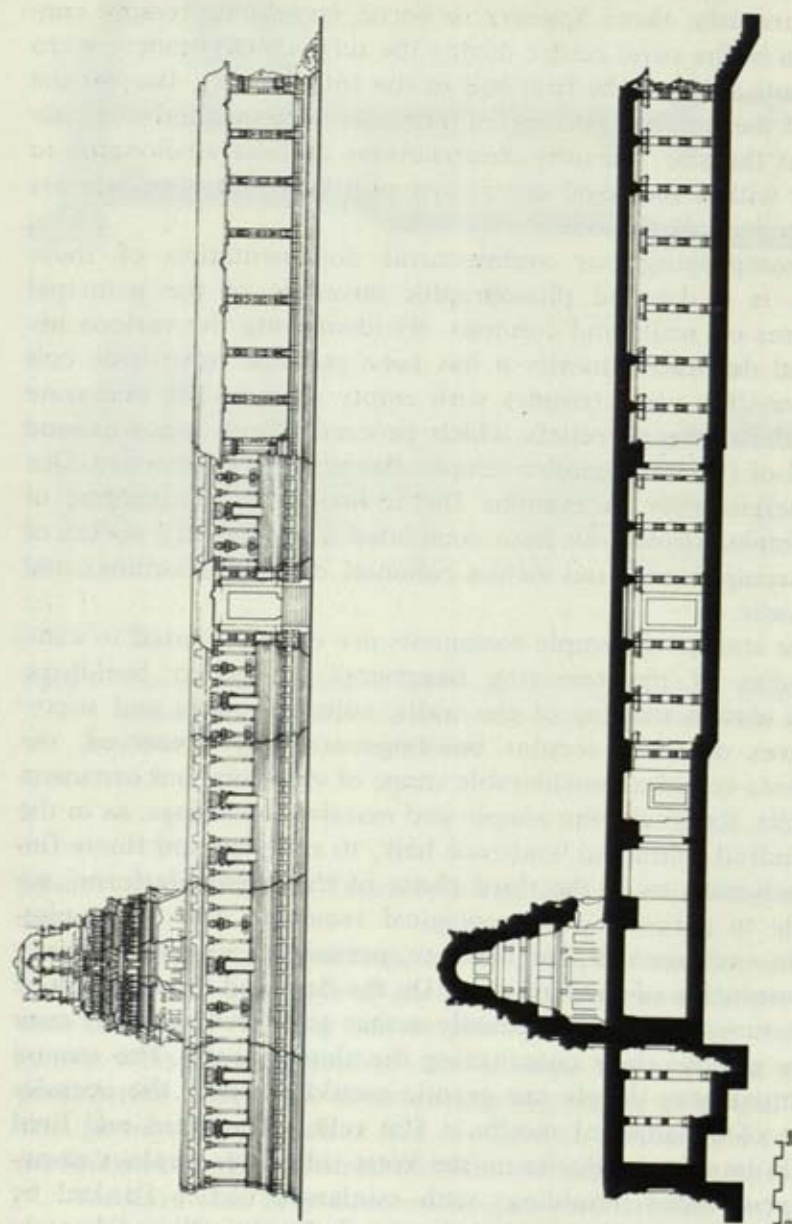


Fig. 3 — Elevation and section of the Paṭṭabhirāma Temple, just outside the urban core of the city. The elongated elevation of the building, and the brick and plaster tower, are typical of 16th-century temple architecture at the capital.

columned halls of 16th-century temples. Thus, the architecture of the 'great platform' encompasses the whole period of building activity at the capital. As the platform upon which the king may have been elevated during the processions and ceremonies of the great annual *mahānavamī* festival, its situation at the highest point within the royal centre, its huge proportions, and its lively friezes recording the varied activities of the king and court are all characteristic. As for the construction on top of the platform, probably of precious timber, metal and cloth, sheltering the king during these festivals, we have to rely entirely on the descriptions of the foreign visitors; nothing of this is visible today.

West of the 'great platform' is a group of square and rectangular basements, clustered irregularly together and built one upon the other, testifying to the continuous use of this zone during the life of the capital. Though traces of wall foundations and column footings indicate the plans of these structures, their precise function is not known. To the South is a series of regularly aligned long platforms currently being cleared by the Archaeological Survey. Between these platforms pass narrow passageways where access steps are also found. Our studies of the basements and other details of these structures are being correlated with similar studies for other buildings within the royal centre so as to suggest some chronological sequence.

Among these other buildings are courtly residences or 'palaces', recently excavated by both the Archaeological Survey and the Department of Archaeology and Museums in enclosures V and XXVI. Though these 'palaces' do not have walls preserved to a height of more than about 1.5 m, the overall plans are clear. Here raised areas are disposed in a 'U' formation about an interior courtyard open to the East or North. After entering the palace there is a sequence of ascending levels marked by a number of moulded basements and steps. The highest level has three rooms opening off a corridor that surrounds a central square or rectangular chamber. In our examination of the basement mouldings of these 'palaces' we note similarities in type and decoration with other secular buildings and even temples. Thus, for instance, the friezes of dancers on the newly cleared 'palace' in XXVI is comparable to 16th-century temple decoration. We have also documented the carved balustrades flanking the entrance staircases to these 'palaces'. These balustrades are provided with

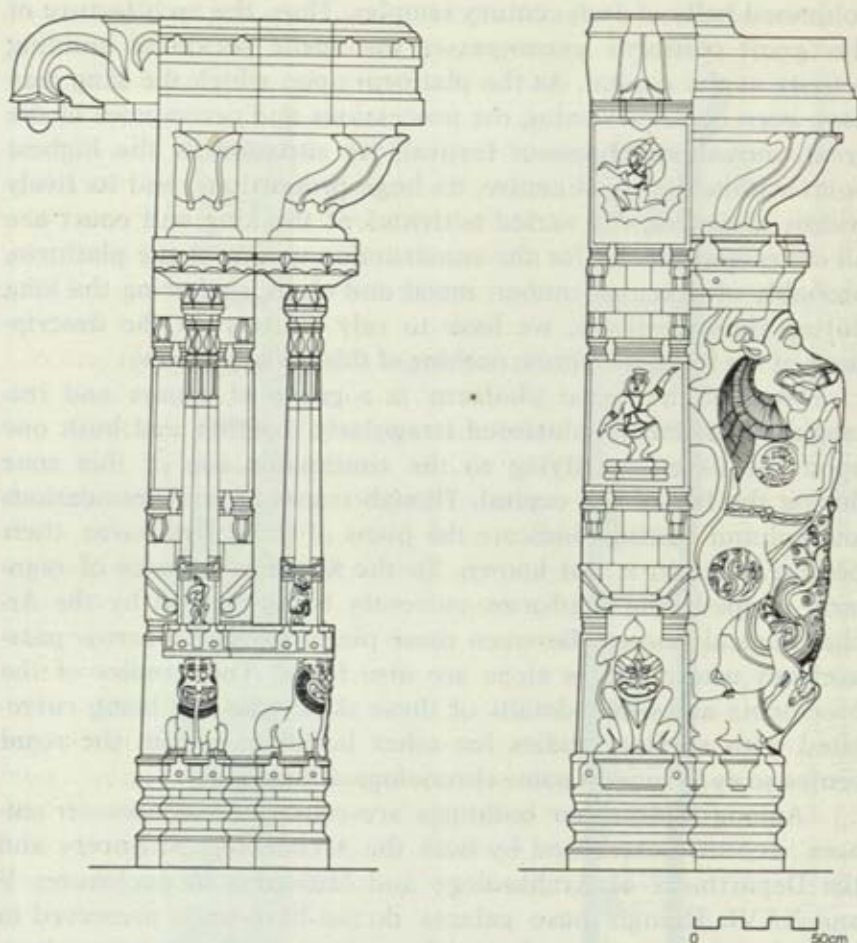


Fig. 4 — Column details from the 16th-century Raghunātha Temple on Malayavanta Hill within the urban core of the city. The use of colonnettes and rearing mythical beasts in columnar forms is characteristic.

reliefs of striding elephants or mythical beasts with long flowing tongues. Here, too, there is a correlation with sacred architecture. Whether the walls, roofs and towers of these 'palaces' resembled temples in any other way, however, can only be a matter of speculation at this stage. Unfortunately, contemporary literary descriptions of the city's secular buildings — whether in Sanskrit, Kannada or Telugu, or even in the chronicles of the foreign visitors — provide little specific architectural information.

Some 'palaces' at Vijayanagara are set in courtyards defined by regularly laid out subsidiary structures, of which only the foundations have survived. In enclosure V these foundations consist of a triple series of parallel walls divided by cross walls into small chambers. Here the foundations seem also to have functioned as retaining walls to raise up the level of the courtyard. Subfloor drainage is achieved by stone covered channels. Also found in conjunction with 'palaces' are entrance complexes with raised areas flanking walkways and defining small courts. The columned structures that once rose above these entrances, however, have disappeared. To be noted is the continuous change of direction, frequently marked by doorways or gateways. This preoccupation with controlling entry and exit is a dominant factor in the layout of these zones of the royal centre. In fact, it is this aspect of the architecture at the capital that best accords with the descriptions of the Portuguese visitors who, for example, observed the complex route of approach when visiting the private apartments of the king.

Invariably associated with all these secular structures are stone aqueducts, drains, tanks and wells. Finely carved stone basins or baths are also found, often in combination with water conduits. The larger tanks are lined with stone or brick, and employ thick lime plaster for waterproofing. The columned pavilions and steps surrounding the vast rectangular tank in the Southeast quadrant of enclosure IV indicate a royal bath. This was probably only used for special occasions (judging from the amount of water required to fill the tank) such as the *mahānavamī* festival. The bath was fed by water conducted in stone channels, raised on piers or supported on a masonry wall, now mostly collapsed. Elsewhere, the channel is excavated into granite outcrops and was once covered with beams. Our drawings of these features of the hydraulic system within the royal centre are not yet completed, and this subject will form a special investigation for the next season.

As for another group of buildings within the royal centre, however, our documentation work is now more or less over. This group consists of a number of Islamic-styled structures exclusively connected with the Hindu court and military. These buildings pose intriguing questions as to when and why such a 'foreign' style was patronised by rulers at the capital. Whatever the

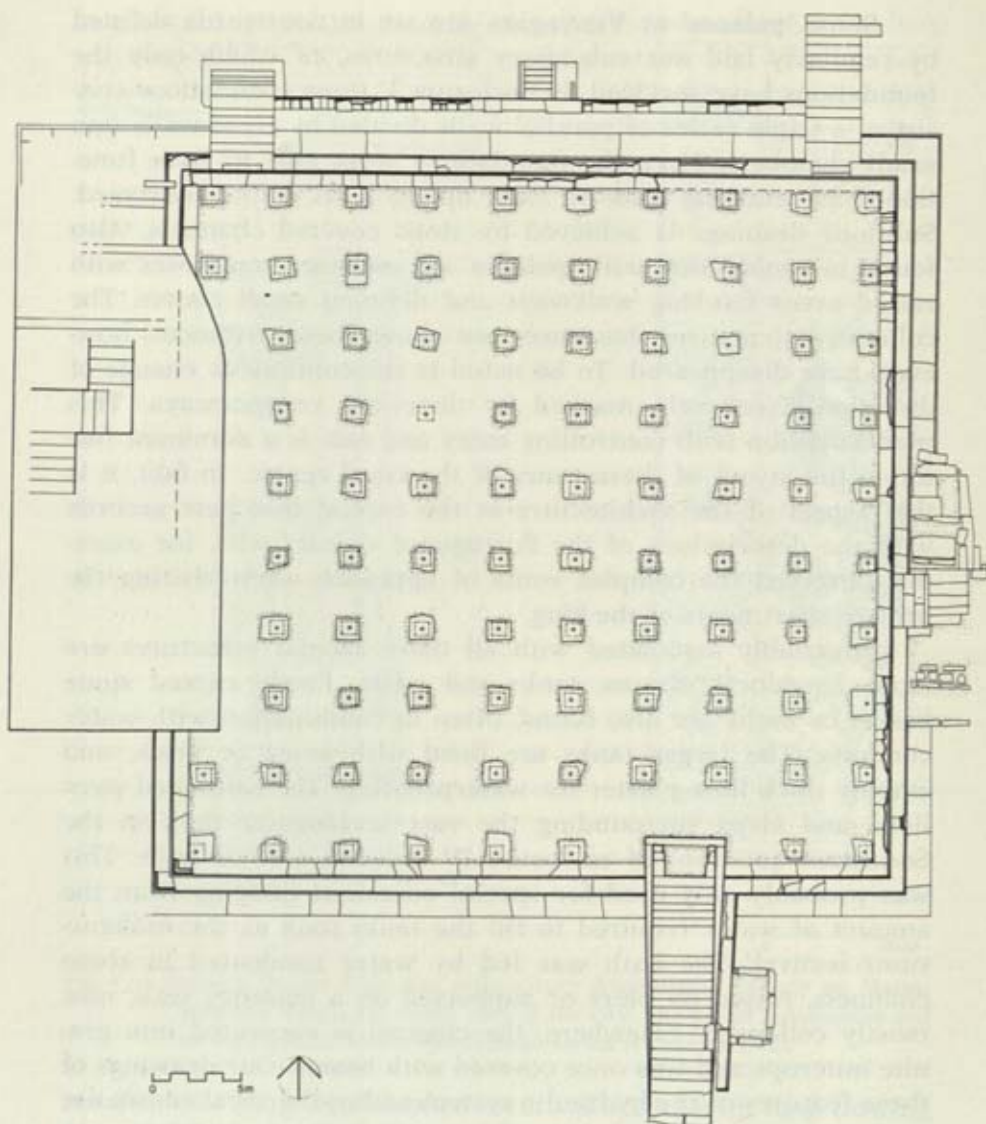


Fig. 5 — The remains of the hundred-columned 'audience' hall in the middle of the royal centre. One of the most important monuments at the capital, this may have been used for dispensing justice. Staircases ascend to vanished upper floor levels.

reasons may be, it is abundantly clear that Islamic-styled structures of many different types — and, presumably, functions — were erected in the royal centre, probably from the end of the 15th century onwards.

Our measured drawings of these Islamic-styled structures reveal both a considerable variety of building form and a degree of uniformity in the architectural elements employed — four-centred arches in several planes, multilobed arches, domed and vaulted bays, projecting eaves on corbelled brackets, parapets of battlements, ornamental towers utilising Hindu elements, and plaster decoration in bands and roundels. In construction, these buildings are characterised by the use of solid stone masonry covered with plaster. (This possibly explains why this group of structures is better preserved than the other secular buildings at the site which utilised earth and rubble walls, and timber columns and roofs.)

Among these monuments in the royal centre are three watch-towers built into the enclosure walls of the so-called 'zenana' enclosure. These square and octagonal towers rise in a number of storeys and have symmetrically arranged balconies and openings above. The roof preserved on the octagonal tower is obviously inspired by temple architecture. In enclosure VI there is another octagonal structure consisting of two domed chambers one above the other, linked by a separate and crudely abutting staircase tower. Of interest in these towers is the inventive fusion of Hindu and Islamic elements. Perhaps more military in function is the watchtower elevated upon the walls at the North-west corner of enclosure VII. Here a number of domed chambers with projecting balconies guard the western approaches to the royal centre.

Quite different in conception is the structure in enclosure VI with nine domed bays open to the North, but enclosed on the other three sides. Within, pointed arches in several planes support shallow domes and vaults. Projecting northwards are two walls, each provided with a deep multilobed niche, defining a courtyard on the North. The exterior of the building is completely plain except for corbelled brackets that once supported an angled eave. In every respect, this structure appears like a multidomed prayer hall; however, its North-facing orientation and its location within one of the royal enclosures clearly argue

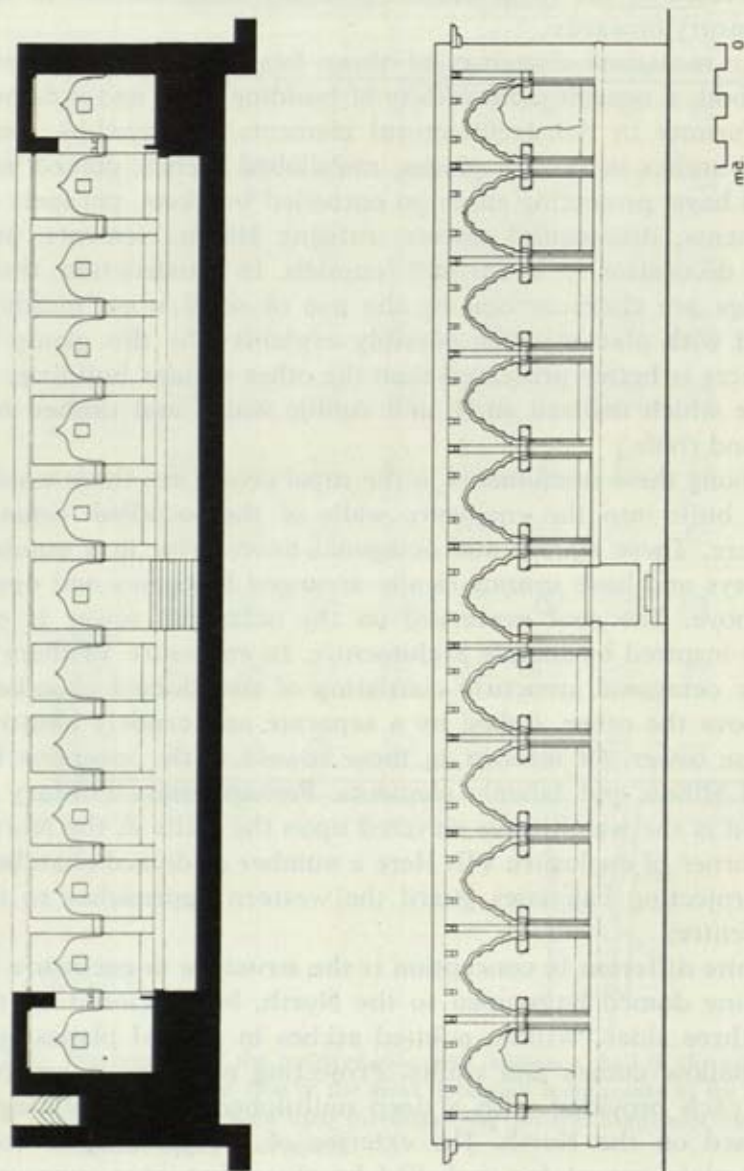


Fig. 6 — This Islamic-influenced structure may have served as an 'arena' for athletic and martial contests. The building overlooks a plaza used for military displays.

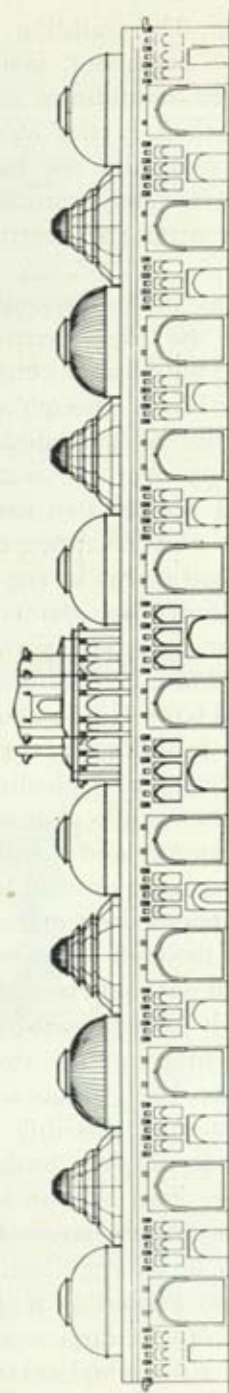


Fig. 7 — Elevation of the multidomed elephant stables, more than 85 m long. Here, a series of domed chambers each housed one or more elephants; the central chamber may have been for musicians and drummers.

against any such identification. The building also seems to be erected upon a typical 'palace' basement, visible on the North side, and complete with carved mouldings and friezes though now much dilapidated. Is this, then, a later Muslim-styled reception hall of some type constructed on the basement of a dismantled Hindu 'palace'? If so, we may consider the possibility of building activity at the site after the destruction of the city in 1565.

Another group of buildings in the Islamic style is located just outside the enclosures of the royal centre, and includes a bath-house and a fountain. The bath-house consists of a corridor running around a square water basin. Though austere and closed off from the outside, the interior of the building has balconies with arched openings projecting over the water. A parapet of battlements is partly preserved, but the two towers visible in the 19th-century photographs have now disappeared. Remarkable is the variety of domed and vaulted forms in the corridor, displaying the large repertory of decorative elements. The fountain nearby, built upon an irregular octagonal plan, also has domed and vaulted bays arranged around a central basin. The octagonal tower of the fountain is derived from Hindu elements.

Two other Islamic-styled buildings are closely related in plan. The example within the 'zenana' enclosure is a closed rectangular structure entered in the middle of the East side. Within is a raised colonnade with domed and vaulted bays running around a central rectangular room at ground level. This room is covered with a gabled roof supported on eight transverse lobed arches. The only light enters through small square ventilation holes. On the exterior, a pierced parapet rises above an overhanging double-curved eave. Though now known as a 'guards' quarters' and on the 19th-century maps as an 'exercise hall', this building is more likely to have been some sort of storehouse judging from its solid construction; possibly this was a royal treasury. Outside the 'zenana' is another building on a similar plan. Here the rectangular inner area is open to the sky and the surrounding colonnade has flat-roofed bays. A balcony on the front (South) consists of a row of enlarged multilobed arches; a staircase rises to the roof. Also known as a 'guards' quarters', this building faces southwards onto a large open space bounded on the East by stables for the royal elephants. Obviously, these

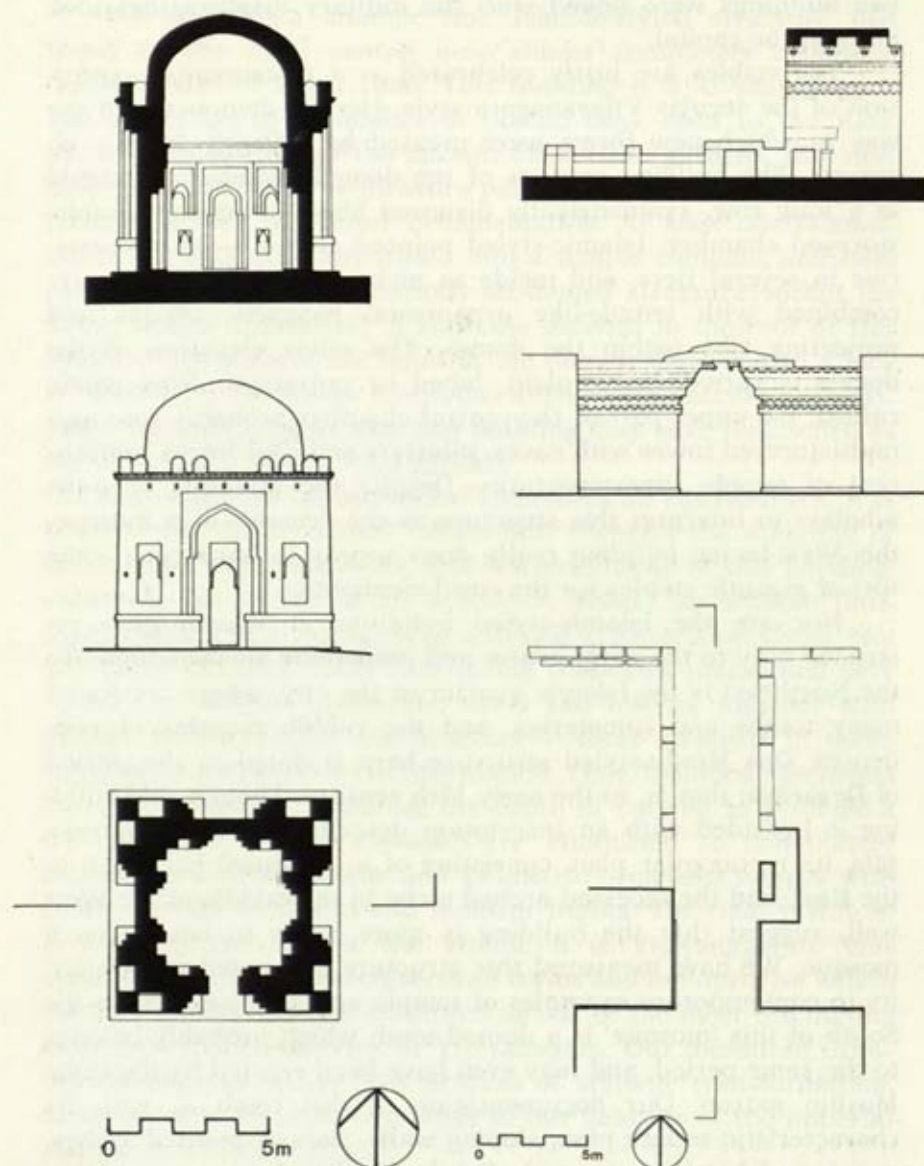


Fig. 8 — Domed tomb within the Islamic quarter Northeast of the royal centre. Such Islamic architecture at the capital is closely related to similar structures at the Muslim sites to the North.

Fig. 9 — A rare example of a well-preserved defensive gateway leading into the urban core of the city. The corbelled blocks and cantilevering beams are typical.

two buildings were linked with the military displays that took place at the capital.

The stables are justly celebrated as a monumental expression of the secular Vijayanagara style. Here is demonstrated the way in which new forms were created by utilising Islamic elements. The building consists of ten domed chambers arranged in a long row, symmetrically disposed about a central double-storeyed chamber. Islamic-styled pointed arches — on the exterior in several tiers, and inside as niches and squinches — are combined with temple-like ornamental parapets, friezes and projecting ribs within the domes. The outer elevation of the domes is varied, being plain, lobed or polygonal. Now partly ruined, the upper part of the central chamber probably rose as a multistoreyed tower with eaves, pilasters and roof forms reminiscent of temple superstructures. Despite the attempts of some scholars to interpret this structure as the remains of a mosque, this West-facing building really does appear to have been some sort of gigantic stables for the royal elephants.

Nor are the Islamic-styled buildings at Vijayanagara restricted only to the royal centre and immediate surroundings. To the Northeast is the Islamic quarter of the city, where are found many tombs and cemeteries, and the rubble remains of residences. One Hindu-styled structure here is dated to the period of Devarāya; that is, to the early 15th century. Though this building is provided with an inscription describing it as a *dharmaśāla*, its rectangular plan, consisting of a columned hall open to the East, and the recessed arched niche in the middle of the West wall, suggest that the building is more likely to have been a mosque. We have measured this structure and noted its similarity to contemporary examples of temple architecture. Just to the South of this 'mosque' is a domed tomb which probably belongs to the same period, and may even have been erected by the same Muslim patron. Our documentation of this tomb — with its characteristic square plan, sloping walls, tiers of pointed arches, parapet of battlements, and slightly flattish dome — reveals a close affinity to Islamic Architecture at Deccan sites to the North (Gulbarga, for example). Other tombs in the same area are, however, in a more fanciful Vijayanagara style with ornate plaster decoration; these are likely to be somewhat later. So far, we have not had the chance to survey many of these examples.

We discovered another fine Islamic-styled structure just North of the royal centre, now almost completely concealed within groves of sugar cane. This building is a 'U'-shaped pavilion consisting of a number of domed bays open to the East. From its location near the ancient canals and gardens, this may have been some sort of pleasure palace. It preserves some of the finest examples of plaster ornamentation. At least one Islamic-styled building is incorporated into a temple complex, and here we are referring to the curious six-domed structure within the Kṛṣṇa temple compound. A staircase ascends to the roof of this building where there are holes in the domes; there is also a lack of openings at the lower level other than a small access doorway. These features suggest that this building may have functioned as a storehouse, perhaps even a granary.

But of all the Islamic-styled structures at Vijayanagara, it is perhaps the 'Lotus Mahal' which best displays the mingling of Islamic and Hindu elements. Our documentation of this building, especially the details of its exuberant plaster decoration, illustrates the effective synthesis of different architectural styles. Not only were elements from contrasting traditions juxtaposed here — such as temple basements, eaves and towers, together with Islamic arches, domes and brackets — these elements in themselves were subjected to transformation. Thus, moulded basements are 'Islamicised' by reducing the depth of carving to produce a flat relief, and Islamic elements are 'Hinduised' so that plaster decoration with arabesque and geometric ornament merges with geese, parrots, peacocks and monster masks. The final result is, in fact, neither Islamic nor Hindu; it is Vijayanagaran. This stability to create new architectural forms and to improvise within several different artistic traditions is one of the most fascinating aspects of the monuments at Vijayanagara. Our measured drawings attempt to record this process of stylistic transformation, and represent an important stage in our analysis of the imperial architecture of the capital.¹

¹ For bibliography, the reader is referred to the article by J.M. Fritz in this volume.

JOHN M. FRITZ

Archaeological Documentation at Vijayanagara

Surface Archaeology

Two sets of archaeological techniques are employed in the study of the material record of the medieval capital of Vijayanagara — excavation and surface archaeology. In general, excavation is necessarily a destructive process since it involves the removal of soil, the separation of artefacts from the archaeological context, and the exposure of buried features. By its nature, excavation is slow work which involves large numbers of workers and supervisors, and is limited to restricted areas. All artefacts that are discovered must be collected, classified, illustrated, published and stored. At each stage of their recovery, revealed structures and other features also must be illustrated and often require painstaking conservation. Excavation leads to the discovery of buried structures; accompanying stratigraphic analysis permits the sequence of events which formed the archaeological record to be known. Thus the relative chronology of construction, use, modifications, destruction, and decay of a building may be postulated. An absolute chronology may be suggested if historic information or stylistic analysis of artefacts permits the dating of some events.

In contrast, surface archaeology concentrates only on those features of a site visible on or above the ground. Since it does not involve intensive labour, surface archaeology is more rapid and can cover extensive areas with a wide variety of characteristics. Destructive techniques are not used; consequently, there is greater freedom regarding what will be documented and the intensity of its documentation. Thus, certain kinds of structures may be recorded. Portable artefacts, such as pottery, may be ignored or may be selectively collected. The limitations of sur-

face archaeology are obvious: since the vertical superimposition of evidence cannot be observed, stratigraphic interpretation is not possible. It may be uncertain whether data found on the surface were produced during the period rather than in more recent times. However, analysis of surface artefacts sometimes permits tentative sequences of changing form to be postulated. Together with other data (inscriptions, for example), this analysis may indicate when certain structures were built or when certain areas were used.

Surface archaeology is carried out whenever a reconnaissance is performed in a region with the object of finding standing structures or sites dating from different periods. To our knowledge, the first intensive documentation of the surface of a medieval Indian city was carried out by Prof. R.N. Mehta at Champaner (1981). Here a team of archaeologists and surveyors made planometric maps of large areas of the site where the remains of walls and surface topography indicated roads and buildings. Information from this investigation then was used to select areas to be excavated and to answer questions regarding the functions of different parts of the site.

At Vijayanagara, we have observed that the surface contains many features that potentially inform on different aspects of life at the capital. Most obvious is the evidence of standing structures — walls and gateways, temples and towers, pavilions and tanks. However, in various parts of the site — particularly on elevated or sloping ground — indicators of the forms of ruined features are also visible. These include fortifications and enclosure walls, a large number of buildings, and roads. When their foundations or lower courses are of dressed stonework or rubble, the walls of enclosures or of buildings are evident at the surface. In exposed and steeply sloping areas, only displaced piles of rubble may remain, while in the valleys buildings are buried. The soil in many areas contains traces of pottery that may have been locally used or even locally produced. The shapes, decoration, and technical qualities of this pottery provide evidence for the producers, the techniques, and even the period of production. The spatial distribution of these sherds may suggest the functions of different areas and the occupation patterns of different groups (Sinopoli 1983, and see this volume). Around collapsed buildings the soil contains brick, plaster, and roof tiles that are

fragments of vanished architectural elements (such as brick superstructures). Artefacts found here may indicate the period of occupation and even the activities that took place within and around these buildings. Even the difference in the density of artefacts on the ground is an important factor, suggesting variation in the intensity of past use. We have also observed that the boulders and expanses of sheetrock that occur throughout the city contain a variety of evidence. In addition to inscriptions and sculptures, these rocky surfaces may display traces of buildings (sockets for columns and beams, anchors for retaining walls, grooves for roofs or to direct rain water) and indicators of domestic activities (mortars, lamps and even gameboards).

In addition to the erosive action of wind and water, a number of cultural factors have affected the preservation of surface data at Vijayanagara. Farming has had a particularly powerful effect on the site, and, as the intensity of farming increases, its impact may also be expected to increase. Quarrying has also dramatically altered the surface of Vijayanagara, most notably near Malyavanta hill at the eastern end of the city. Construction of modern roads and buildings, water channels, and power lines has also changed the surface. Most dramatic has been the effect of the construction of the hydroelectric scheme and adjoining camp East of Kamalapuram. However, the growth of Hospet, and even of Hampi, have forever altered the record of Vijayanagara suburbs.

In documenting the surface of Vijayanagara one should note the alterations that have occurred, and any interpretations must take into account the fact that cultural features may not be preserved or accessible in several areas of the site. However, the sheer size of the city and the vast number of visible surface remains ensure that the work of documentation at Vijayanagara will continue for many years.

Designating Areas and Elements

In order to document the cultural features found on the surface of Vijayanagara some system for designating different areas of the site must be employed. Names given to various areas and monuments over the past 150 years have been useful to scholars

and tourists alike. However, these names are often misleading. In designating different areas of the site we have followed two approaches. On the one hand we have attempted to define zones of the city that had different functions, and to provide appropriate names for these zones; on the other hand, we have employed systems that use grids combined with abstract symbols.

Several distinct functional zones can be identified at Vijayanagara (Fritz & Michell 1984a: fig. 41.1). Each is spatially separate, with different architectural and organizational characteristics. However, we do not claim that past residents employed the same conceptual scheme for the city. To the North of the Tungabhadra river is Anegondi, a walled town on the river, linked to a fortified citadel in hills to the West and to walls that extend along the river to hills to the West. Another set of walls extend up valleys to the North. This 'twin' settlement of Vijayanagara protected the city on the North and East by defending the approaches by land or water.

The sacred centre is located Southwest of Anegondi, primarily on the flat land, hills and ridges that flank the South bank of the river. Here are located the four largest temple complexes of the city — Virūpākṣa (Pampāpati), Kṛṣṇa, Tiruvengaṇātha ('Acyuta Rāya's temple'), and Viṭṭhala. Also found here are numerous smaller temples and shrines, isolated sculptures, and inscriptions. A few shrines and sculptures occur North of the river, especially where it passes through a narrow, rocky gorge. On the ridge above the South bank are the early temples on Hemakuta hill, the Virabhadra temple on Matanga hill, and an incomplete temple (possibly to have been dedicated to Rāma, whose image is carved on a nearby boulder) on a hill Northeast of Matanga hill. The ground surface has been much altered around the Virūpākṣa, Kṛṣṇa, and Viṭṭhala temples, obliterating evidence of settlement. However, evidence of rubble wall structures is still preserved East of the colonnaded street of the Tiruvengaṇātha temple complex.

The irrigated valley is located South of the sacred centre in a natural feature that was probably an earlier course of the Tungabhadra river. The valley opens to the river at each end, and rises slightly towards the middle. The colonnaded car street of the Kṛṣṇa temple complex extends into the southwestern side of the valley. To the East it is closed by a wall that extends from

the urban core to the river. A canal (Turutta) follows the South side of the valley, and several smaller canals occur on the North side. A water channel also flows to the Northeast down the valley. The zone is rich with irrigated crops — banana, sugar cane, coconut palms, and paddy. There is evidence that the zone supported irrigated crops during the occupation of the city. The Turutta canal was certainly in use at that time: old and much worn bridges carry traffic across the canal on two roads (N1, NE, see Fritz 1983b). A thick wall carried the North road across the valley to the base of Matanga hill. Several characteristics of this wall — its exceptional width, the stepped profile of its western face, the spillway-bridge complex near the North end of the wall, and a massive water gate (?) complex in the canal immediately downstream — indicate that it acted as a bund. Thus, a tank certainly stretched upstream to the Southwest. The paucity of buildings and pottery sherds in the valley and on the hill slopes to the North indicates that this area did not have substantial settlement. However, two or three large complexes on the periphery of the valley may have been elite residences.

The urban core occupies a series of ridges, hills, and valleys to the South of the irrigated valley. The urban core was probably the site of the greatest concentration of the city's population. This is indicated by the large number of structures and the great density of pottery sherds that are found here. The zone is surrounded by a complete circuit of fortification walls that extend along ridge tops, and across valleys, often at their narrowest points. To the North, the urban core is bounded by a hill that we term the North ridge. Here, a large number of standing and partly fallen structures are discovered, on the South side of the city wall that runs along the ridge. Here also occur tanks, wells, a *math*, and a number of branch roads. To the North of the walls, the ridge descends, sometimes in a series of broad terraces, to the irrigated valley. A large tank (near to which are commemorative stones) and temples are found beside and above the Turutta canal. A complex of well-worn paths and stairways leads through boulders and across terraces where mortars and pottery sherds are occasionally found. This area above the irrigated valley and outside the walls of the urban core probably contained residential structures of impermanent material (earth and thatch).

At the East end of the North ridge and extending across the valley to the base of Malyavanta hill is the Muslim quarter (Mitchell 1984a). This is indicated by mosques, tombs, cemeteries, inscriptions as well as contemporary travellers' accounts (Nagaraja Rao 1983: 57, 65). This quarter was the residence of a Muslim population, substantial numbers of which served in the king's army (particularly the cavalry); possibly Muslims were also employed as artisans. Tombs and cemeteries South of the urban core (near Kamalapuram) and near Kadirampuram indicate other Muslim settlements.

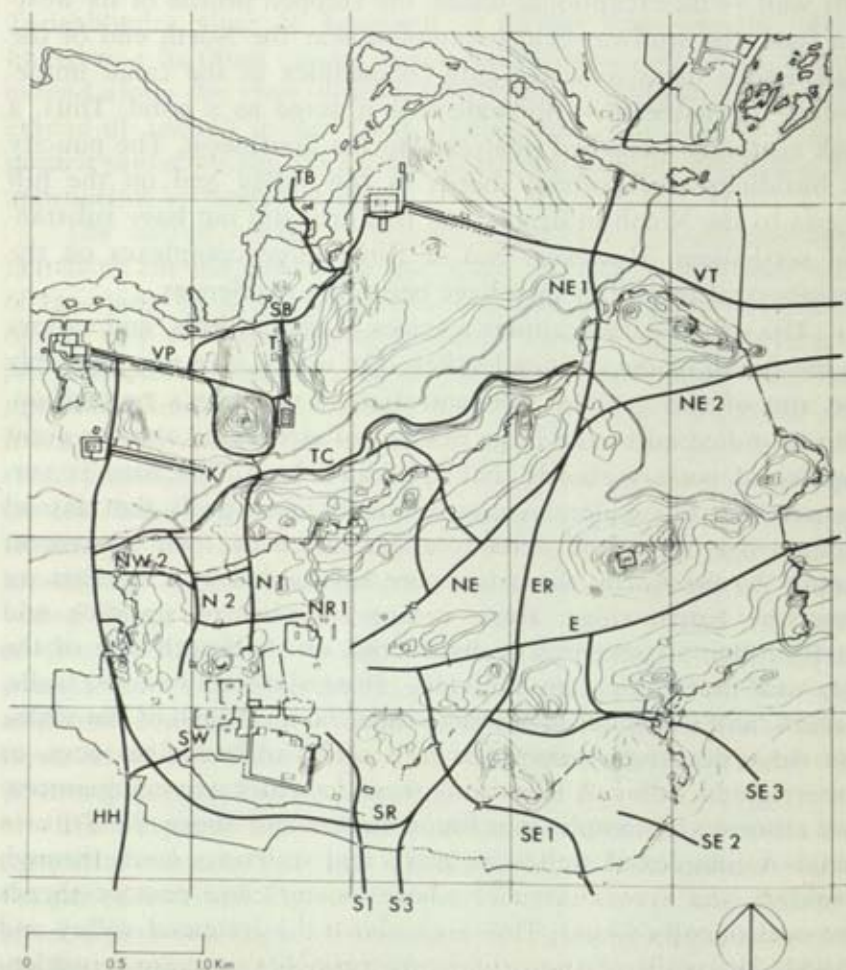


Fig. 1 — Principal roads of Vijayanagara.

We use roads to label other areas of the urban core. Thus the valley through which the Northeast road passes is designated the Northeast valley (fig. 1); similarly, the valley through which the East road passes is termed the East valley. As well as containing major roads and branch roads on their peripheries, both these valleys are cut off by fortification walls. Structures and the greatest concentration of pottery sherds in the city indicate that here Vijayanagara's population was most dense.

The royal centre is located within the western half of the urban core. It is surrounded by walls (now broken and levelled in several places) on the Southeast, South and Southwest. To the East and North, segments of walls lead across valleys, connecting ridges (apparently unfortified). The concentrations of structures on the ridges probably created effective barriers.

The royal enclosures occupy the western part of the royal centre. Here, high stone walls define compounds containing many of the civic monuments for which Vijayanagara is justly famous.

While several of these compounds have been named 'zenana', 'king's palace', 'mint', and 'danaik's enclosure', we have adopted terms for each zone that do not presuppose past use or conception. Rather, we have preferred to separate description from the interpretations implied by such names. This system, in some cases, also identifies smaller areas which may have been more functionally homogeneous.

Roman numerals identify each compound. The enclosure that includes the Rāmacandra temple compound is assigned 'I', and surrounding compounds are given successive numbers in an outward expanding, clockwise spiral (fig. 2). Areas immediately adjacent to the compounds (which may or may not have been surrounded by walls) have also been numbered. Wherever possible, subdivisions have been identified and assigned lower-case letters, for example, IIIc. In some cases, subdivisions are architecturally defined; in other cases they are natural features, such as rock terraces. In three instances, we have used letter abbreviations to designate alleys located between enclosures; these are the West alley (WA), North alley (NA), and Southeast alley (SEA). At this stage, we refer to the alley surrounding enclosure IV on three sides and leading to the Rāmacandra temple as IV-Alley.

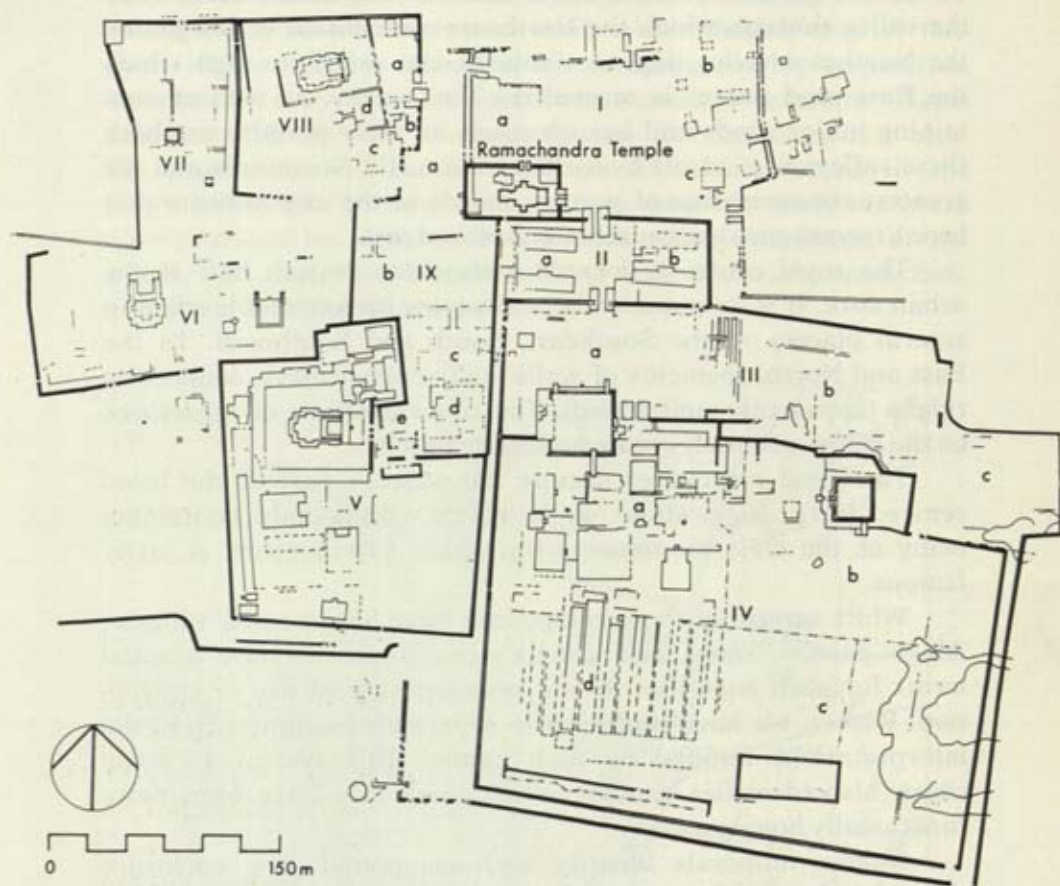


Fig. 2 — Royal centre at Vijayanagara. Designation of enclosures.

Structures visible in the enclosures have also been designated using this system. Thus, each building, tank, well, mortar, etc. within an enclosure, or subdivision has been assigned a number; for example IIIc/5, XIV/2, WA/8. In some cases, subdivisions of a structure have been designated also using lower-case letters, for instance IIa/3/d.

The Noblemen's Palace areas (also known as the Noblemen's quarter) has been designated by the Department of Archaeology and Museum (DAM) (Nagaraja Rao 1983: 14-29). Within this zone

structural complexes have been numbered sequentially, for example, NMQ/1. Here palace complexes and other buildings are surrounded by compound walls. A major road (N2) runs northward through the area; temples and wells occur along the road and on the nearby hillsides.

To the South and West of the urban core, and also to the East, occur the suburbs of Vijayanagara. These consisted of nucleated settlements surrounded by irrigated fields with canals taking water from tanks and the river. According to foreign visitors, arcs of fortification walls extended to either side of the road that led to the urban core from Hospet (Sewell 1900). The wall leading through Kamalapuram is best preserved. Within the fabric of this town are the remains of a square fort with (later?) circular corner bastions. Little documentary work has been done in this zone; here it has been sufficient to designate structural remains according to the name of the town in or near which they occur.

Documentation of Cultural and Natural Features

In 1980, and to a lesser extent in 1981, documentation of cultural features was balanced between the monuments of the sacred centre, and those of the royal centre. Since 1982, however, we have concentrated our work in the urban core, particularly in the royal centre. Here we are attempting to produce a set of maps that will depict the form and location of various features; we also aim to compile inventories of standing and ruined structures in which verbal descriptions will be combined with drawings and photographs. In this report we first describe different map series — areas covered and techniques employed. We then describe the areas in which the inventory has been concentrated together with the range of information recorded, and the techniques employed. We conclude with a brief mention of other, related work which we have initiated.

Mapping

The preparation of sketch maps at different scales has been essential for establishing the form and location of archaeological

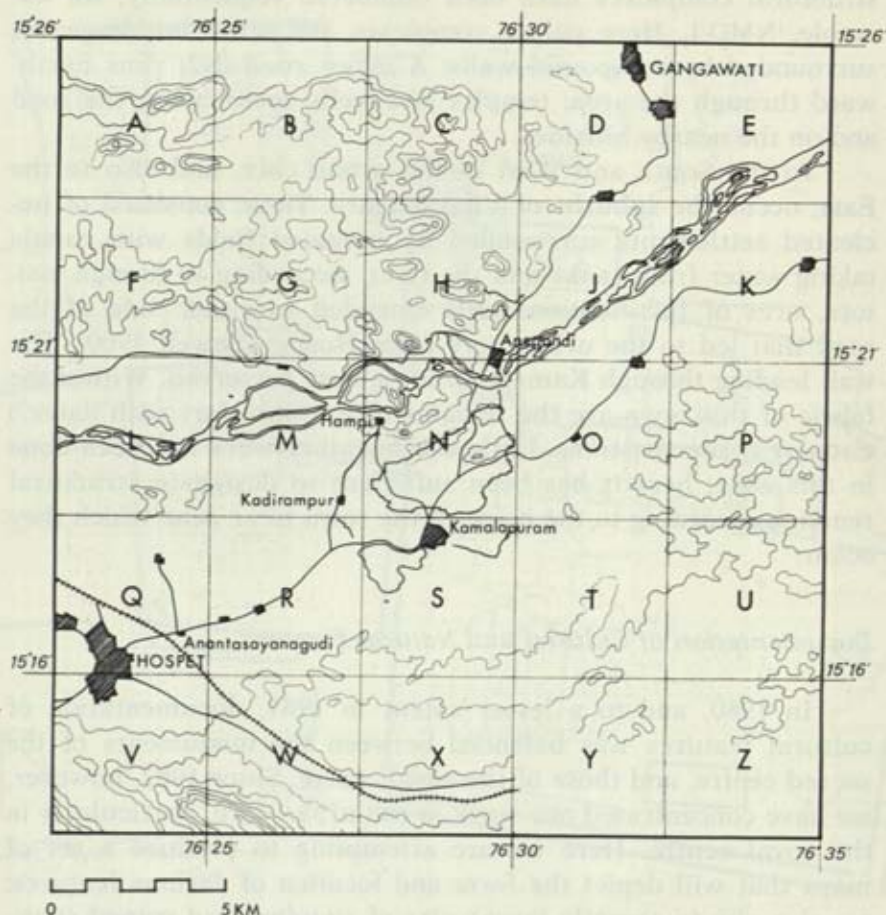


Fig. 3 — 1:4,000 sketch map; index.

features at Vijayanagara. Several surveys of the site were made in the 19th century, and include the excellent Madras Survey map of 1880. While structures such as walls, gates and major temple and civic complexes were shown in these maps, no attempt was made to indicate the minor structures and collapsed buildings that dot the site. In our mapping we have attempted to locate all structural remains; in the royal centre we have recorded the faint traces of rubble walls, and the position of footings and basements, even when misplaced or overturned.

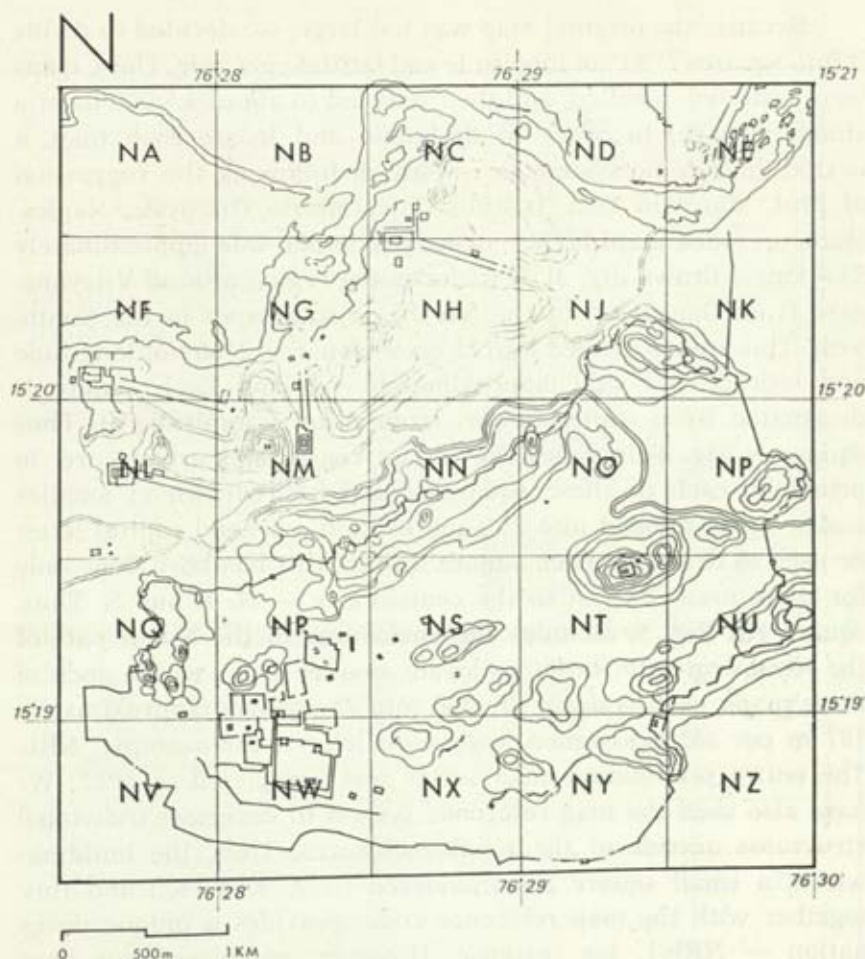


Fig. 4 — 1:4,000 sketch map; square N.

1:4,000 is the scale of the sketch map that covers the largest area (roughly from Kamalapuram to Anegondi). The topography of the hills and the locations of major features were mainly derived from Survey of India maps. The sacred and royal centres were sketched in 1980, and the rest of the area in 1981. (The zone Northwest of the sacred centre, on the North bank of the Tungabhadra river, has yet to be systematically sketched). Areas immediately to the North and West of Anegondi were sketched in 1982. In conjunction with an inventory of structures in the urban core, some parts of the original sketch map have been redrawn.

Because the original map was too large, we decided to divide it into squares $2'30''$ of longitude and latitude per side. These maps were redrawn, labelled, and then reduced to about 1:5,000 to fit a standard page. In order to designate and locate each map, a nested, hierarchic system is employed, following the suggestion of Prof. Maurizio Tosi, Istituto Universitario Orientale, Naples. Here, an index map, $12'30''$ of longitude per side (approximately 23.4 km) is drawn (fig. 3). It includes the region around Vijayanagara from Gangawati in the Northeast to Hospet in the Southwest. This area is divided into 25 equal squares, $2'30''$ of longitude and latitude per side (approximately 4.7 km). Each square is designated by a capital letter, from A to Z (omitting I). Thus square N (fig. 4) includes the sacred centre and urban core. In principle, each of these squares could be redrawn at smaller scales, again divided into 25 squares, and a second capital letter be used to designate each square. In fact this has been done only for those areas closest to the central city — H, N and S. Thus, square NR (fig. 5) includes the enclosures in the North part of the royal centre. In order to locate smaller areas within each of these maps, each is again divided into 25 squares (approximately 187 m per side), assigned lower-case letters, for example, NRb. The entire preliminary map series was completed in 1982. We have also used the map reference system to designate individual structures outside of the royal enclosures. Thus, the buildings within a small square are numbered (1, 2, 3, 4 etc.) and this, together with the map reference code, provides a unique designation — NRb/1, for instance. However, gateways have been usually designated only according to the square in which they fall — thus, gateway NRb.

1:400 sketch maps have been made in certain areas of the royal centre. This work was begun in 1982 when 1:200 sketch maps were made near the Rāmacandra temple. This scale proved inconvenient and unnecessarily detailed, given the information we could observe on the surface; subsequent mapping was done at 1:400. Areas sketched have included enclosures I-IX, and XVb. (In 1982 we worked closely with personnel of the ASI to prepare a 1:200 plane table map of enclosure V). In this sketching traces of walls, footings, platforms, wells, tanks and other visible structures have all been indicated.

NR

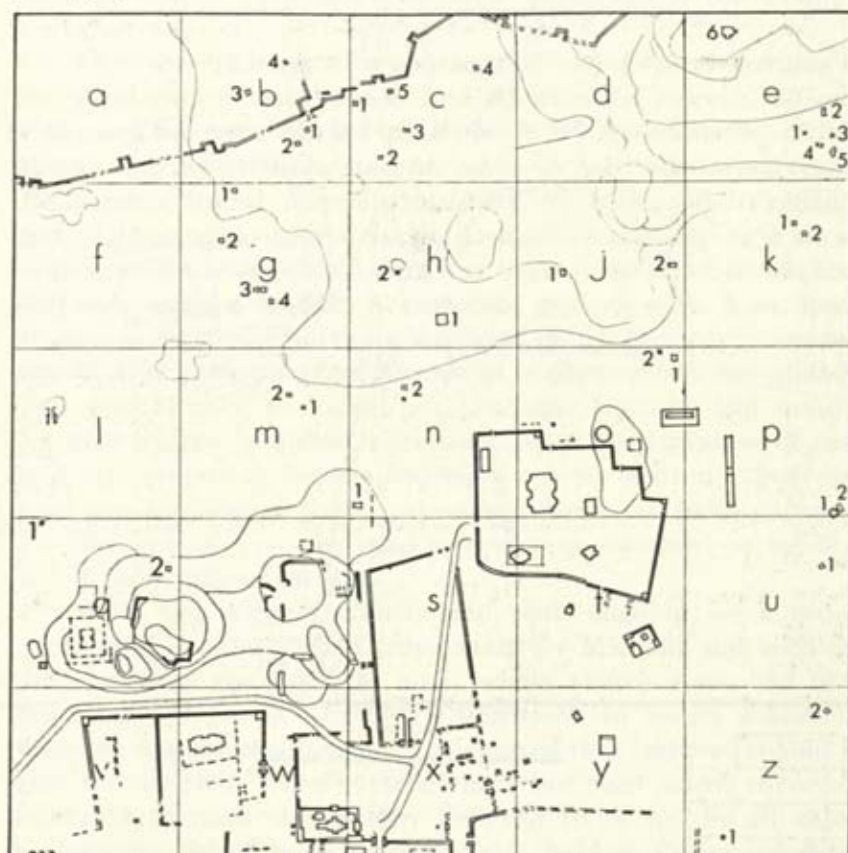


Fig. 5 — 1:4,000 sketch map; square NR.

It has been necessary to devise a set of standards for representing ruined buildings at this scale. Architectural conventions show all fallen elements of buildings by a dashed line, and our earlier sketch maps and drawings tend to use this system. However, more recently, we have followed archaeological conventions and have used a solid line to designate the outer or

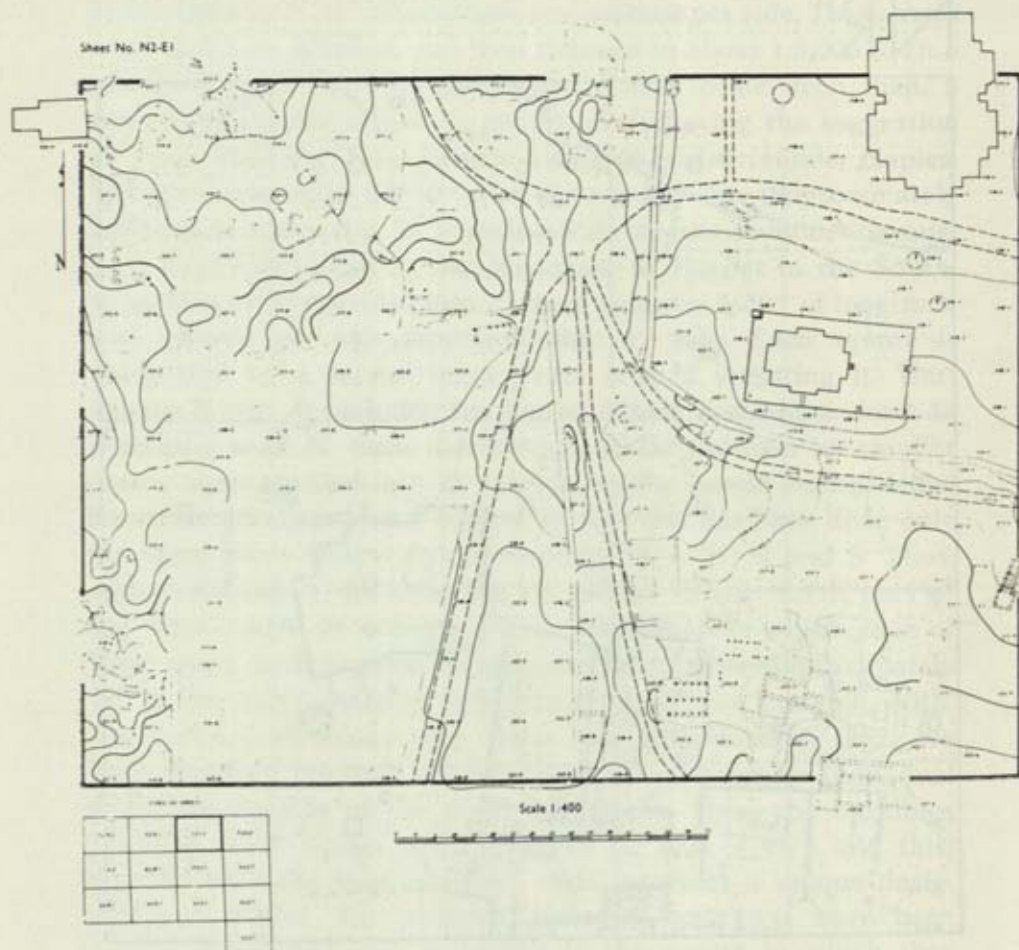


Fig. 6 — 1:400 topographic map; enclosure XIV ('zenana') and vicinity.

inner faces of a wall (indicated by aligned rubble, blocks or slabs), the outer faces of a retaining wall or platform, or the inner faces of wells and tanks. Dashed lines have been used at the ends of solid lines to indicate the probable continuation of a face, or where, for instance, rubble indicates that a wall was present but one or both faces are not visible. Walls may be evident only at intervals along their lengths, and here broken lines are used. As noted above, cultural features located within and next to the royal enclosures are assigned numbers, for exam-

ple, XIV/2. When it is possible to identify subdivisions of enclosures, these are given lower-case letter designations, and the features within each are numbered sequentially, for example IIc/15.

1:400 survey maps of topographical and cultural features of the royal centre were begun in 1983 (contour interval 50 cm). This work has been carried out by Sri R.S. Ramamoorthy, retired officer, Survey of India, and his team of professional surveyors (Bangalore). Initial mapping included enclosure XIV ('zenana') and adjacent areas to the North, East and South (fig. 6). A series of permanent triangulated data has been established throughout the area using a transit. A cartesian grid of axes, 5 m apart, aligned to magnetic North, is indicated on the ground by temporary data at each intersect by use of a plane table and alidade. This grid is used to locate both cultural features and natural features (ridges, boulders, sheetrock, etc.). The elevation of each grid intersection is determined with a level. Altitude above sea level was established from a secondary Survey of India datum — the elevation of a nearby road intersection indicated on the Survey of India map of the area.

Work was closely coordinated with ongoing work of architectural documentation (supervised by Michell) and with the programme of the DAM. In areas where sketch maps had been previously prepared, surveyors attempted to locate individual features. Sometimes their work suggested that features should be added or deleted. When sketches have not been made, surveyors indicated features which they believed to occur. In all cases, preliminary pencil maps were ground checked. Corrected drawings were then inked in Bangalore, and dye-line copies of these preliminary maps have been given to the Archaeological Survey of India (ASI) and DAM.

Inventory

One of our research objectives is to produce two inventories of cultural features at Vijayanagara: the first will deal with the royal enclosures, and the second with the remaining areas of the royal centre and the urban core. In the royal enclosures we are documenting all structures (excluding those areas where clearing

is being carried out by the ASI), both standing and collapsed. In our second area, we are primarily concerned with standing or partly fallen buildings, although hydraulic features such as tanks and wells are also recorded. Documentation of the royal enclosures was begun in 1980 and is continuing. Work elsewhere in the urban core was begun in 1982. Here we discuss documentation in the royal enclosures.

The surface remains in each enclosure are described both verbally and graphically. Brief written descriptions of enclosures IV and V were begun in 1981, and this work was expanded to include a number of other enclosures in 1983. Enclosures described to date include I-IX and XIII-XVI.

Written descriptions for each enclosure deal with each wall, opening, and standing or ruined structure. Photographs and drawings are also noted. Descriptions of walls include the form of constituents, patterns of jointing and coursing, and condition. For doorways, size and condition, the forms of sills and lintels, and the position of door sockets are noted. For gateways, the form and condition of flanking platforms, subfloor foundations, column footings and walls (where preserved and exposed) are described. Associated features, such as sills, columns, doorposts and troughs are also given, as is the relation of the gateway to the enclosure walls. Architectural characteristics of the plan, elevation and section of standing buildings are described. In reporting the plans of ruined structures the constituents, size, and condition of each wall are given, also the nature of floor, subfloor foundations, and exposed footings. Where elements of the elevation are evident, these also are described. The form, orientation and location of miscellaneous features occurring in outcrops are also given.

The plans of the walls of the royal enclosures have been sketched in the 1:4,000 maps series. However, more accurate sketches have been prepared at 1:400, and the most accurate plans will occur in the 1:400 surveyed map series. Walls of the royal enclosures were constructed according to a number of different schemes. In 1982 Kiran Kapadiya (architecture student, Ahmedabad) identified these different wall types and drew elevations and sections (1:20) of representative segments, indicating the location of each type of a map. Such data will be useful as the sequence of wall construction in this area is analysed. Gate-

ways (usually indicated only by surviving basements) that lead into or connect the royal enclosures have also been measured (plans and sections, 1:100).

Unmeasured sketches at variable scales have been made of selected ruined structures as part of the enclosure descriptions. Begun in 1982, these sketches form part of the body of field notes on the site. We plan to initiate measured drawings of a number of ruined structures in the royal enclosures in the 1984 season (at 1:100 and 1:50).

Documentation of Roads

Preliminary documentation was carried out, primarily in 1982. The western two-thirds of the urban core has been most intensively examined; elsewhere, plausible routes were suggested by linking known roads to gateways (fig. 1). The indicators and routes of roads have been briefly reported (Fritz 1983b). Techniques for locating roads were somewhat impressionistic. Solid lines located probable road segments on the 1:4,000 sketch maps whenever one or more indicators were present, and also linked segments when no evidence for roads was present in intermediate areas. Our chief photographer (John Gollings) initiated photo documentation of the Northeast and East roads, emphasizing the alignments of structures which help to identify these routes. The author also photographed associated features along a North road (N1). In the future it is hoped that a more precise technique for recording indicators of roads on 1:4,000 sketch maps can be employed, and that each road segment can be described and photographed.

Analysis and Interpretation

We have made progress in understanding the urban form and growth of Vijayanagara, and the relationship of the capital to Hindu imperial kingship. While our knowledge is still expanding, it has been possible to arrive at several preliminary propositions that have guided analysis and stimulated debate. Here we summarize our views regarding the functional divisions within

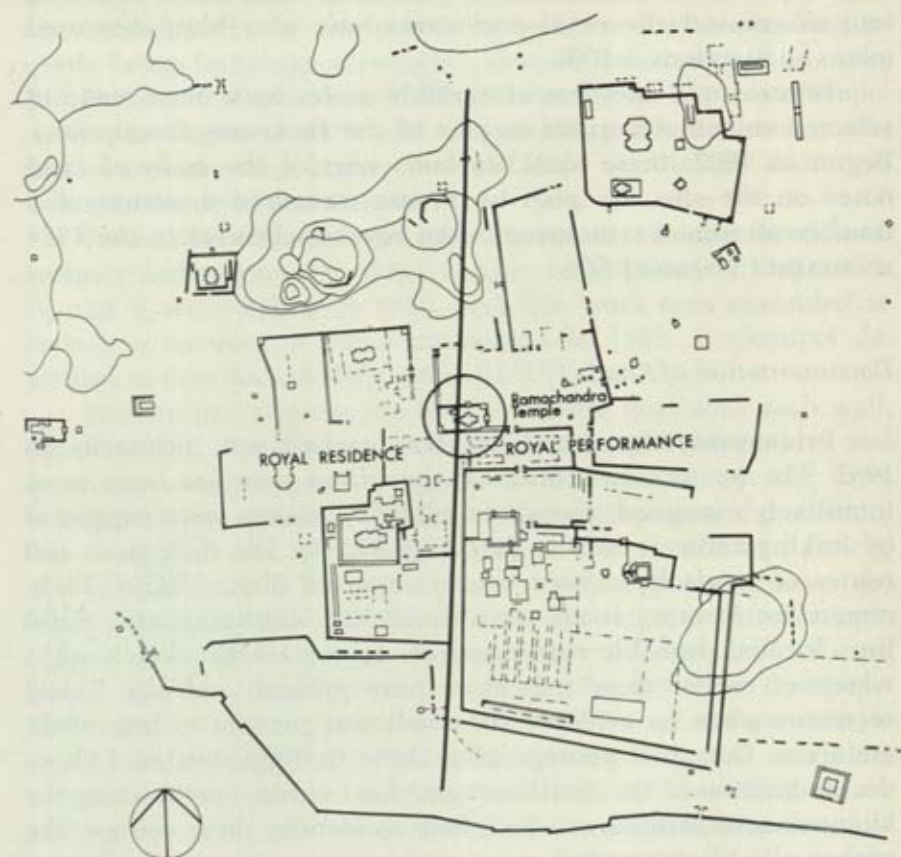


Fig. 7 — Functional divisions of the royal centre; the axis extends northwards towards Matanga hill.

the royal centre, and the structure and symbolism of this part of the capital.

Space in the royal centre appears to be organized on a North-South axis (fig. 7). This axis is defined in part by the walls of enclosures V and IX, and extends through the shrine of the Rāmacandra temple. Matanga hill lies due North of the temple, and the axis may have extended into the countryside beyond. Within the royal centre, this line appears to separate zones which are used for different activities. To the West are mainly 'palaces',

with subsidiary buildings, tanks and wells. Elaborate and complex entries lead to areas containing palaces, especially in enclosures VIII and IX. Also found here is the Virūpākṣa temple (dedicated to the tutelary deity of the royal family), aligned approximately on an East-West axis with the Rāmacandra temple.

To the East of this axis are entry courts (enclosures II and IIIa) which lead to a large space (enclosure IV) containing the stone basements of various ruined structures. Here the hundred-columned 'audience hall', a ceremonial platform (*mahānavamī dibba*), and many other structures of uncertain function are found, along with many tanks, wells, drains, and aqueducts.

We have suggested that the royal household (the private domain of women and their retainers) was to the West, while in the East zone the king performed his public activities (the domain of men, public ritual, and perhaps administration) (Fritz 1983b, 1985). Exceptions to this pattern do occur; for instance, a few palaces are found in the East zone. Analysis of these anomalies has led to a better understanding of some areas. For example, the 'zenana' (enclosure XIV) is clearly not a zone for women, but the residence of those responsible for war and defence (Fritz 1983b).

* * *

We have analysed movement in the city through the preliminary documentation of roads and paths. The major roads converge radially on the royal centre, in particular on the plaza adjacent to the Rāmacandra temple (enclosure I). All movement between the various enclosures necessitates passing through this plaza. A second series of roads passes around the royal centre, and other roads connect important points outside the urban core.

Clockwise circumambulation of the royal centre and of the Rāmacandra temple is suggested at several scales (fig. 8). The sequence of narrative reliefs on the temple, the movement of courtly and military figures in relief on the outer face of the temple enclosure wall, and the mythical movement of the god Rāma through the features of the landscape associated with the *Rāmāyaṇa*, all indicate this pattern.

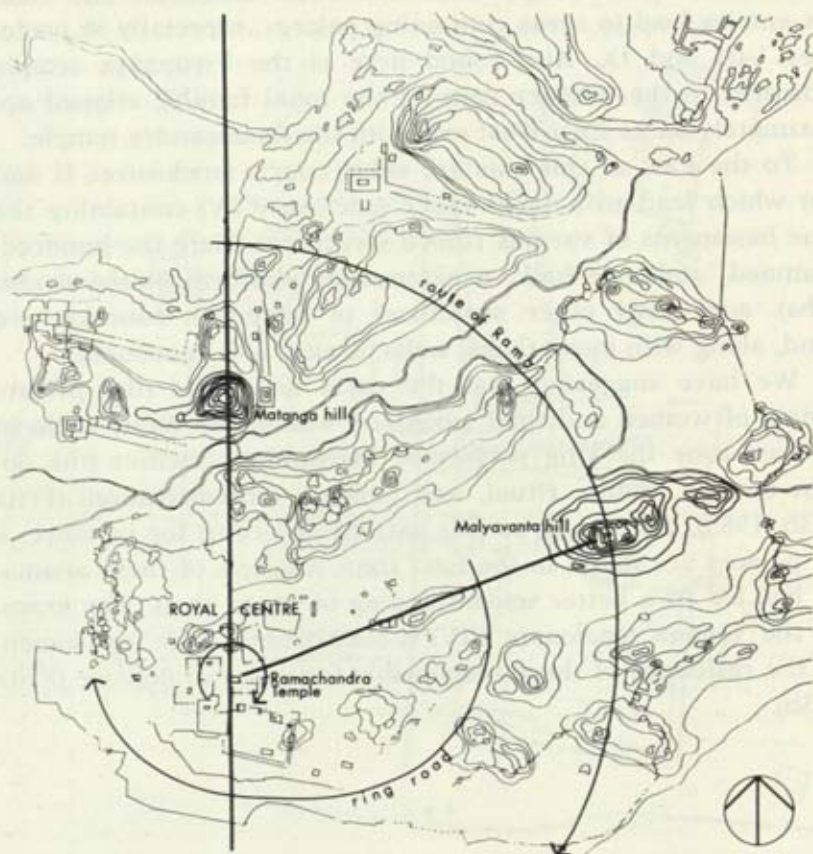


Fig. 8 — Routes of circumambulatory movement around the royal centre.

We propose that the organization of space and movement in the city was part of an 'argument' for the homology of the king of Vijayanagara and the hero/king/god, Rāmacandra. This deity is located at the centre of the royal enclosures: his sanctuary is on the axis that divides the king's functions. The temple is the nucleus of the radial road system; movement, both real and mythic, pivots around the temple and the royal centre. We suggest that the functional divisions of the royal centre also symbolize fundamental dualities in the life of the court and empire — between men and women, public and private life, and, the right and left sides. The god is at the centre of the king's public and private life, and is even linked to him through processional

routes. The royal centre can thus be interpreted as conveying the 'partnership' of king and god, as suggested by Stein (1980) and other historians. We would modify this concept to suggest that Rāmacandra was conceived as being 'within' the king, 'empowering' or 'generating' his activities.

The elaboration and testing of these propositions will require further fieldwork, data preparation, and analysis. Equally important, there is a need for continued and more extensive research on the primary and secondary sources for Vijayanagara culture and history.

ACKNOWLEDGEMENTS

Since 1980, successive Directors General of the Archaeological Survey of India have graciously given permission for documentary work to be carried out on a number of areas and protected monuments at Vijayanagara. We are most grateful to the ASI and the Government of India for permitting us to participate in the research on this site, one of India's most significant medieval cities. The Directorate of Archaeology and Museums of the Government of Karnataka, under the energetic leadership of Dr M.S. Nagaraja Rao, has given us every possible assistance. Since early 1982 we have enjoyed the amenities of the Karnataka Government archaeological camp which made our stay at the site comfortable and productive. From the beginning, Dr Nagaraja Rao has warmly supported our work; he also encouraged us to participate in the ambitious 'Resurrection of Hampi' project initiated by the Government of Karnataka. We are particularly thankful to the Karnataka Government for permitting us to work in cooperation with their excellent archaeological team. All the staff of the archaeological camp, especially C.S. Patil and Balasubrahmanyam (Technical Assistants) have been of enormous help.

Though our documentary work at Vijayanagara began as an unfinanced and somewhat improvised exercise, we have been fortunate in raising funds to cover expenses of travel and fieldwork, and also to permit preparation of field data and analysis in London and New York. At the end of 1981, the British Academy made a grant. From 1982 onwards, the Smithsonian Institution (Special Foreign Currency Program) has supported our travel and living costs in India, as well as the expenses of volunteer participants. The National Science Foundation and the National Endowment for the Humanities have provided funds to support research costs outside of India. We are indebted to the staff of these foundations for the support of our work.

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CARLA M. SINOPOLI

**The Local Pottery of Medieval Vijayanagara:
Research Perspectives and Some
Preliminary Results**

Recent archaeological work at the medieval Hindu capital of Vijayanagara undertaken by the Department of Archaeology and Museums of the Government of Karnataka has focused on unearthing the architecture of the royal and administrative center of the city. Along with the palaces, fortifications, and waterworks that are being found in these excavations are innumerable earthenware sherds.

Medieval ceramics have received little attention from archaeologists working throughout India (cf. Mehta 1979), despite the fact that they are the most numerous artifact category found at medieval sites. Several factors may account for this inattention, including the presumed (though seldom tested) similarity of medieval ceramics to modern wares, and the often pressing needs to conserve and study the many monuments present at the sites. Nonetheless, the study of pottery should be an important part of any archaeological program and can provide information on the chronology, economy, technology, and social organization of medieval settlements.

In this report I will present a preliminary summary of my first season of work on the earthenware pottery of Vijayanagara¹. The materials examined come from two excavated palace

¹ I would like to express my gratitude to Dr M.S. Nagaraja Rao, director of the Department of Archaeology and Museums of the Government of Karnataka, for making this material available to me for analysis. Thanks also to Mr C.S. Patil and other staff members of the Hampi Research Project. Finally, I would like to thank Drs John Fritz and George Michell for introducing me to the archaeology of Vijayanagara. Support for this project has been provided by the Smithsonian Institution Foreign Currency Program, the National Science Foundation, and a University of Michigan Rackham dissertation fellowship.

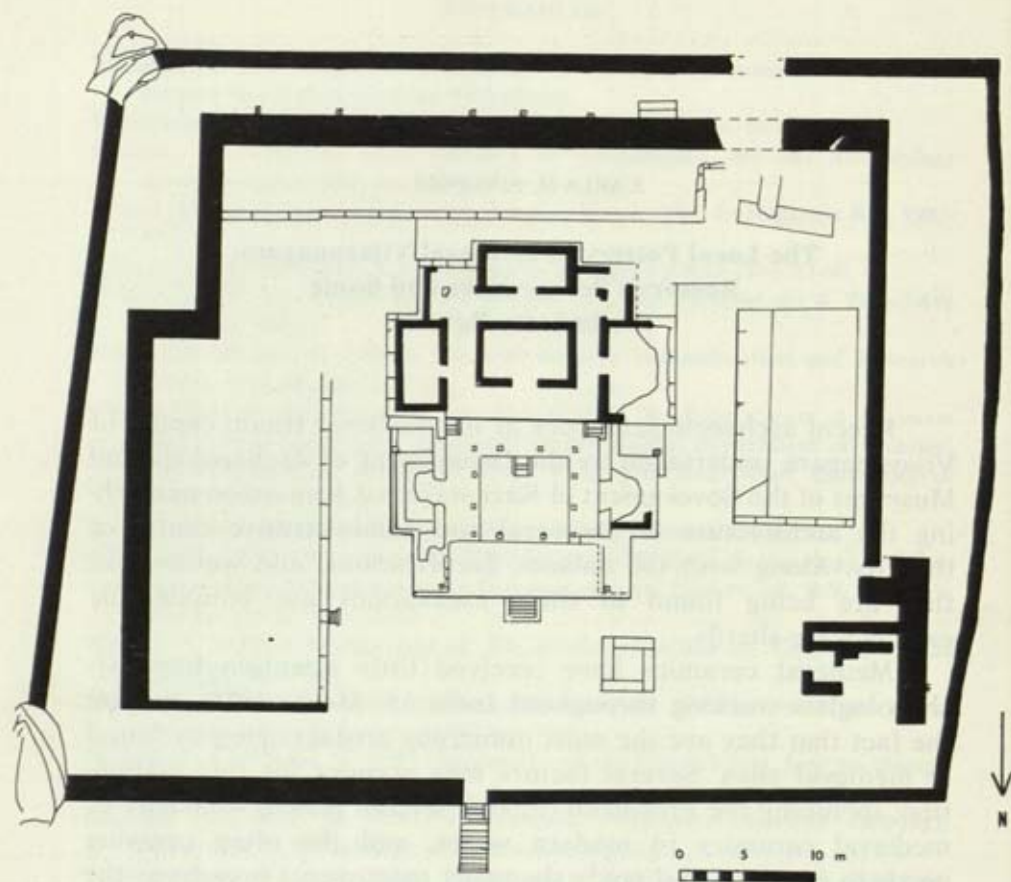


Fig. 1 — Plan of Palace 1 in the Noblemen's Quarter.

structures located within the royal center of the city, in an area currently referred to as the Noblemen's Quarter (NMQ). Both are walled compounds, containing outer corridors and chambers. The two structures, referred to as NMQ1 and NMQ2, differ considerably in both form and size. NMQ1 is a large multi-roomed structure (fig. 1), located in a compound which contains elaborate drains and a large well. NMQ2 (fig. 2) is much smaller, with one inner room. It is likely that the two compounds served somewhat different functions. Both structures were burned, presumably in AD 1565, when the city was sacked. Floor deposits within NMQ2 were sealed below a layer of charred roof and wall debris.

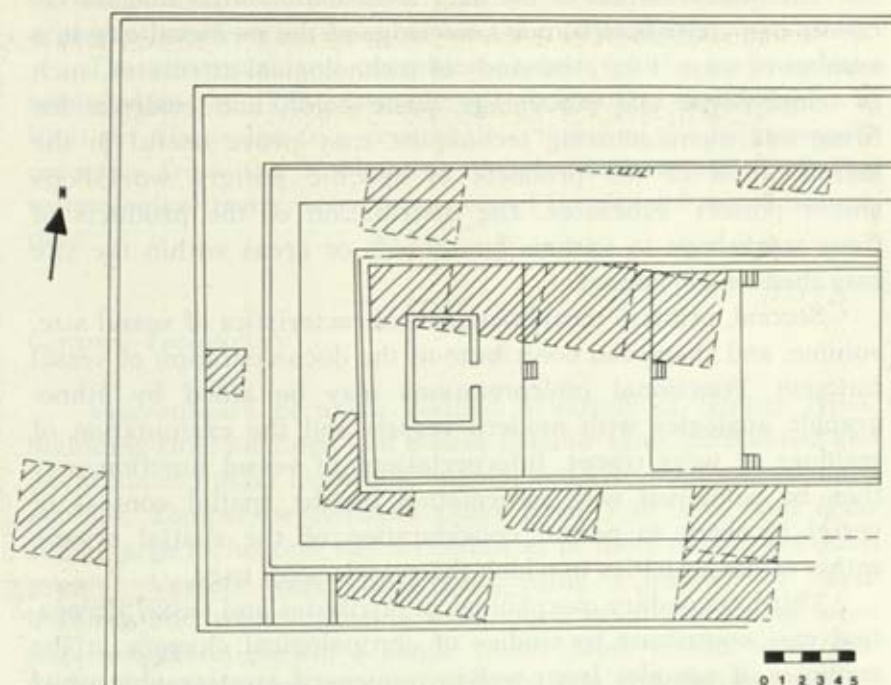


Fig. 2 — Sketch plan of Palace 2 in the Noblemen's Quarter.

While the analysed ceramics comprise an extremely limited sample from a site which covers some 25 sq.km, it is nonetheless possible to present a descriptive summary of the range of ceramic forms present, and to make some comparisons of functional and stylistic diversity between the two structures.

Approximately 20,000 sherds were examined from well provenienced excavation units within and surrounding the two palace compounds. Most of these were body sherds, which were sorted and counted by ware type. The remaining c. 3,000 diagnostic rim and decorated sherds received a much more detailed examination. A number of attributes were recorded for each sherd in order to document (1) technological characteristics of the vessels, (2) primary morphological features, such as vessel size and shape, (3) secondary morphological attributes, such as rim shape and orientation and vessel angularity, and (4) surface and decorative treatment.

The interpretation of the data recorded on Vijayanagara ceramics can contribute to our knowledge of the medieval city in a number of ways. First, the study of technological attributes, such as temper type and percentage, paste color, and evidence for firing and manufacturing techniques, may prove useful in the identification of the products of specific pottery workshops and/or potters' subcastes. The distribution of the products of these workshops to various households or areas within the site may then be considered.

Second, primary morphological characteristics of vessel size, volume, and shape can contribute to the documentation of vessel function. Functional interpretations may be aided by ethnographic analogies with modern vessels and the examination of residues or wear traces. Interpretations of vessel function may then be combined with information on the spatial context of vessel recovery to permit consideration of the spatial organization of the activities in which the vessels were used.

Third, secondary morphological attributes and vessel decoration may contribute to studies of chronological changes in the ceramics, if samples from well-provenienced stratigraphic units can be recovered. The association of local ceramics with imported porcelain and other wares can contribute to the creation of fine-scale chronological frameworks.

The study of Vijayanagara social organization may also be approached through ceramic analysis. The population of Vijayanagara was composed of a multiplicity of caste and occupational groups. Also present were Saivite, Vaisnavite, Jain and Muslim religious groups, and Telugu and Kannada speakers. It is expected that differences between these groups, including religious and caste-specific dietary and ritual practices (Khare 1976) would have resulted in differing needs for ceramic vessels. The symbolic association of vessel forms with both the foods and activities they were used in and the social rank of their users would have further contributed to ceramic differentiation leading, in many cases, to variability within functional classes in secondary 'non-functional' attributes such as rim shape and vessel decoration (cf. Bose 1982; Miller 1982). Since these different social groups were also discrete residential units (Mahalingham 1940), the study of the spatial distribution of ceramics over broad areas

of the site could contribute greatly to our knowledge of the organization of social space within the medieval city.

The statistical and computer analysis of the ceramic data recorded in the 1983 season is only beginning, therefore I will limit my discussion to a general description of the Vijayanagara ceramics from the Noblemen's Quarter excavations, including technological traits, ware types, vessel forms, and vessel decoration.

Ceramic Technology

Vijayanagara ceramics contain a variety of temper types, including fine, medium, and coarse angular sand, carbonized and uncarbonized plant materials, angular red grit, shell and rounded pebbles. Temper percentages range from 5 to 30%, and occasional large inclusions, half a centimeter or more in size, are often present. Vessels were constructed using a number of hand-building and wheel-throwing techniques, often combining more than one technique on a single vessel. Most vessels were produced in a two stage process, with the rim and shoulder wheel-formed and the lower body shaped and thinned with a paddle and anvil; a practice still common among contemporary Indian village potters (Behura 1978; Saraswati & Behura 1966). Other vessels, such as bowls and coarse ware vessels were entirely hand-formed, using pinching and slab building techniques. Production traces such as paddle and anvil impressions, joints, and finger marks are often visible.

Wares

Three general ware types were defined for Vijayanagara ceramics on the basis of surface color, surface treatment, and vessel wall thickness. These are (1) Plain Wares, characterized by smoothed or lightly polished surfaces, (2) Fine or Burnished Wares, and (3) Coarse Ware. Plain Wares are the most numerous ware type and were further divided on the basis of color into (1) Black or Grey Ware, (2) Brown or Buff Ware, and (3) Red Ware. Ware color is determined by the atmosphere in which the vessels

were fired, and by the colorants applied to the vessels' surface; with reducing atmospheres producing black or grey wares, while oxygen-rich firing conditions yield the brown or red wares. Body and surface colors were recorded using the Munsell color system.

The Plain Wares account for nearly 80% of the body sherds from the two palaces, and significant differences exist between the two structures in the relative frequencies of the three Plain Ware groups. In the first palace (NMQ1), nearly 90% of the sherds are of Black or Grey Ware, while less than 10% are Brown Ware. In NMQ2, on the other hand, only 60% of the sorted sherds are Black Ware and more than a third of the sherds are of Brown or Buff Ware (Table 1). These differences in ware frequencies may result from differences in the workshops serving the two structures, although the contribution of other factors, such as the range of vessel forms present in each structure must also be considered.

TABLE 1.

	NMQ1	NMQ2	TOTALS
BLACK	9230	2475	11,705
RED	296	65	361
BROWN	887	1408	2295
TOTALS	10,413	3948	14,361

$$\chi^2 = 1572.29$$

$$\text{SIGNIF.} = .0001$$

Vijayanagara Fine Wares include Black Burnished Ware and Red Burnished Ware, both characterized by lustrous, highly polished surface finishes. Vijayanagara Coarse Ware is quite thick and contains high percentages of coarse sand and organic temper. Coarse Ware sherds are characteristically red or buff in color.

Vessel Forms

A hierarchical coding system was developed for the classification of Vijayanagara vessels. At the first level, vessels were divided into restricted or necked forms, and unrestricted or bowl forms. The restricted vessel forms are the most numerous and were subdivided into three groups on the basis of rim form — flange rim, straight rim, and round rim restricted vessels (fig. 3)². A number of subvariants were defined for each rim form on the basis of lip orientation and thickness, and the location of the point of maximum rim thickness. Finally, a series of measurements was made on each sherd (fig. 4). These measurements, of such attributes and rim, neck, and body diameters, rim and neck heights, and thicknesses, which comprise the bulk of my data, and similar measurements made on the unrestricted vessel forms, will provide a quantitative basis for comparisons within and between each vessel category.

Flange rim restricted vessels are the most numerous of the vessel forms found in excavations in the Noblemen's Quarter. The vessels vary in diameter from 10 to 30 cm, and range in shape from low-necked, shallow, relatively open vessels, probably used for food preparation and storage, to more restricted slender vessel forms, which may have been used in the transport and storage of liquids (fig. 5 A-G). Nearly 1600 flange rim sherds were analysed in the 1983 season.

² It must be noted that a strict equation can not be made between rim form and general vessel morphology in the Vijayanagara ceramic inventory. In the analysis done to date, there appears to be surprisingly little correlation between rim form, vessel size, and vessel shape.

RESTRICTED VESSELS

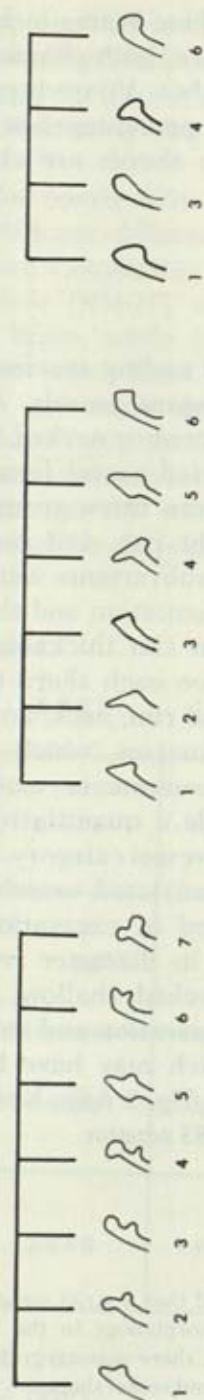
Flange
RimStraight
RimRound
Rim

Fig. 3 — Restricted vessel classification by rim form.

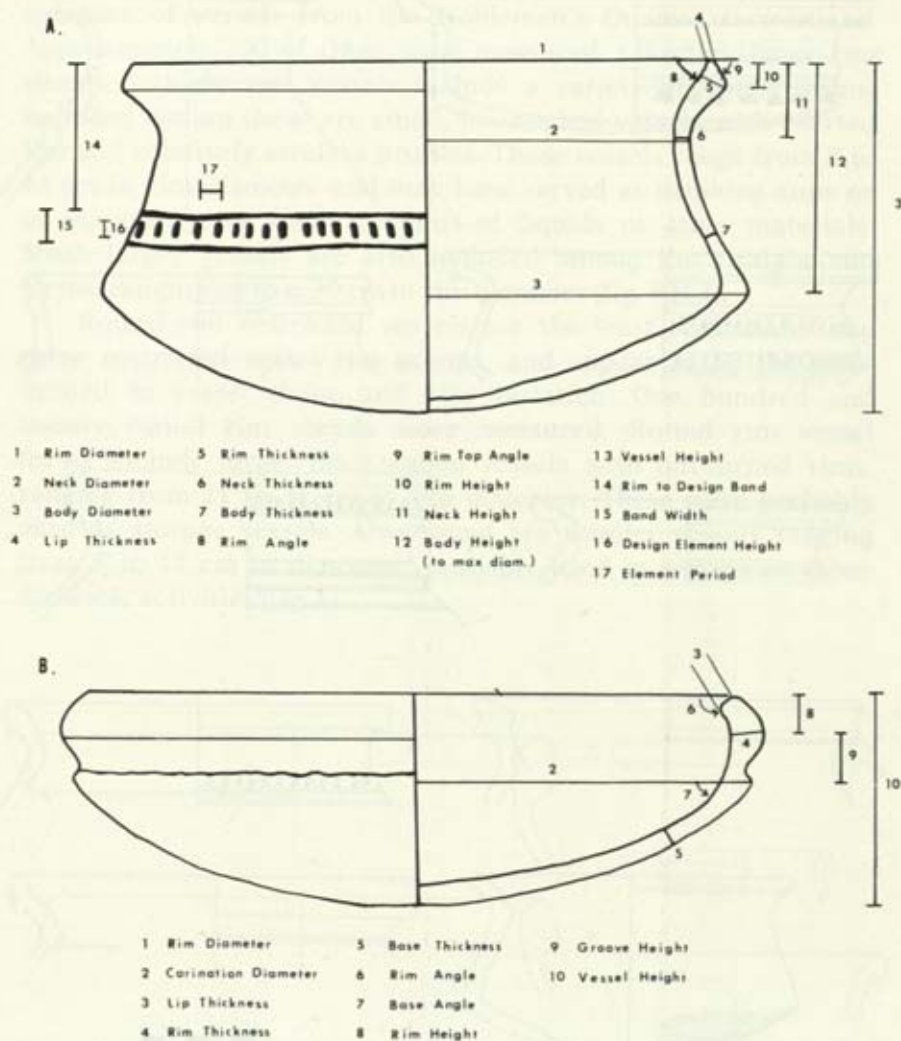


Fig. 4 — Attributes measured on Vijayanagara ceramics.

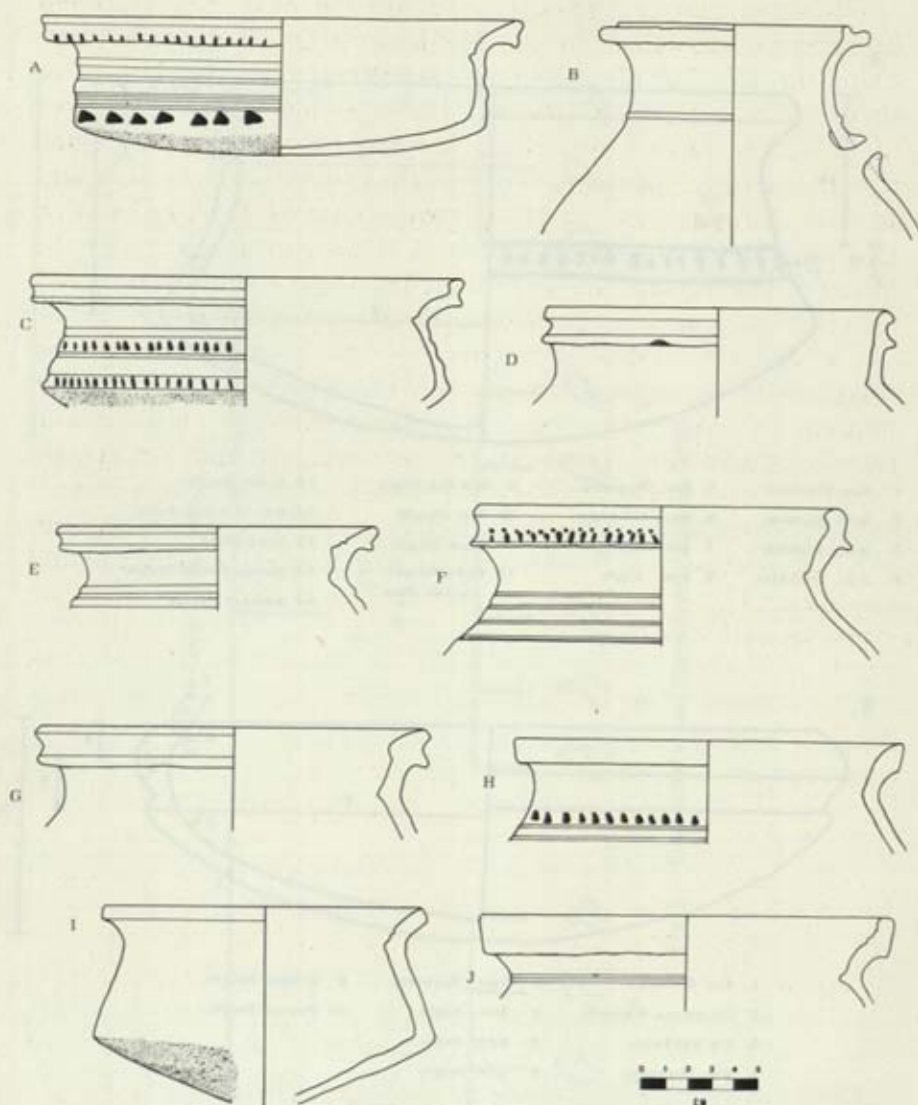


Fig. 5 — Restricted vessel forms.

Straight rim restricted vessels are the next most common category of vessels from the Noblemen's Quarter excavations. Approximately 700 of these were measured. Like the flange rim sherds, straight rim vessels include a variety of vessel forms. Included among these are small, low-necked vessels with everted lips and relatively straight profiles. These vessels range from 8 to 12 cm in rim diameter and may have served as drinking cups or in the storage of small amounts of liquids or other materials. Much larger vessels are also included among the straight rim forms, ranging up to c. 30 cm in rim diameter (fig. 5 H-J).

Round rim restricted vessels are the least common of the three restricted vessel rim groups, and appear to be the most limited in vessel shape and size variation. One hundred and twenty round rim sherds were measured. Round rim vessel forms include large, thick-walled vessels with out-turned rims, ranging from 21 to 31 cm in rim diameter. These were probably used as storage vessels. Also found are smaller vessels ranging from 9 to 17 cm in diameter, probably used in serving or other domestic activities (fig. 6).

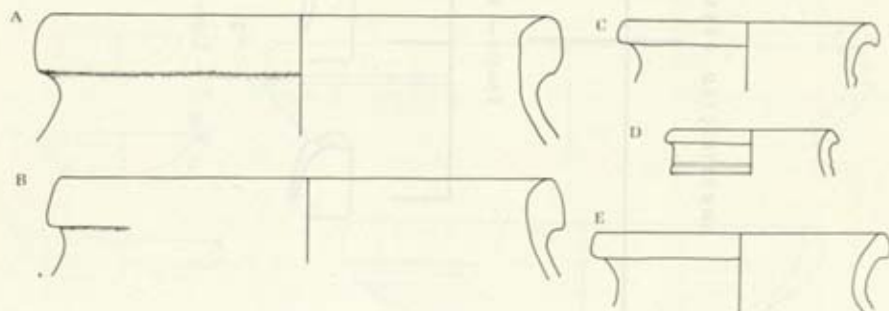


Fig. 6. —Round rim restricted vessels.

Vijayanagara unrestricted vessel forms appear to be far more standardized in general form than the restricted vessels, and far less common in the ceramic samples coded from the two palace compounds. The unrestricted vessels were divided into three groups on the basis of general vessel form. These groups, (1) lamps, (2) shallow bowls and (3) other bowls or trays, were

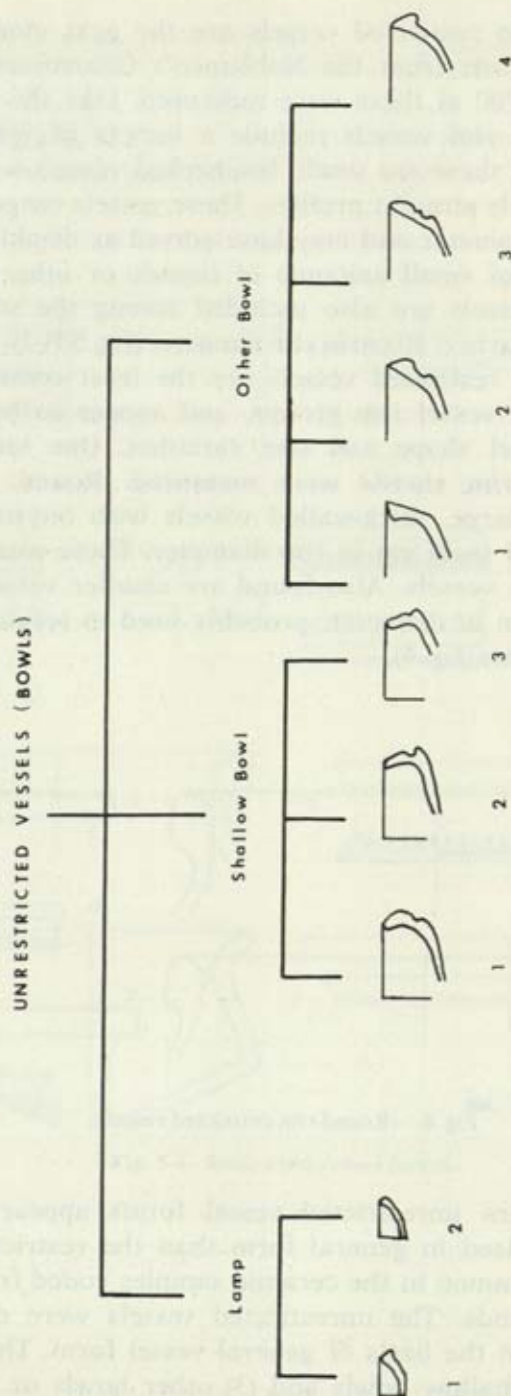


Fig. 7 — Unrestricted vessel classification.

each divided into a number of subvariants on the basis of rim and/or base form (fig. 7).

The lamps are small saucer-shaped vessels which range from 8 to 13 cm in diameter. Similar vessels are used as oil lamps in worship throughout modern Karnataka, and several of the archaeological examples had traces of burning or blackening around their rims (fig. 8 A-F). Nearly half of the 58 lamps coded come from a single excavation unit in NMQ1, possibly the *pāja* or shrine room.

Shallow bowls are characterized by everted rims, angular base carinations, and rounded bases (fig. 8 G-J). The vessels range in size from 12 to 30 cm, with a mean rim diameter of 17 cm. Shallow bowls were probably used in food serving or preparation. The other unrestricted vessels exhibit a great deal of variability in rim form, and tend to be fairly large, with rim diameters of 21 to 32 cm. Approximately 90 of these vessels were coded in the 1983 season.

A number of other vessel forms have also been recovered in excavations in the Noblemen's Quarter. Vijayanagara Coarse Ware vessels include large shallow trays and large vertical-

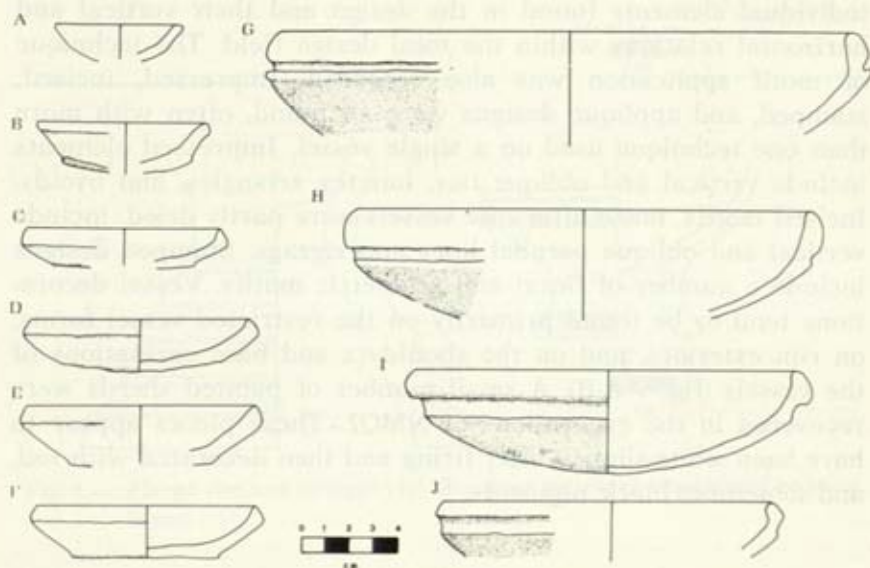


Fig. 8 — Unrestricted vessel forms: lamps and shallow bowls.

walled pieces which may have been used as architectural fittings in wells or drains. Also found are Coarse Ware stoves — three-sided vessels with three triangular knobs located along the rim, on which cooking vessels could be set.

Other vessels include earthenware water pipes, and pedestaled vessels (fig. 9 C-D), possibly incense burners. One strainer and several small gaming pieces were also recovered, along with fragments of spouts and strap handles. No earthenware figurine fragments have yet been recovered in the Noblemen's Quarter excavations.

Surface Treatment and Vessel Decoration

Interior and exterior surface treatments were recorded for all diagnostic sherds. Surface treatments include scraping or smoothing, polishing, burnishing, and slipping, as well as rough surfaces with coarse impressions. Technological aspects such as the presence of paddle and anvil impressions or finger marks were also recorded.

A 'design grammar' was developed to record Vijayanagara ceramic decoration. This grammar recorded information on the individual elements found in the design and their vertical and horizontal relations within the total design field. The technique of motif application was also recorded. Impressed, incised, stamped, and appliqué designs were all found, often with more than one technique used on a single vessel. Impressed elements include vertical and oblique tics, lunates, triangles, and ovoids. Incised motifs, made after the vessels were partly dried, include vertical and oblique parallel lines and zigzags. Stamped designs include a number of floral and geometric motifs. Vessel decorations tend to be found primarily on the restricted vessel forms, on rim exteriors, and on the shoulders and base carinations of the vessels (fig. 9 A-B). A small number of painted sherds were recovered in the excavations of NMQ2. These pieces appear to have been white-slipped after firing and then decorated with red, and sometimes black, pigments.

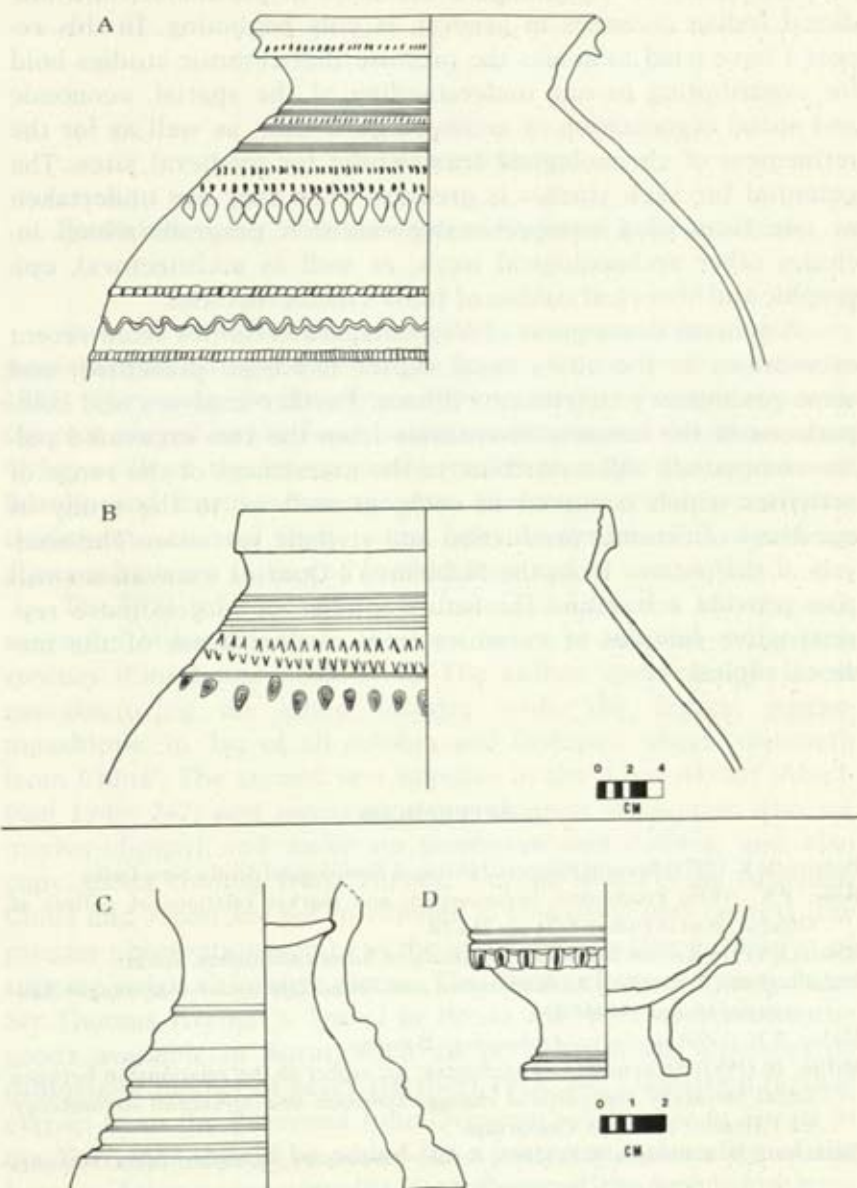


Fig. 9 — Flange rim and straight rim decorated restricted vessels and pedestal bases.

The study of Vijayanagara ceramics in particular, and medieval Indian ceramics in general, is only beginning. In this report I have tried to assess the promise that ceramic studies hold for contributing to our understanding of the spatial, economic and social organization of archaeological sites, as well as for the refinement of chronological frameworks for medieval sites. The potential for such studies is greatest when they are undertaken as one facet of a comprehensive research program which includes other archaeological work, as well as architectural, epigraphic and historical studies of India's medieval cities.

A general description of Vijayanagara ceramics from recent excavations in the city's royal center has been presented, and some preliminary conclusions drawn. Further analyses and comparisons of the ceramic inventories from the two excavated palace compounds will contribute to the assessment of the range of activities which occurred in each, as well as to the study of questions of ceramic production and stylistic variation. The analysis of the pottery from the Noblemen's Quarter excavations will also provide a baseline for future studies of larger, more representative samples of ceramics from diverse areas of the medieval capital.

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YOLANDE CROWE

Foreign Sources of Decoration on Gujarati Lacquer Work

Over twenty literary references to Gujarati-made lacquer wares are listed by Simon Digby in his recent inventory (Digby 1985). They range in date from 1502 to 1689 and emphasise well the part played by the local Indian craftsman and the importance of his work on the international market through the factories of Islamic and European merchants. Three quotations are of particular interest and throw some light on the possible visual exchanges between India and further East and of course West.

The first reference is taken from Jan Huyghen Linschoten's narration of his travels to the East Indies at the end of the 16th century (Linschoten 1885: 2.90). The author compares the local manufacturing on inlaid lacquer with 'the fayrest worke-manshippe' in 'lac of all colours and fashions' which 'commeth from China'. The second text appears in the *Ā'in-i Akbarī* (Abu'l-Fazl 1949: 247) and mentions the craftsmen of Gujarat who set mother-of-pearl and make up pen-boxes and coffers, and also copy goods coming from Turkey, Europe and Persia. Although China and Japan are not mentioned in this particular context, the present observation points to the standard practice in Gujarat of copying original foreign pieces. The third reference comes from Sir Thomas Herbert's *Travel in Persia 1627-9*. It enumerates the goods available in Surat, such as 'porcelain-ware, scrutores or cabinets of mother-of-pearl' (Herbert 1928: 34). Likewise a further extract from the Reverend John Ovington's *A Voyage to Suratt in the Year 1689* should be added for a better understanding of the Eastern Asian connection: 'I cannot boast of the lack upon scrutores and tables at Surat, which is but ordinary in respect of that at Japan' (Ovington 1976:125).

Although Japan closed its ports to foreigners in 1639, Japanese export lacquer works were still mentioned in texts during

the latter part of the 17th century. Besides the Dutch, other European traders purchased these wares from Chinese merchants in a number of Far Eastern ports. Oliver Impey describes the change in their style from the *Namban* style with inlay of mother-of-pearl to the painted pictorial style after the 1630s. Furthermore he suggests that the *Namban* style or part of it, could have been inspired by Gujarati boxes brought to Japan by the Portuguese (Impey 1982: 127). Plainly the shape of writing boxes originates from Europe and is copied both in Gujarat and farther East. As to the decoration, setting aside the mother-of-pearl inlay technique, it refers only superficially to the Indian style. Indeed, bands of decoration induce at all times more geometric and textile repeat patterns than do whole panels. These surfaces are in turn of a high standard but create a different artistic vision, unmistakably Japanese in taste.

On the other hand Simon Digby submits that the impact of Eastern Asia is far greater than that of the West on East (Digby 1984). For the last three thousand years lacquer had been used as a natural product of countries in Eastern Asia. Inlaid with mother-of-pearl, it survived in Japan in a remarkable series of musical instruments enshrined in the treasure of the Shōsōin in Nara dating back to the Tang period in the 8th century. The same decorative technique also occurred in Korea during the Koryo dynasty (918-1392). Five *Sātra* boxes with related decoration have survived in various parts of the world (Shono 1982: 174). The British Museum example has been described by Harry Garner as decorated in: 'tight floral scrolls with flowers and leaves in thin iridescent mother-of-pearl, and the spiral stems in inlaid silver wire [...] an entirely new feature' (Garner 1979: 214). It could be mentioned in passing that the use of silver wire is not to be found either in Japan or in India in later times. These flowers (fig. 1) according to Gompertz, 'were [...] based on small wild chrysanthemums found all over Korea in the autumn, and have long been recognised as such' (Gompertz 1980: 14). The tight floral scroll motif unrolls itself into an elongated leafy shoot with lotus blossoms at regular intervals; it repeats itself in groups of three along the narrow border to the large panels of the *Sātra* box.

The mother-of-pearl inlaid lacquer technique and its decorative tradition was pursued in China during the Ming dynasty

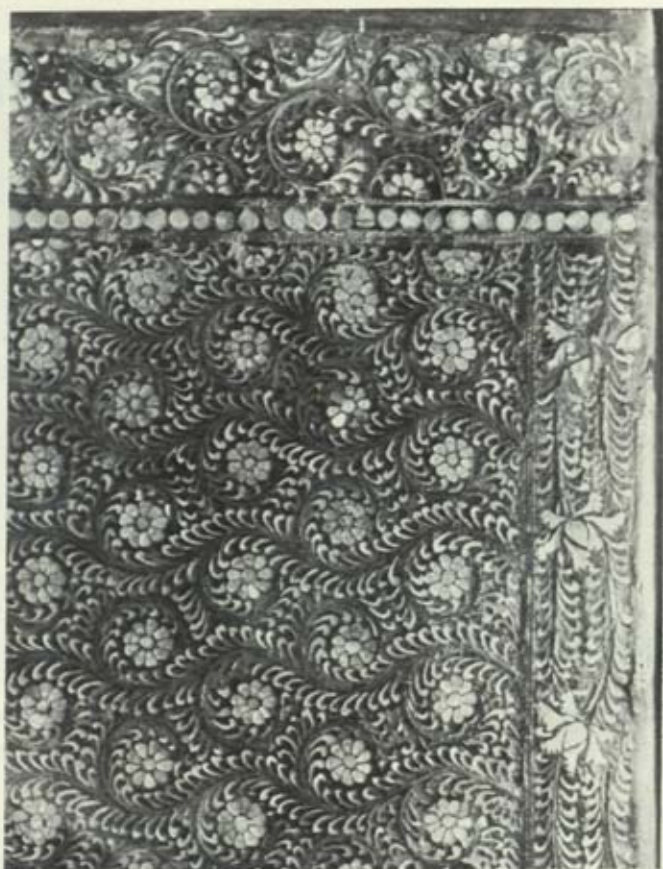


Fig. 1 — British Museum: Korean *Sutra* box, detail.

(1328-1644) although straight forward lacquer carving appears to have been more popular or survived better climatic contrasts. A rare dated example, a small box, 'bears a fairly convincing cyclical date mark in correspondence with the 23rd year of Ch'eng Hua (1487)' (Figgess 1952: 128). The open style of its decoration contrasts with the dense one of the earlier *Sutra* boxes; it belongs to a more typically Chinese vocabulary of loose fleshy lotus or peony scrolls used for long and narrow areas on the side of lids. Further examples can be noticed on tiered boxes (fig. 2) and trays of the 16th century. The steady development of the pictorial style eventually reduces the flower scrolls to the limited areas of panels or *cartouches* on framing areas. The scroll can



Fig. 2 — Victoria and Albert Museum: Tiered box, 16th century, FE 70 toC, 1974.

relate either to the Korean pattern in its elongated form or to the looser Chinese approach to it. On the exceptional octagonal tray in the Victoria and Albert Museum (FE71-1974), the eight pictorial panels on the border point to a late date in the 16th century, yet its main ground is covered by the earlier dense type scrolling with the addition of a central lotus blossom which gives a direction to the tray. The late survival of the dense type of scrolling on this Chinese example provides the visual link between the Korean *Sutra* boxes and the work of Gujarati craftsmen in the 17th century, although there is no technical link. Both workmanships proceed from totally different traditions.

To sum up the Far Eastern Asian scene as far as it relates to India and its indigenous lacquer work: two separate floral types of decoration seem to be available in the late 16th century on mother-of-pearl inlaid lacquer. On the one hand, the tight scroll used on the octagonal tray which clearly echoes the dense scroll

on Korean *Sâtra* boxes. It has been called the *centipede* scroll (Ragué 1976: 128) and this descriptive word conveys forcefully the repetitive character of the pattern. On the other hand, Simon Digby relates the second type of scroll to what has come to be known as the Timurid international style, a style which owes its foreign aspect to the impact of Chinese blue and white porcelain and its decorative vocabulary of flowers of the four seasons.

The remarkable inventory of Indian lacquered pieces (Digby 1985) includes items which range from cenotaph canopies in Muslim tombs to circular shields, thrones, caskets and penboxes. All share the same technique of inlaid mother-of-pearl ornament. Varied patterns have been gathered into twenty-two groups relating mainly to the two separate traditions: one is local and Gujarati; the other, more international and post-Timurid in essence, includes medallions and a variety of leaf scrolls. Specific leaf and tendril fillers in their five variations, reach out, stretch or scroll according to the area of decoration in the composition. Such patterns are indeed foreign to the shores of the Indian ocean and their attraction for artist and craftsman alike remains a source of constant surprise; it is often difficult to appreciate what triggers off sympathy or rejection in a given selection of motifs in the mind of the Gujarati onlooker in this particular instance, although he readily yields to the attractive flow of the scroll, beyond the rigour of pure geometry.

The writing chests, Islamic in shape, are listed in the inventory. The decoration on one of them in the Victoria and Albert Museum may be used as a standard example of the way in which in the 16th/17th centuries in India, scroll decoration in mother-of-pearl has been adapted to a lacquered body. The chest itself consists of two levels of drawers: one drawer spans the whole front of the upper level; the lower one is divided into three drawers. The face of each of them is filled with a geometric repeat of a derivative *centipede* scroll, including the central small flower. Its scrolling is punctuated by four split leaves at regular intervals, an Islamic addition to the original form. A lotus scroll belonging to the international Timurid style, runs continuously below all three drawers (fig. 3).

Both ends of the chest show variations on the *centipede* scroll. Within the two lozenges, it is the central flower which dominates the decorative composition with its nine petals equal

in number to those of the Korean *Sātra* boxes; the stems now reach outwards in a dense if haphazard pattern (fig. 4). The eight reserved areas of the border frame are swamped by more or less uncurling leafy stems of a denser kind, with or without little blossoms at their tips.

These few examples briefly indicate the adaptability of the original *centipede* scroll in the hands of the Gujarati artisan. Further transformations may be detected farther afield in Ottoman Constantinople were, for a brief period of time early in the 16th century, a whole group of blue and white ceramics was decorated with series of scrolls easily connected with the regular geometric repeat on the lower drawers of the Gujarati writing

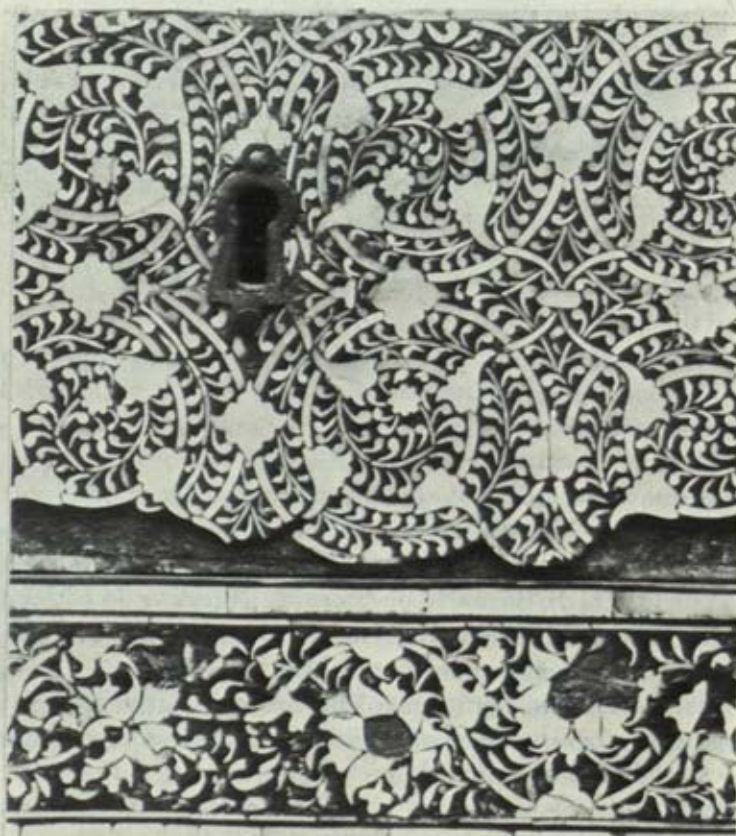


Fig. 3 — Victoria and Albert Museum: writing chest, W31.1946, detail.



Fig. 4 — Victoria and Albert Museum: writing chest, W31.1946, detail.

chest. The split leaves are replaced by small flowers spaced regularly along the scroll. This style typifies the so-called Golden Horn group. It is also used to illuminate the signature of the Sultan on his official edicts (Petsopoulos 1982: nos. 73, 74).

Further echoes of the extended *centipede* scroll are yet to be found in India throughout the 18th century, for instance in the continuous stem and foliage of the spandrels in the arched openings of the City Palace in Udaipur (fig. 5). Besides flower blossoms, buds are used to finalise some of the lesser stems (fig. 6). In the same palace, wall panels are also filled with tree shapes made up of similar leafy stems. A last example can be seen in the Victoria and Albert Museum. It is a *Palampore* made for the Dutch market and representing a large tree of life (fig. 7). Both the cornucopias and the hillocks below the roots of the tree, have been filled with two different versions of the extended *centipede* scroll (fig. 8). The scrolling flowers of the border are a far cry

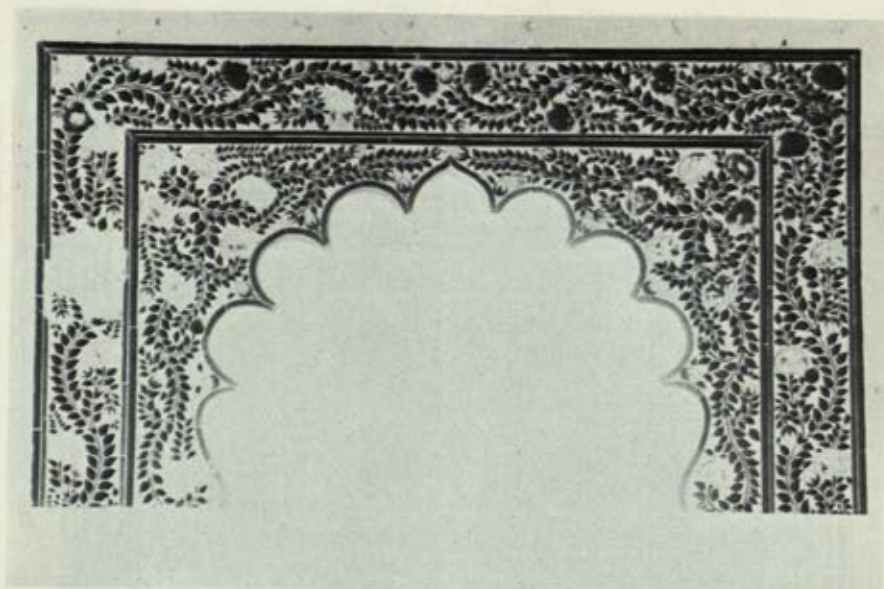


Fig. 5 — City Palace, Udaipur: lobed arch.

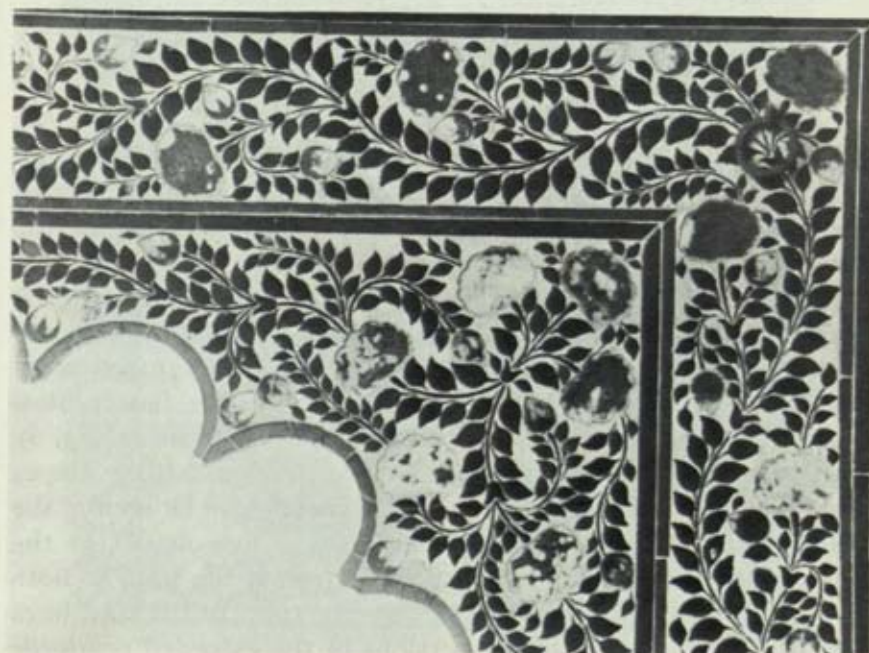


Fig. 6 — City Palace, Udaipur: lobed arch, detail.



Fig. 7 — Victoria and Albert Museum: *Palampore*, IM 2-1937.

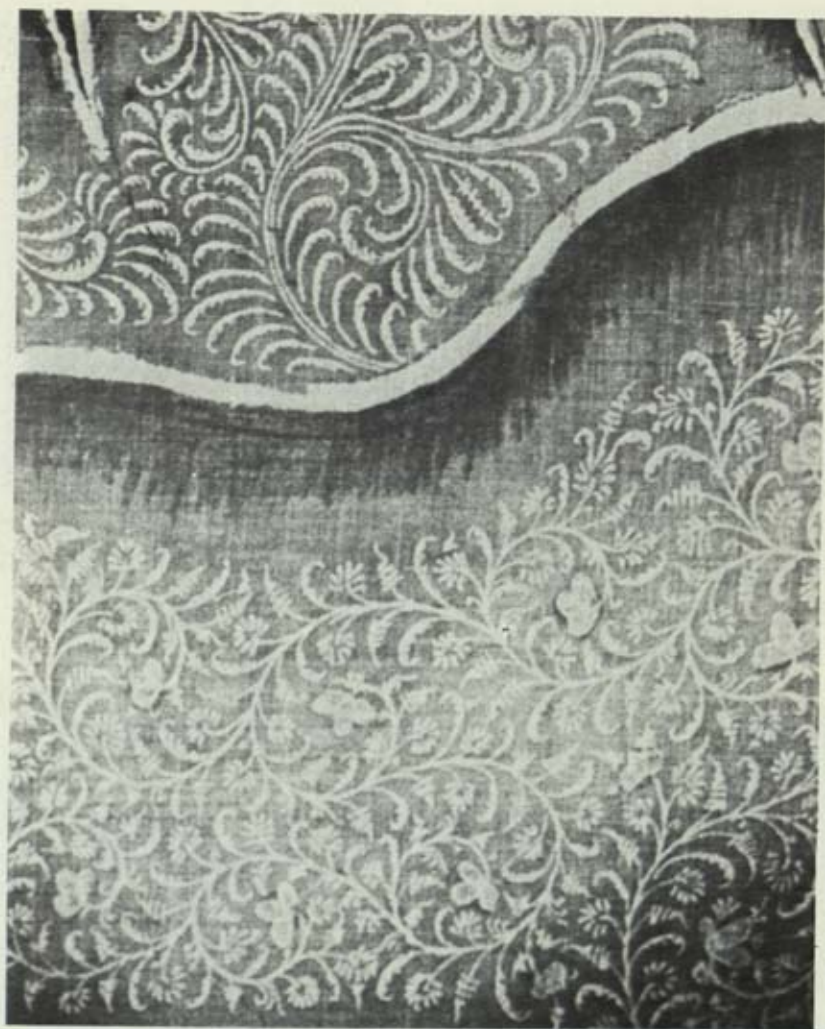


Fig. 8 — Victoria and Albert Museum: *Palampore*, IM 2-1937, detail.



Fig. 9 — The Saddlers' Company, London: ballot box, dated 1619.

from the international Timurid style types and yet they can be seen to derive from them.

In all probability further research into the decorative arts of India should produce many more examples of the adaptations springing from the Korean/Chinese *centipede* scroll, and it should be wondered whether the pattern survived beyond the 18th century. So far it appears to be more related to the provinces of the Mughal empire rather than to its capital cities in Northern India.

In the city of London, the Saddlers' Company possesses a remarkable ballot box (fig. 9) which was originally made for the Court of the East India Company. The date 1619 appears inside the lid. Part of the painted decoration on a black ground echoes faithfully the visual effect of the *centipede* scroll. The pattern had, it seems, also caught the imagination of the English craftsman in the early part of the 17th century.

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LUCA MARIANI

Wooden Mosques in Swat, Pakistan

The study of the wooden mosques in the Swat valley was begun in the form of a collection of original photographic documents in 1959 by Professors Umberto Scerrato and Maurizio Taddei during the Italian Archaeological Mission of IsMEO led by Professor Giuseppe Tucci. This study was subsequently resumed during the systematic surveys and photographic campaigns conducted in 1968, 1970 and 1972, in which I participated together with Mr Zander. In 1980, 1981 and 1982, the survey was extended to the surrounding regions of Darel, Tangir, Kohistan and Dir, again under the guidance of Prof. Scerrato.

Documentary evidence is now available for about one hundred mosques. In some cases accurate photographic documentation accompanied by a map is sufficient to record the present state of the building, before the actual local structural renewal projects blot out its precious artistic and historical appearance.

As Prof. Scerrato pointed out in his paper delivered at Peshawar in 1982, the appearance of these buildings, seen sixty years ago by Sir Aurel Stein, tends to be destroyed by their rapid replacement with modern materials that are more resistant than the wood of which they were originally built (figs. 1-2).

As well as being the material most readily available locally, wood lends itself to being used both for basic structures (e.g. pillars and beams) and as decorative panels, since it is easy to carve. It should be recalled that the Swat mosques are of two different basic types according to whether they are located in a mountain or lower valley area, corresponding to the Dardic and Pashtu ethno-cultural areas North and South of Bahrain village (fig. 3).

This building itself comprises two zones: a rectangular one, closed on four sides, often with only one entrance, forms the



Fig. 1 — Kalam: entrance porch of wooden mosque. (Photo F. Bonardi, 1968).



Fig. 2 — Kalam: modern works in the entrance porch of wooden mosque. (Photo U. Scerrato, 1981).

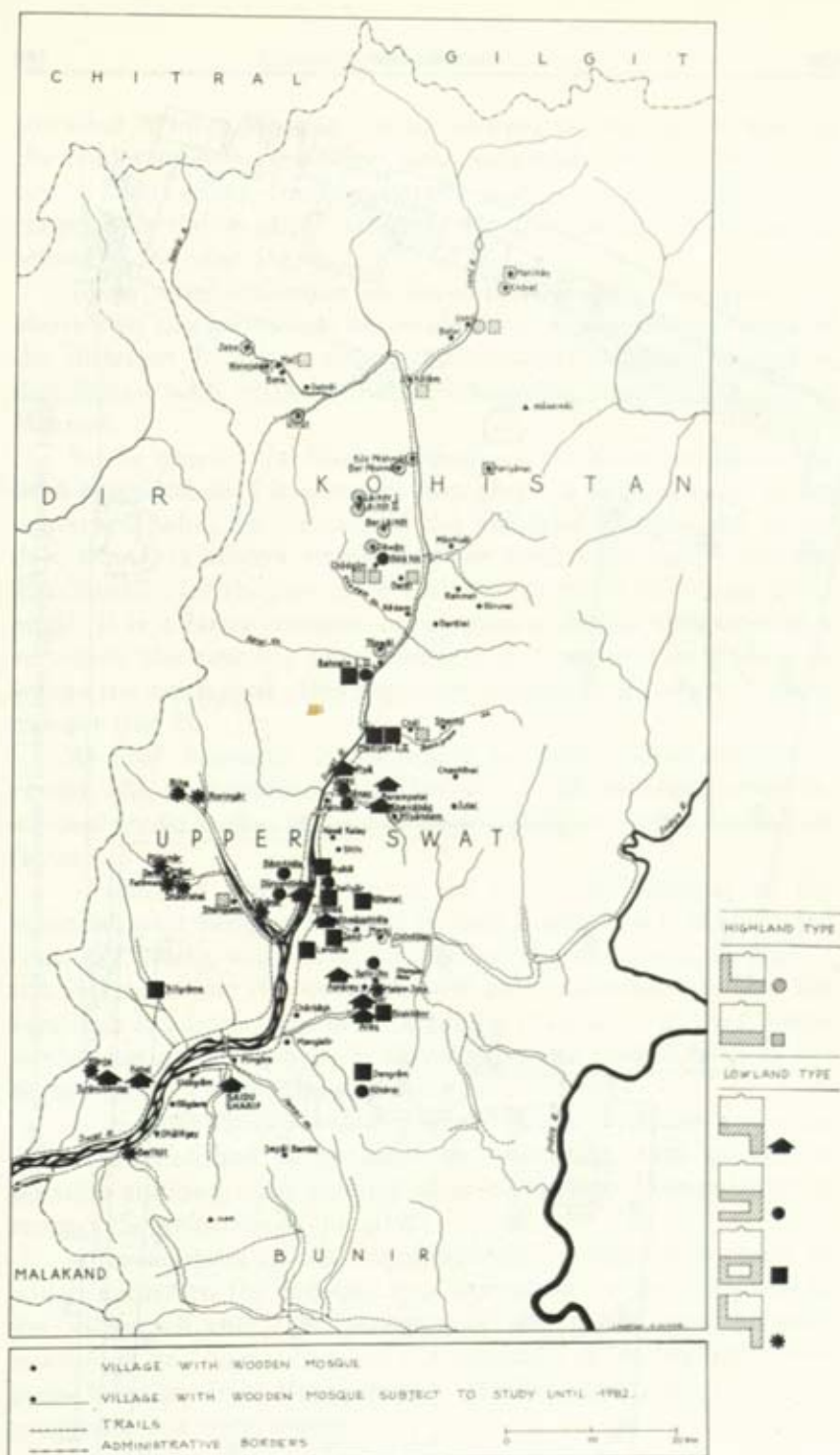


Fig. 3 — Distribution map of wooden mosques in the territory. (Drawing N. Olivieri & L. Mariani, 1982).

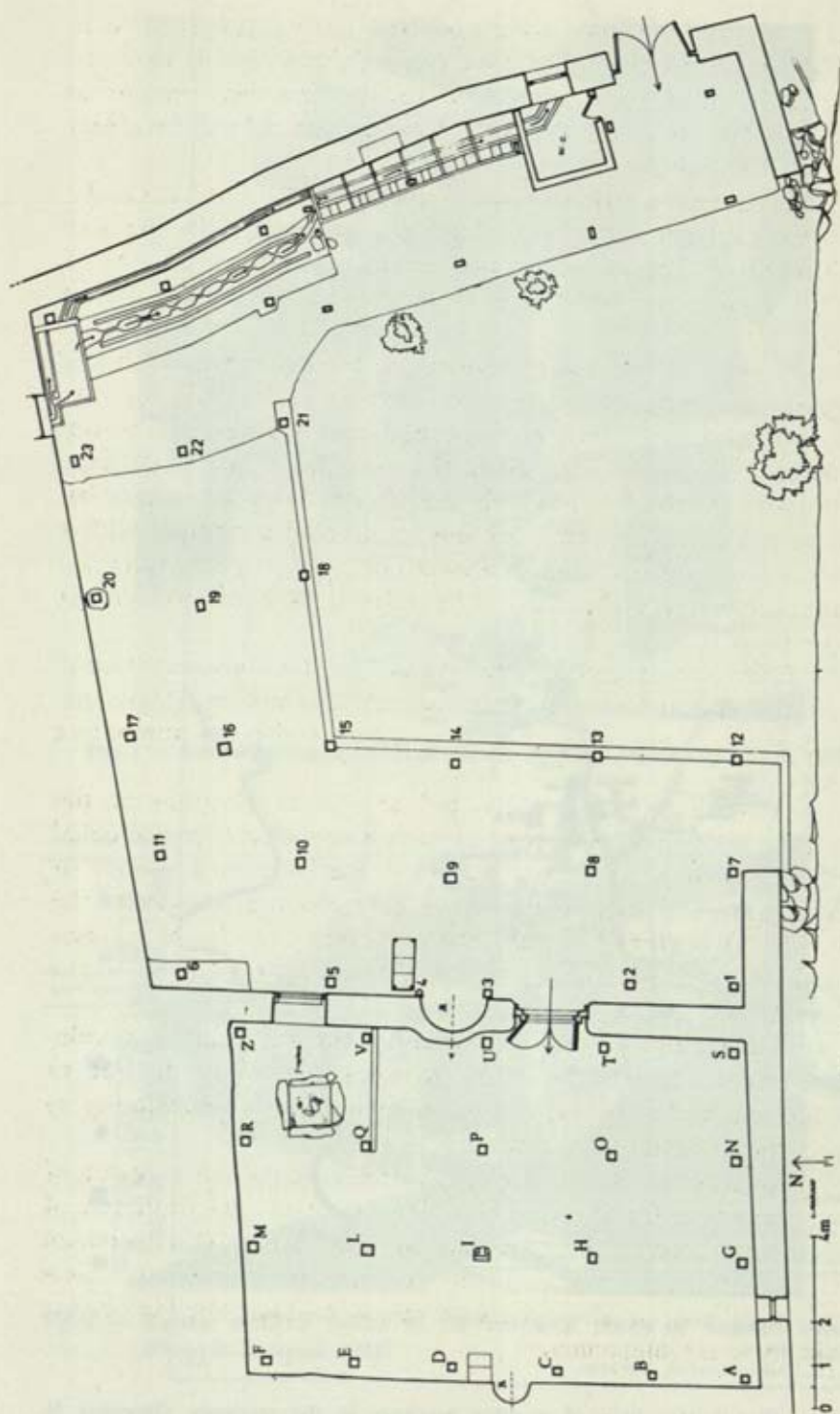


Fig. 4 — Bashkela: wooden mosque, ground floor. (Drawing L. Mariani, 1970).

so-called 'Winter Mosque', which is used during prayer time in the colder months; the other zone (verandah), which is open on one or more sides, forms a portico and is often less regular in shape; it is the so-called 'Summer Mosque', used in the warmer season of the year (fig. 4).

From an examination of the numerous different types, the above two categories can be divided into groups on the basis of the different forms in which the summer verandah section is distributed with respect to the rectangular room of the closed Mosque.

In the case of the lowland Mosques, the outer verandah has been extended until it occupies two, three or all four sides of the courtyard, while in the case of the highland Mosque, the verandah, if any, is always attached to the main body and is perhaps distributed over the two more sheltered external sides lying at an angle. It is a fairly common occurrence to find a mosque with a verandah abutting the main building and one arm extending towards the courtyard. This could be defined as a 'mixed' type of mosque (fig. 5).

As Prof. Scerrato rightly points out in the above-mentioned report, the spontaneous organization of the building types described above is due to, or has been influenced by, a number of factors:

- climatic reasons, which led to the distribution of the verandah part being performed in such a way that it is protected from the North winds and to develop the courtyard so that it remains separate; moreover, in the cold mountain regions, the verandah has been built in an artificial excavation in the hillside so that natural protection is afforded by the ground itself to the bottom and the two sides (fig. 6);

- morphological reasons, whereby the verandah and relative courtyard had to be built in areas that were as flat as possible and had to be orientated in such a way as constantly to respect the direction of the *qibla*;

- town-planning and topographical reasons, as a result of which access to the mosque was dependent on the direction of the village streets, the position of the main road between townships and, very often, on the existence of an extensive view over the valley from the verandah; another important factor was proximity to a watercourse.

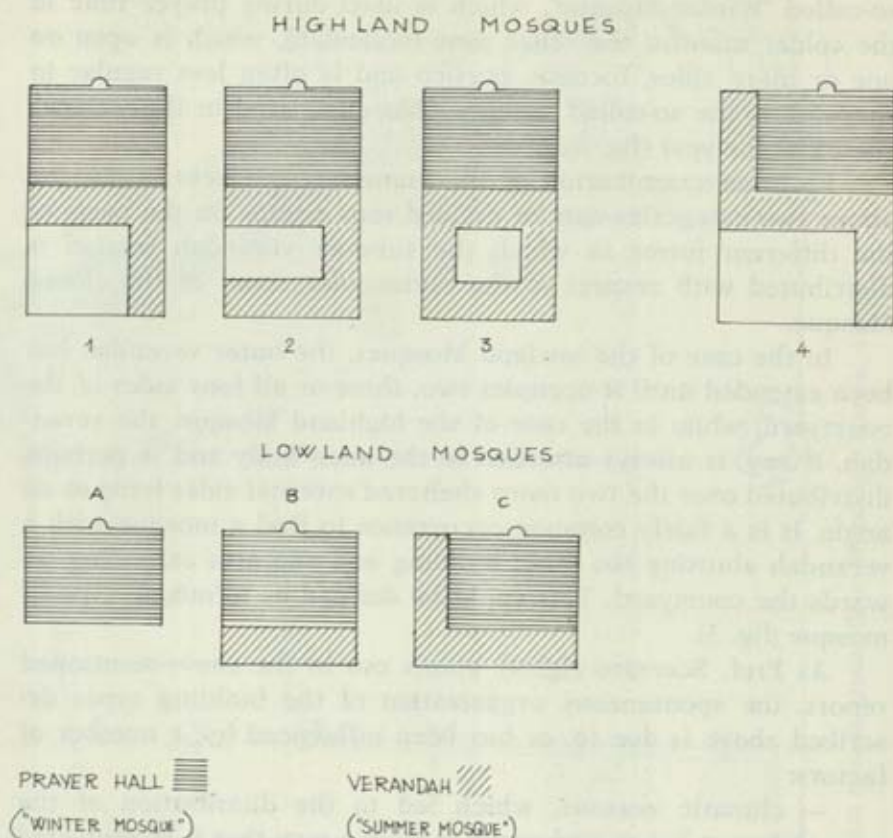


Fig. 5 — Typological subdivision of the plans. (Drawing L. Mariani, 1980).

Other extremely interesting reasons are those connected with the basic construction technique, which consisted of building a perimeter wall of mixed stones and wood courses. Pillars are set along the main direction of the wall in order to support the main roofing, which consists of long, thick horizontal beams bearing smaller beams laid at right angles to the former, bundles of brushwood or boards, straw and a final layer of compact clayey mud (fig. 7).

The main roof beams always run longitudinally, even from the closed room to the various wings of the verandah.

A further constant feature is that of displaying the entrance on one of the long sides of the rectangular closed room. How-

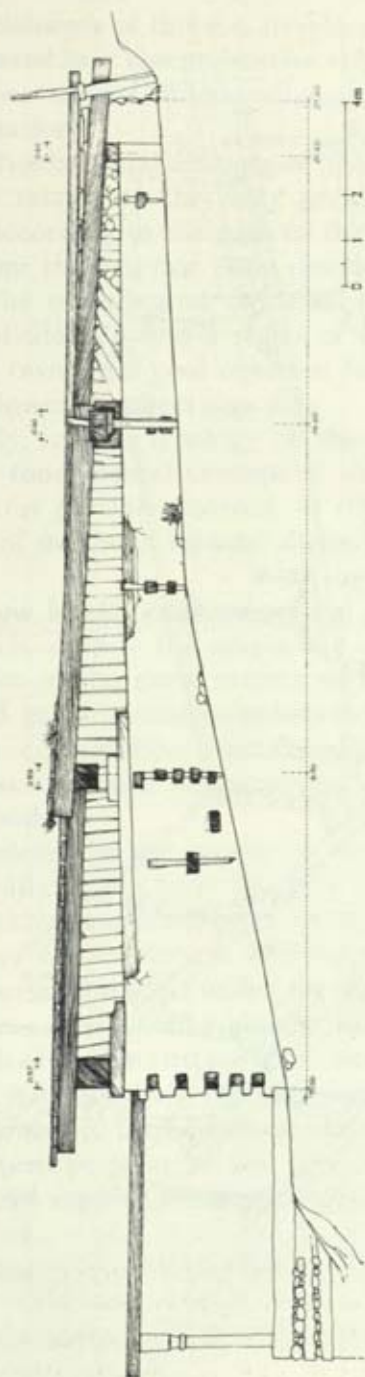


Fig. 6 — Kalam: South side of the mosque. (Drawing L. Mariani, 1968).

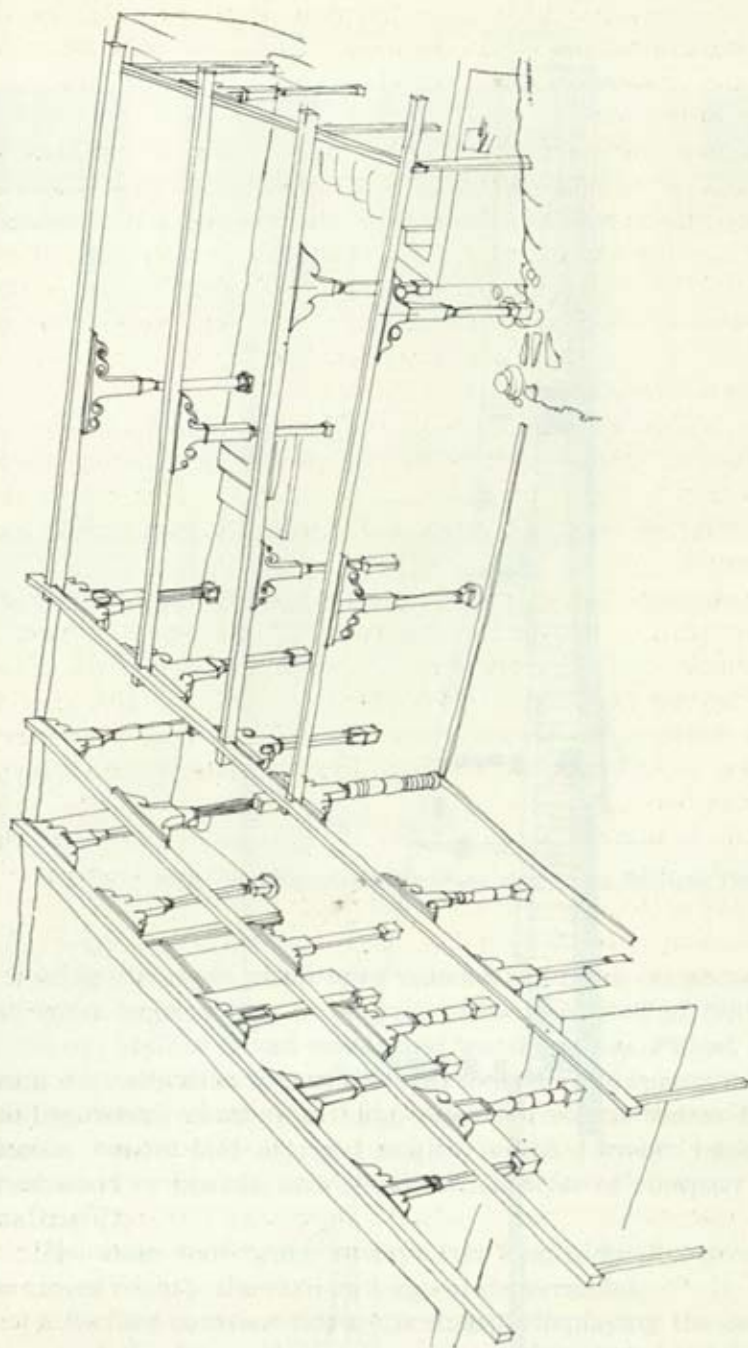


Fig. 7 — Pya: isometrical view of covering beams. (Drawing L. Mariani, 1970).

ever, all the elements of this (i.e. fireplace, doorway, *mihrab*) are closely integrated in a comprehensive relationship, once again to ensure the spontaneous functionality of the room, i.e. its most coherent utilization.

Another fundamental element of the mosque is the area of the ablutions related to the daily prayer ritual. This space is apportioned according to the path of the running water channel leading in from the exterior. This channel generally runs along one wall of the mosque and, in order to make the area more reserved, is divided up into a series of identical zones, each of which has its own little pool obtained from the channel, where the water is allowed to collect (figs. 8-9).

The highly varying typology of this ablutional complex is based on the fundamental concept of using the running water over the greatest possible distance, of siting the area beside the entrance and of making a rational distinction between clean and waste water.

Let me now briefly examine several particular construction solutions which, despite the originality of the Swat craftsmen, are reminiscent of the great architectural traditions that often extend beyond geographical boundaries to link up with similar Central Asian construction forms typical of mountain areas, where the most important characteristic consists of the frequent use made of wood.

Also of interest is the system of containment used for the ends of the walls in the form of short beams laid transversely and jointed with the long beams (figs. 10-11).

The danger of detachment due to outward bulging of the load-bearing perimeter walls under the thrust transmitted by the main roof beams is averted by placing vertical wedges in special slots in the ends of the flat surface of the beam (figs. 12-13).

However, it is precisely the elementary principle of joining the vertical element to the horizontal beam that has produced the transition element peculiar to this type of architecture, namely the carved scroll capital. Bearing in mind that the structure of the mosque roofs, which is always organized starting from the closed room, entails having the beams supported by the pillars parallel to the long sides; also in the verandah the longer front supported by the pillars appears in perspective in its full extension with decorated capitals.

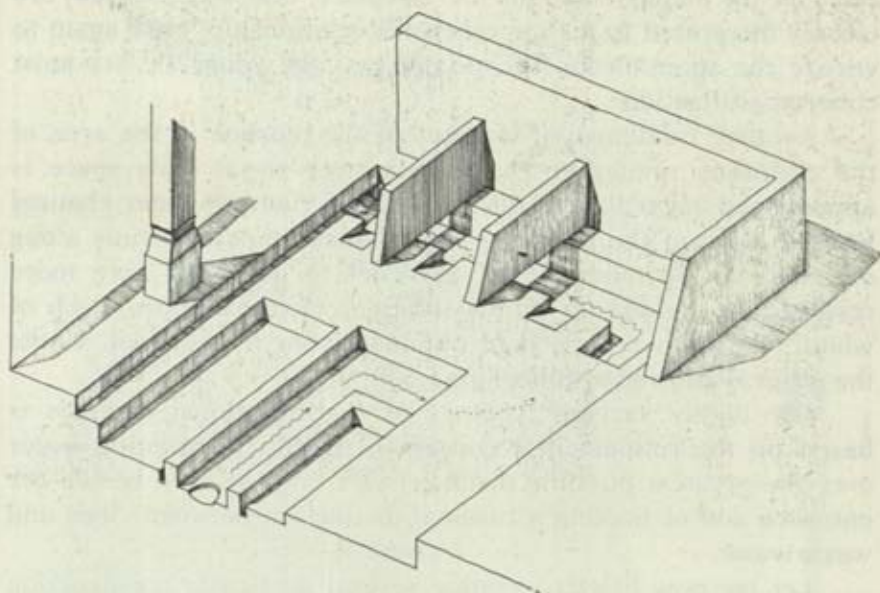


Fig. 8 — The ablutinal complex. (Sketch by L. Mariani, 1970).

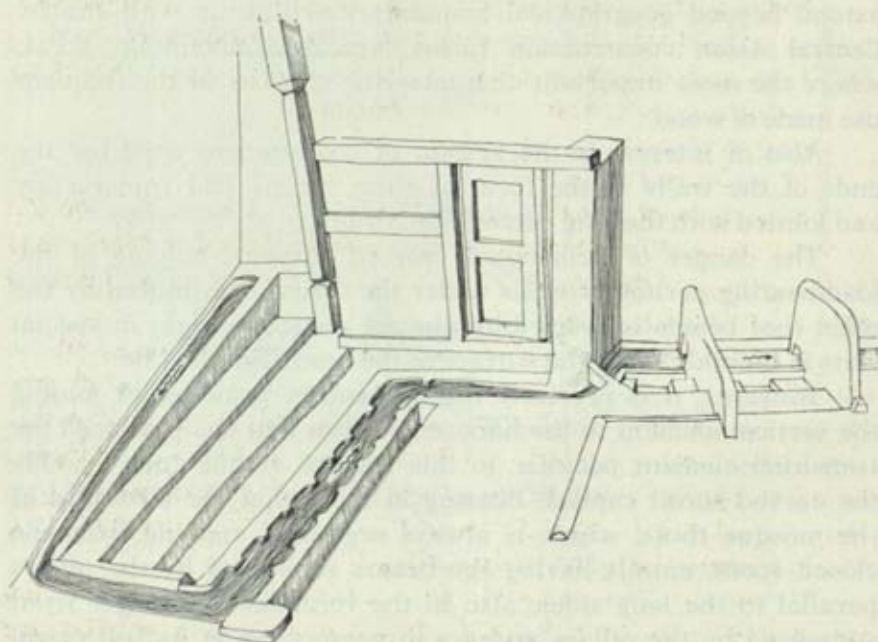


Fig. 9 — The ablutinal complex. (Sketch by L. Mariani, 1970).



Fig. 10 — Kalam: South external wall of the mosque. (Photo F. Bonardi, 1968).

The carving work which thus makes this architectural evidence so artistic and valuable, and which involves the vertical and horizontal structural elements (pillars and beams) as well as the capital, may be generally subdivided into:

- volume carving;
- surface carving.

What is meant by 'volume carving' is the working of the element so that it is proportionately divided into several parts and, its original roughness having been overcome, of giving it an aesthetically valid shape.

The term 'surface carving' is used to refer to working involving all the flat surface produced by the volume carving performed on horizontal and vertical bearing members, i.e. the surface of the capitals, pillars, roof cornices and doors are adorned with extremely elaborate geometrico-floreal decoration to produce a highly effective chiaroscuro effect which enhances the architecture of the entire mosque (figs. 14-17).

The analyses to which the decorative matrixes of the carving are currently being subjected allow the following preliminary considerations to be made:



Fig. 11 — Utrot: South external wall of the mosque. (Photo F. Bonardi, 1968).

1) the treatment given to vertical elements in the transition from the essentially monoxylon form to more elaborate forms always tends towards a proportional division that ultimately leads to a distinction being made between the three fundamental parts of the base, the shaft and the head. This distinction is reached in successive steps: a) identification of the top, b) distinction between shaft and base, c) shaping and elaboration of the shaft, d) shaping and division of the base, e) symmetrical identification of head and base.

2) As far as the succession from the simpler to more complex element is concerned, the elaboration of the capitals basically involves the multiplication of the scrolls, which occupy an increasing smaller space as the edge of the capital is approached. It seems natural that the trapezium shape of the capital, a primitive geometric shape creating a static connection between the



Fig. 12 — Kalam: South external wall of the mosque. (Photo F. Bonardi, 1968).

area of the section of the vertical bearing element and the horizontal surface of the beam supported, should immediately have suggested a decorative treatment in the form of scrolls, which end up being the geometric motifs that utilize the greater part of the surface available for decoration. Earlier samples examined have been catalogued according to parameters referring to the capital as a whole (e.g. direction of outgoing scrolls, combination of different-sized scrolls, number of scrolls, shape of the central segment of the capital, shape and starting level of the scrolls, shape of the end portion of the capital, presence of lesser decorative elements, etc.), as well as to parameters referring to the shape of the scrolls themselves (e.g. the number of spirals, the thickness, the final shape of the scroll's curve, the shape of the curve joining two scrolls, the presence or absence of gaps, etc.) (fig. 18).



Fig. 13 — Kalam: South external wall of the mosque. (Photo F. Bonardi, 1968).

While on the one hand it was possible to work out the development of the pattern of volume carving from the simpler to more complex forms by grouping the various elements into typological classes, the frequent custom of replacing deteriorated pillars or capitals with others or of using elements from different sources has prevented any quantitative or typological evaluation being made of the formal and dimensional relationship between the pillar and its capital. As far as the surface carvings are concerned, the examination and comparison of the various samples has enabled the groups of decorative elements most frequently used in carving to be defined. They consist of two main classes:

- the single element class (fig. 19);
- the multiple element class (fig. 20).

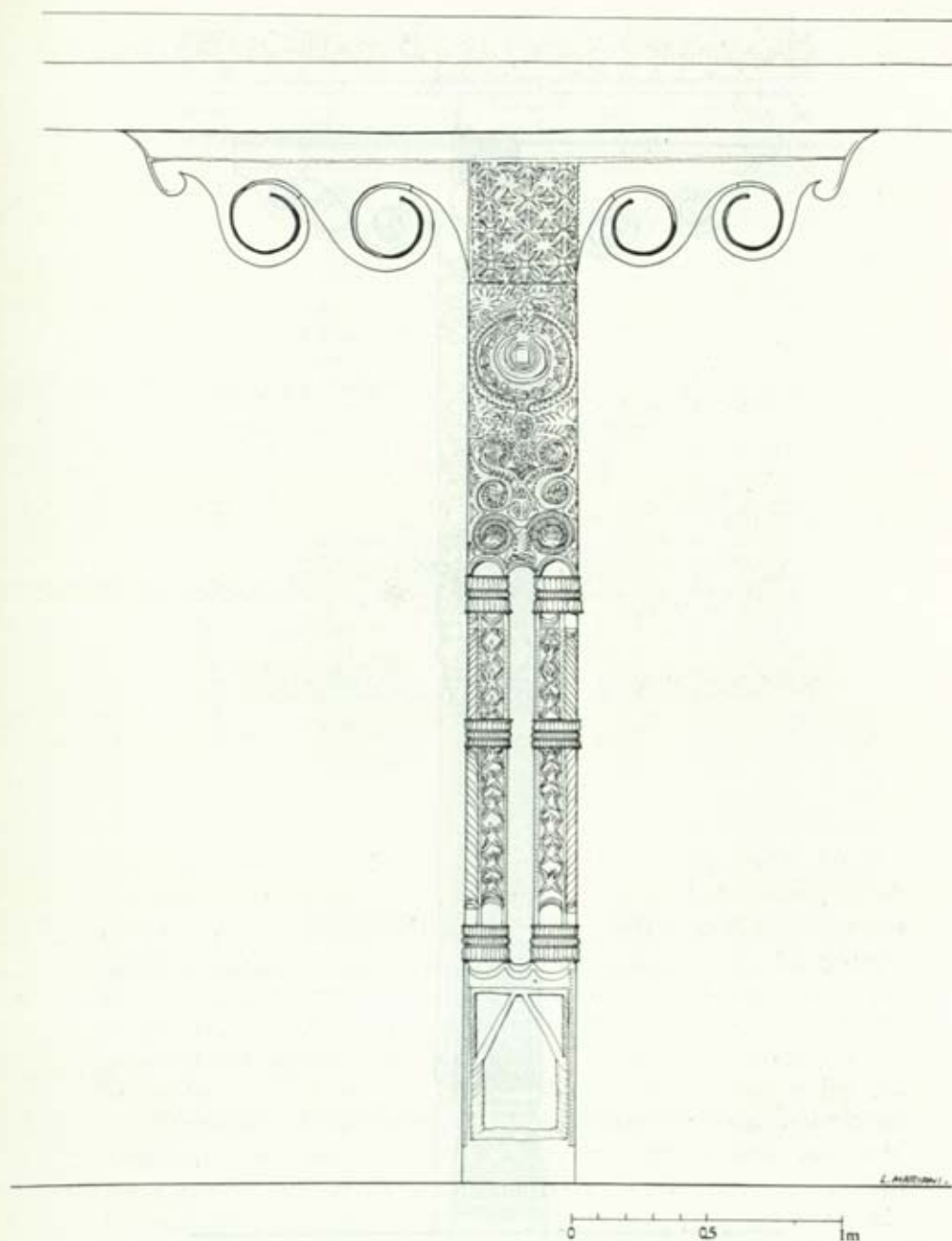


Fig. 14 — Bahrain: pillar of the entrance porch of the mosque. (Drawing L. Mariani, 1968).

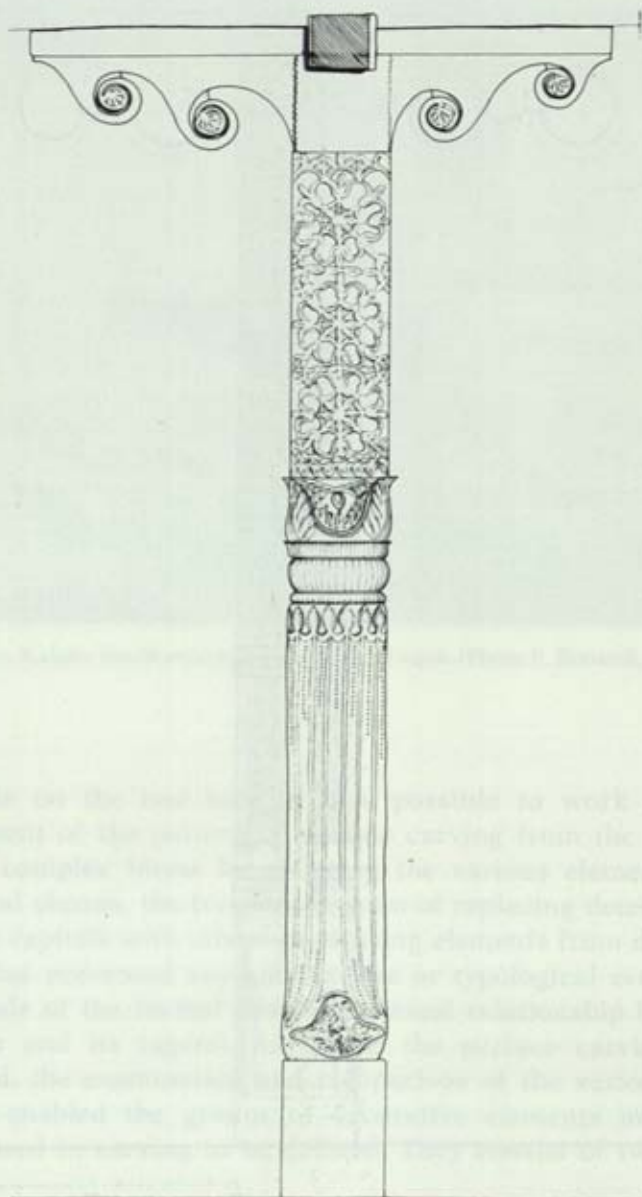


Fig. 15 — Bahrain: pillar of the entrance porch of the mosque. Scale 1:30
(Drawing L. Mariani, 1968).

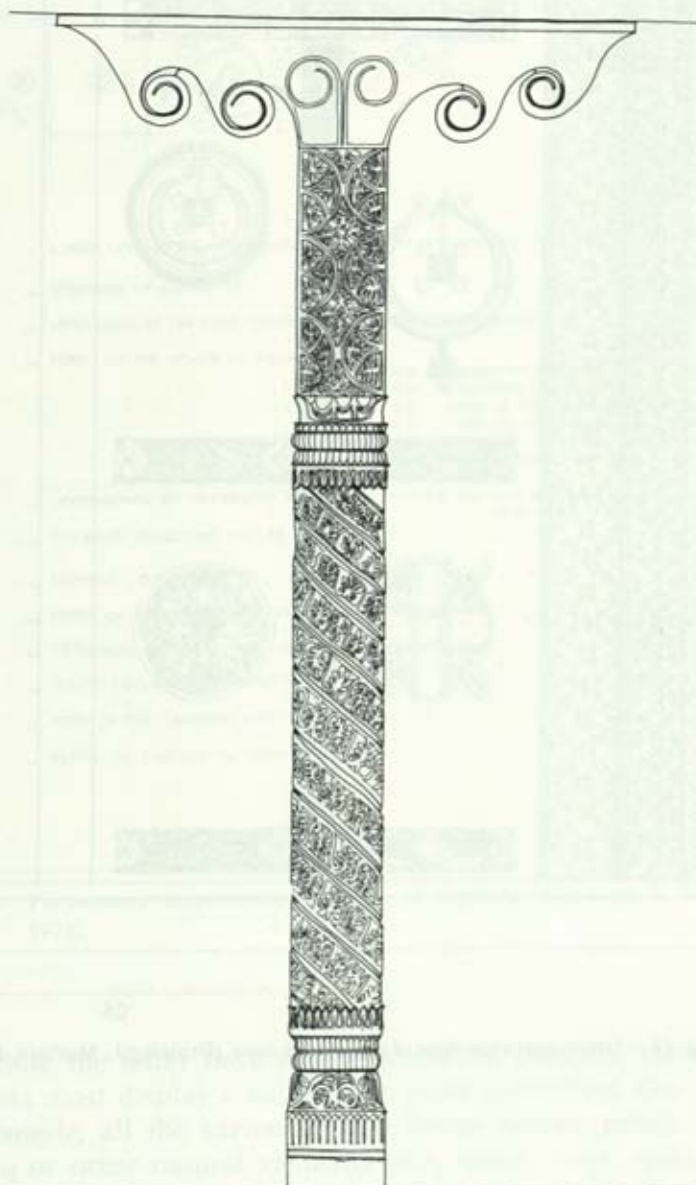


Fig. 16 — Bahrain: pillar of the entrance porch of the mosque. Scale 1:30
(Drawing L. Mariani, 1968).

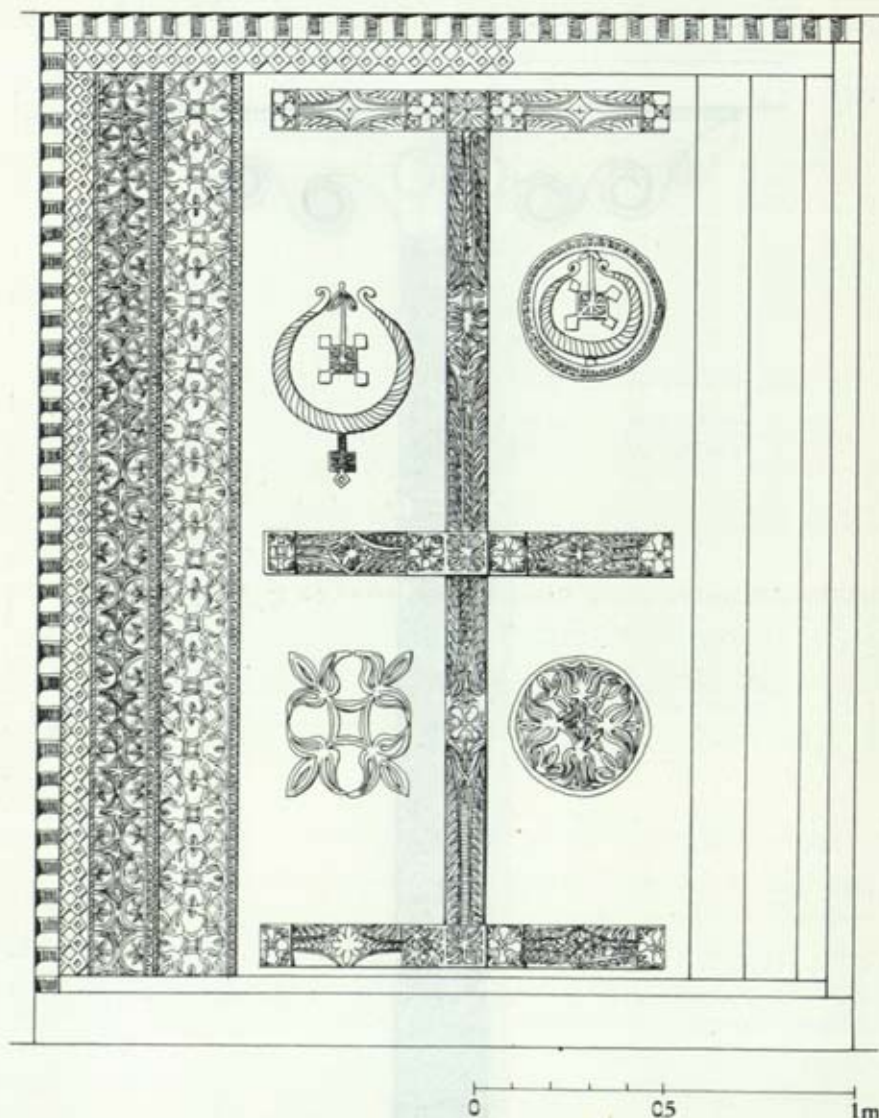


Fig. 17 — Utrot: entrance door of the winter zone. (Drawing L. Mariani, 1968).

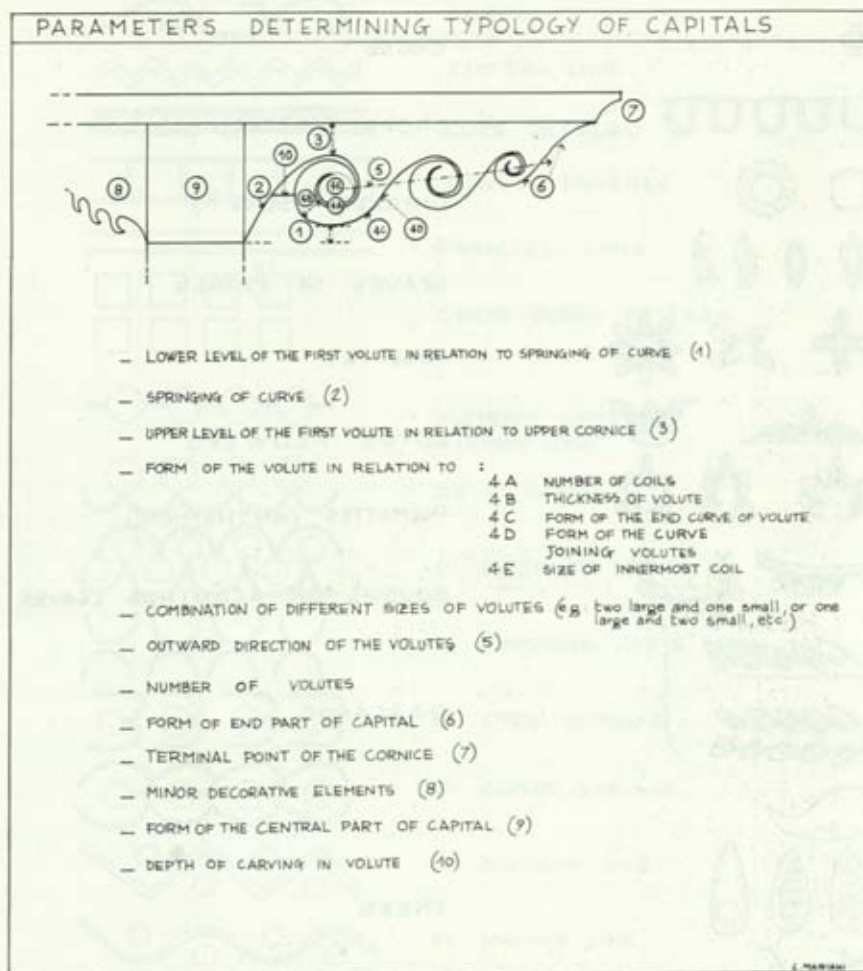


Fig. 18 — Parameters determining typology of capitals. (Drawing L. Mariani, 1978).

While the latter have purely geometric patterns, the single elements most display a naturalistic plant symbolism. One finds, for example, all the various flower forms (leaves, petals, buds, lotuses) or other natural elements (sun, moon, trees, spike, berries, fruit), as well as references to domestic objects (jugs, bangles, combs).

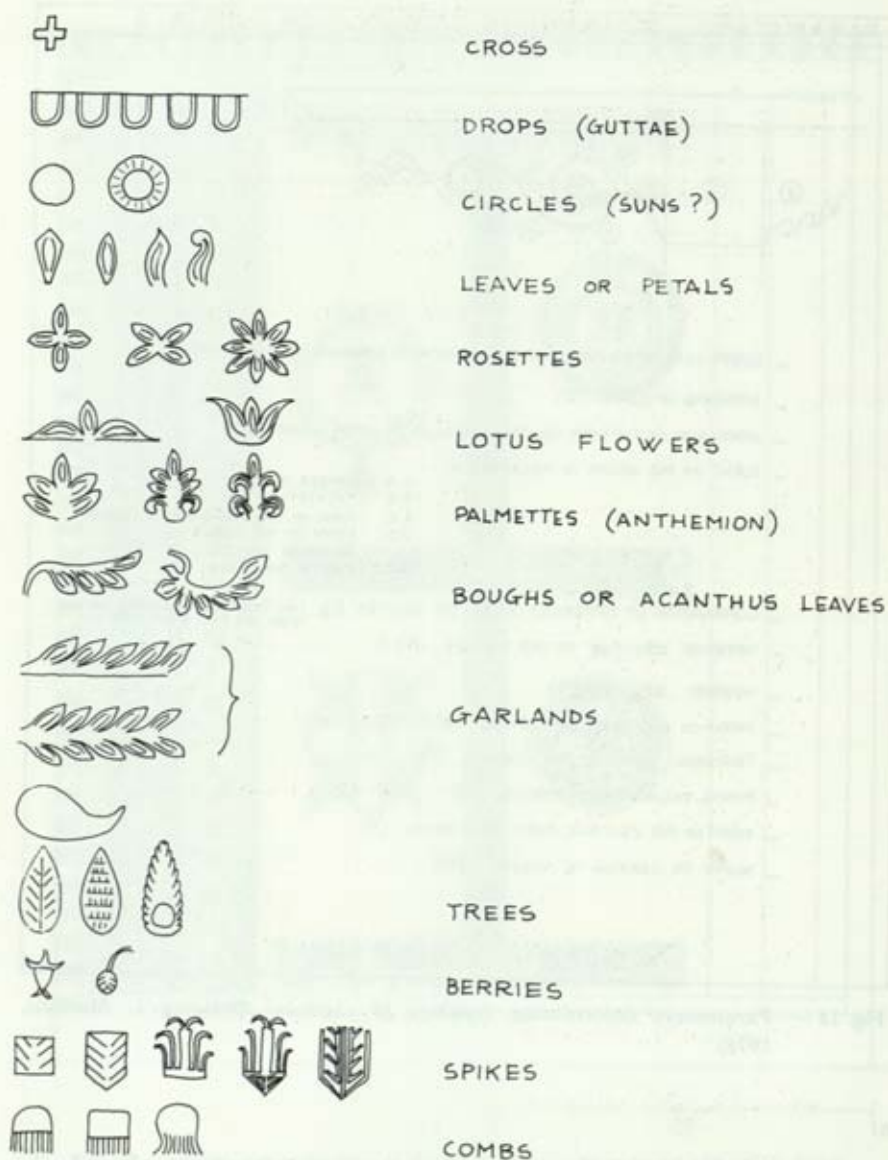


Fig. 19 — Principal elements of decoration in carving work: single element class.
(Drawing L. Mariani, 1978).

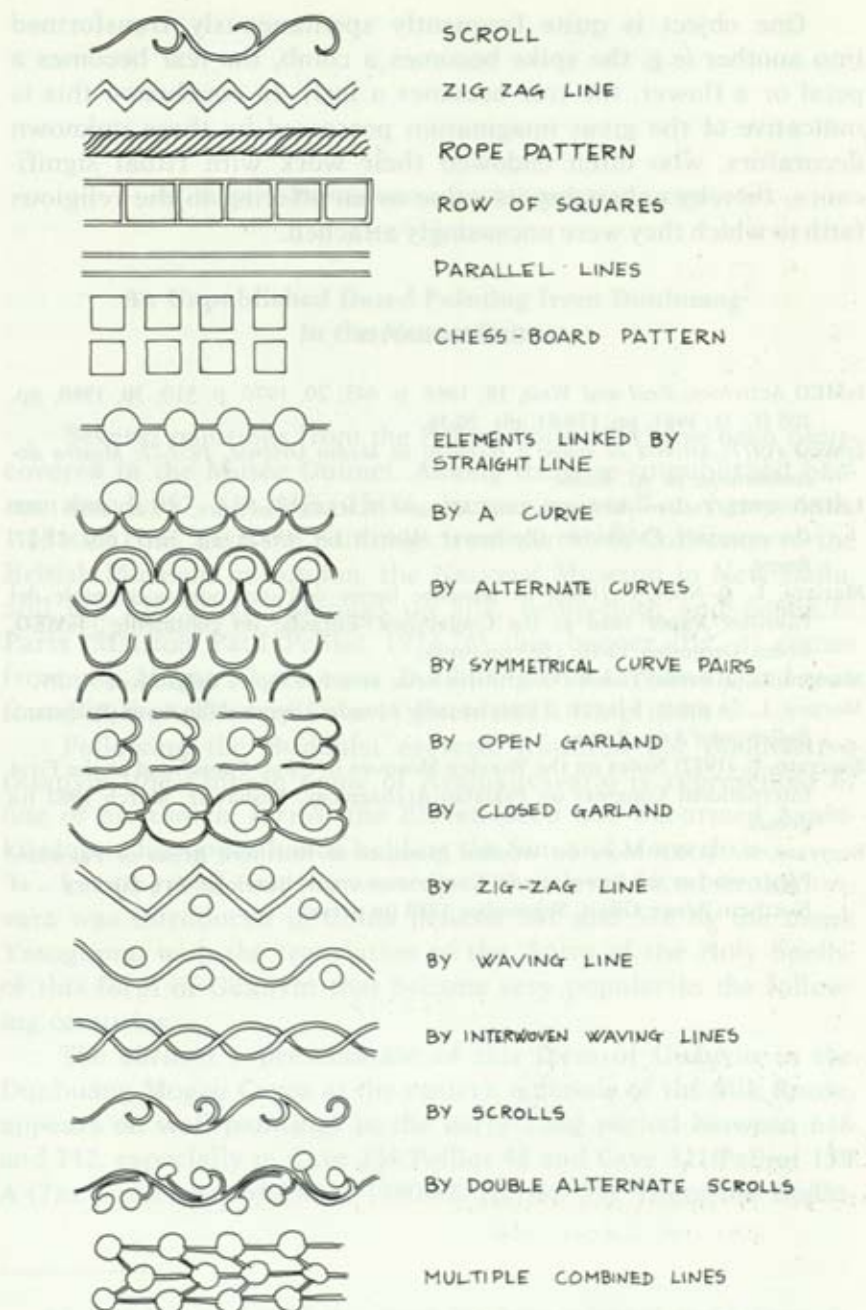


Fig. 20 — Composition of decorative elements in patterns: multiple elements class. (Drawing L. Mariani, 1978).

One object is quite frequently spontaneously transformed into another (e.g. the spike becomes a comb, the leaf becomes a petal or a flower, the tree becomes a leaf). In conclusion this is indicative of the great imagination possessed by these unknown decorators, who often endowed their work with ritual significance, thereby enhancing its value as an offering to the religious faith to which they were unceasingly attached.

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ROBERT JERA-BEZARD and MONIQUE MAILLARD

An Unpublished Dated Painting from Dunhuang in the Musée Guimet

Several paintings from the Pelliot Collection have been rediscovered in the Musée Guimet. Among them an unpublished banner dated 957 AD (MG. 25486, banner painted on hemp-cloth, 1.25×0.51 m). Like the paintings from the Stein Collection in the British Museum in London, the National Museum in New Delhi, and the 223 other paintings on silk, hemp-cloth and paper in Paris (Mission Paul Pelliot 1974-76) this banner (fig. 1) comes from the Mogao Caves near Dunhuang (P.R.C. Gansu) and was found in the walled-up Cave 17 (Stein 1921: III, pl. 200) ¹.

Following the Buddhist esoteric tradition the Bodhisattva Guanyin (the Chinese name of Avalokiteśvara) is represented in one of his tantric forms: the Eleven-faced and Six-armed Avalokiteśvara, his upper hands holding the Sun and Moon disks.

Let us recall that the worship of the eleven-faced Avalokiteśvara was introduced in China between 561 and 578 by the monk Yasogupta, with the translation of the 'Sūtra of the Holy Spells' of this form of Guanyin that became very popular in the following centuries.

The earliest representation of this form of Guanyin in the Dunhuang Mogao Caves at the eastern outcome of the Silk Route, appears on wall paintings in the early Tang period between 618 and 712, especially in Cave 334/Pelliot 48 and Cave 321/Pelliot 139 A (*The Grotto Art of China* 1980-82: III, no. 55). There the Bodhi-

¹ A first presentation of this paper has been published in *La Revue du Louvre et des Musées de France*, 1983/3, pp. 171-177, entitled « Une bannière de Dunhuang inédite et datée du Musée Guimet ».

sattva is represented standing with six arms, as he will later appear in the paintings of the Pelliot Collection in the Musée Guimet, but still without the floating scarfs around his body and the representation of the Moon and the Sun disks in his upper hands.

In Cave 196/Pelliot 63, dated at the end of the Tang period, all these components of the later iconography appear (*The Grotto Art of China* 1980-82: III, no. 188). Finally in Cave 76/Pelliot 102, decorated at the end of the Five Dynasties Period (middle of the 10th century), the painters represent the very same model as on our painted banner: the two caricatural demonic faces on either side of the head, the sketching and the spot of the third eye on the forehead and many other points (*The Grotto Art of China* 1980-82: III, no. 105; Mission Paul Pelliot 1983: 41, pl. CLXXXV).

On our banner, Guanyin is holding the Moon-disk in his upper hand. Inside we can see on each side of a tree, the representation of a hare and a figure that may represent a woman. These details illustrate an old traditional Chinese legend (Williams 1978: 278-9). It was believed that the Moon was inhabited by a hare occupied in pounding the drug of immortality at the foot of a cassia tree: its companion is a kind of frog with three legs. This frog is the embodiment of a woman who stole the elixir for her husband. She fled on the moon for safety and was transformed into a mythical animal. But on our banner she still has a human form.

Kneeling at the feet of the Bodhisattva is the beneficiary of the banner, the 'very reverend monk Fayun'. The wording terms used in his cartouche tell us that the gift of the banner was made by a monk who served at the 'great altar' and consequently this offering was different from the usual dedicatory panels. We can see it in connection with the two groups of donors, facing each other at the bottom of the painting.

Their inscribed cartouche give interesting historical details as the male donors belong to the *Zhang* family, former ruler of the Dunhuang oasis. In the center the large panel gives us the dated dedicatory inscription corresponding to the month of September 957.

Probably before 920, a new family had seized the power: the *Zao*. The new rulers paid a tribute to all the dynasties who reigned over China at that time. The date on the banner refers to



Fig. 1 — Painted hemp-cloth banner showing Eleven-faced Guanyin; from Dunhuang, dated 957. Paris, Musée Guimet, no. MG. 25.486. (Photo by R. Jera-Bezard).

a little dynasty, the Hou Zhou who briefly reigned (951-960) just before the glorious Song dynasty. This fact proves that the links between Dunhuang and China still existed notwithstanding the pressure brought by the Uigurs of Ganzhou.

Another interesting point is the use of a hemp-cloth to make the banner. Consequently the dedicating family was not rich or powerful enough to offer a banner painted on silk. Moreover, the Chinese cartouche seems not to have been written with a brush but with a small piece of wood (*calamus*). This explains the aspect of the characters, often difficult to read. The ink does not stick on the rough hemp-cloth in the same way as on the smooth, glossy surface of the silk.

The unskillful aspect of the writing may also have another explanation. The dedicating family have Chinese names and wear Chinese dresses but that does not mean that the origin of the family was truly Chinese: as we know the ethnic origin of the inhabitants of the Dunhuang oasis was very cosmopolitan.

We would like to compare this painting from the Musée Guimet with another one of the same type from the Stein Collection in the British Museum and dedicated in May of the same year (Waley 1931: 101-3, no. LXV; Whitfield 1983: fig. 23). The costumes and hair-dresses of the donors are similar. The men wear the *potou* with stiff ribbons used at Dunhuang during the 10th century. The head-dress of the female donors is also characteristic of this epoch. The hair is set up in a heavy chignon, with a large comb in front, supporting flowers and leaves and numerous precious hair-pins, protruding on both sides. And we know that during the 10th century decorative hair-pins become more and more numerous.

The second half of the 10th century corresponds in China with a religious revival of Buddhism at the imperial court of the Song. A large number of Chinese monks were sent over Dunhuang and Central Asia, to the Mahayanist centers of India, like Nalanda and other places. We will not in the least be surprised that these pilgrims, during their stay in the monasteries of Dunhuang, played a great part in spreading the Buddhist faith during the second half of the 10th century.

The costumes and hair-dresses of the donors, the style and the iconography connect this banner with the last period of creativity of Buddhist art in Dunhuang. Our banner has to be added

to the six other dated banners, kept in the Musée Guimet, that bear dated inscriptions between 729 and 983. It also points out the links of the painted banners with the wall-paintings in the Mogao Caves at the same period.

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HEINRICH GERHARD FRANZ

**Remarks on Some Terracotta Models in the Collection
of the Musées Royaux d'Art et d'Histoire, Brussels**

Among the small terracotta models from Vietnam to be found in the collections in the Royal Museums of Art and History in Brussels, there is a striking series of pagoda reproductions which all depict the same pagoda type¹. They date from the period in which Tonkin, northern Vietnam, from where they originate, was a part of the Chinese Empire and under Chinese military administration (111 BC to 949 AD)². These models are of

¹ They belonged to a collection of ceramic pieces which have been found in Northern Vietnam, the former collection of Clément Huet. This collection has been acquired in 1952 by the M.R.A.H. at Brussels. This part of the collection consists mostly of pieces for architectonic decoration, of cylindrical roof-tiles, ornament-plates and tiles with relief decoration. They all belonged originally to wooden constructions, the small-shaped models of pagoda-buildings excluded.

² The ornamental decorative pieces belong, the roof-tiles excepted, to the period of the autonomous Vietnam, i.e. 11th-13th century, contemporaneous with Chinese Sung dynasty. They show already the influence of the rich decoration of Khmer art of Cambodia and Champa, inspired from India. The architectonical models still belong to the Chinese period, when Tonkin, the northern part of today Vietnam, was part of the Chinese Empire (till 949 AD). Until the end of the Chinese T'ang dynasty (618-906) it was called Giao-chi (Kiao-tche) and was governed by Chinese military administration. The administrative capital of the Chinese was situated near today's capital, Hanoi. It has been mentioned first in the year 599 AD under the name of Thang-binh, when the seat of the Chinese commandership was transferred from Lung-ben (in the region of Bač-ninh) hither. Since 767 the city has been called Dai-la. There are only very few publications about the Buddhist Art of Vietnam from the Chinese period, i.e. from the period before 949 AD. Hence the statement of L. Bezacier: 'nothing is known of the secular or religious architecture of this Chinese period'; 'We are a little better informed about its sculpture, at least for the late period'. From the period of Dai-la Bezacier mentions 'numerous fragments of architectural decoration in terracotta, discovered mostly in the vicinity of Hanoi, the site of the ancient city of Dai-la'; 'Most of them certainly came from religious monuments'. The only

particular interest, since the pagoda type which they reproduce reveals a set of extensive connections pointing back to the countries of origin from which Buddhism penetrated into China.

The architectural models are reproductions of the pagoda type familiar to us from China, which I have termed 'Nischenpagode' or niched pagoda. This is quite clearly manifested in the largest of the models, with whose description we will begin. (Huet 1942: 50, fig. 2; Catalogue 1961: 22, no. E17). The pagoda is constructed as a five-storey structure, tapering off toward the apex, and on a square groundplan. The individual storeys are separated by projecting roofs. Each storey contains a niche with an inserted image, though its form is only suggested. The tower is topped by a *stûpa* dome, surmounted by a five-tiered mast with baldachins (*chattras*) (fig. 1)³.

The next largest pagoda model (ht. 37.2 cm; not mentioned by Huet 1942; here figs. 2 and 3) can be dealt with in close association with the first. Here too we find that the five storeys with Buddha niches are separated by projecting, slightly curved roofs. In this model, however, the crowning *stûpa* has been preserved only partially and in traces. The base is likewise triple-tiered.

Two small-size pagoda models stem from the ancient capital Dai-la (Huet 1942: 51, fig. 4; here figs. 4 and 5). They represent the identical constructional type with its five-niched storeys, though in this case a separate base storey has been added. The niches and Buddha images have only been hinted at in the form of shallow engravings. The upper termination, still intact in only one of the models, has been simplified into a kind of stepped pyramid (fig. 4).

known monument of the period of Chinese government are the ruins of Binh-son. Bezacier mentions a *stûpa*, but we may suppose that it was a tower-shaped Buddhist monument (earliest possible date 7th-8th century). The terracotta fragments of the decorative pieces must have belonged to such Buddhist monuments. L. Bezacier says about the art of the period of Dai-la: 'Most of its products show a strong Chinese influence'.

³ Pagoda model from the province of Nac-ninh. Together with other tower-models it was used for the construction of the walls of a big pagoda. 'Les murs avaient été édifiés à l'aide de petites tours-stûpa de l'époque des T'ang (VIIe-IXe siècles), petites tours dont le sommet avait été tronqué' (Huet 1942: 52).



Fig. 1 — Five-storied pagoda; red terracotta, ht. 48.5 cm, base 14 cm. From Tonkin, Prov. Bac-ninh, Vietnam (found near the 'Canal des Rapides'); c. 8th century. Musées Royaux d'Art et d'Histoire, Brussels, Coll. Huet 503. (Photo A.C.L., Brussels).



Fig. 2 — Five-storied pagoda; terracotta, ht. 37.2 cm. From the Baie d'Along, Tonkin, Vietnam. Musées Royaux d'Art et d'Histoire, Brussels, Coll. Huet 443-444. (Photo A.C.L., Brussels).



Fig. 3 — Another view of the terracotta pagoda in fig. 2. (Photo A.C.L., Brussels).

The type of niched pagoda represented in these four terracotta models can be attested in China beginning with the late 5th century. However, no monuments in the form of buildings have been preserved. It does appear depicted in illustrations and reproduced in models, which document the existence of this pagoda type of northern China during the period of the northern Wei. Their rule lasted until the year 534 AD in the North of China, which was at that time still divided. Between approximately 470 and 494 they constructed the large Buddhist sacred



Fig. 4 — Pagoda; terracotta, ht. 9.8 cm. From Dai-la, Tonkin, Vietnam. Musées Royaux d'Art et d'Histoire, Brussels, Coll. Huet 499. (Photo A.C.L., Brussels).

Fig. 5 — Pagoda; terracotta, ht. 10.3 cm. From Dai-la, Tonkin, Vietnam. Musées Royaux d'Art et d'Histoire, Brussels, Collection Huet 500. (Photo A.C.L., Brussels).

caves in Yün-kang; in these caves, along with sculptures carved from the rock, there are numerous pagoda reproductions in relief, and these models all reflect the type of the niched pagoda (Mizuno & Nagahiro 1952; Franz 1978a: 28-37, pls. XVIII and XXIV; here figs. 6 and 7).

A mural contained in one of the caves of Mogao in Tun-huang (Cave 254, fig. 8) (Franz 1981c: 169-72, fig. 4; Pelliot 1914: 24; Hua-Shih 1982: pl. 14), which was decorated in the 5th century under the northern Wei, indicates that these sculptured pagodas are indeed reproductions of existing structures. Included within a Jātaka scene, a three-storey niched pagoda is

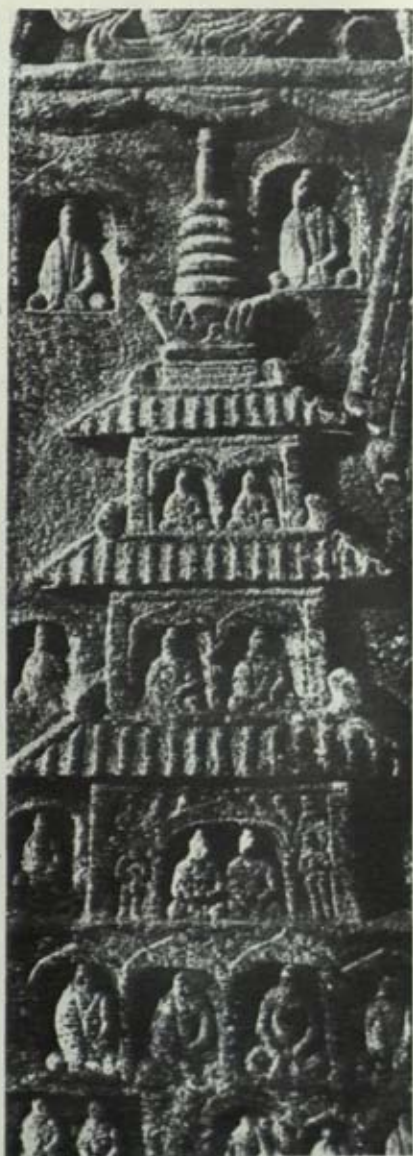


Fig. 6 — 'Nischenpagode', Yün-kang, cave no. 11.



Fig. 7 — 'Nischenpagode'. Yün-kang, cave no. 5.



Fig. 8 — Wall painting with Jataka-scene, detail with three-storied 'Nischen-pagode'. Tun-huang, Mogao, Buddhist cave no. 254.

represented here, surrounded by devotees and worshippers. It is quite clear that an existing structure has been depicted in the pictorial representation.

The small-size model of a niced pagoda made of stone can also be cited as evidence in support of the existence of the niced pagoda during that period: a five-storey structure, separated by roofs, was found at Tun-huang and is on display in the Museum of Tun-huang. Judging from the figures inserted in the niches, it would likewise appear to date from around the year 500 AD (fig. 9).

The reproductions of niced pagodas in the sacred caves of Yün-kang can be reliably dated to the late 5th and early 6th



Fig. 9 — Model 'Nischenpagode'; stone. Tun-huang Museum.

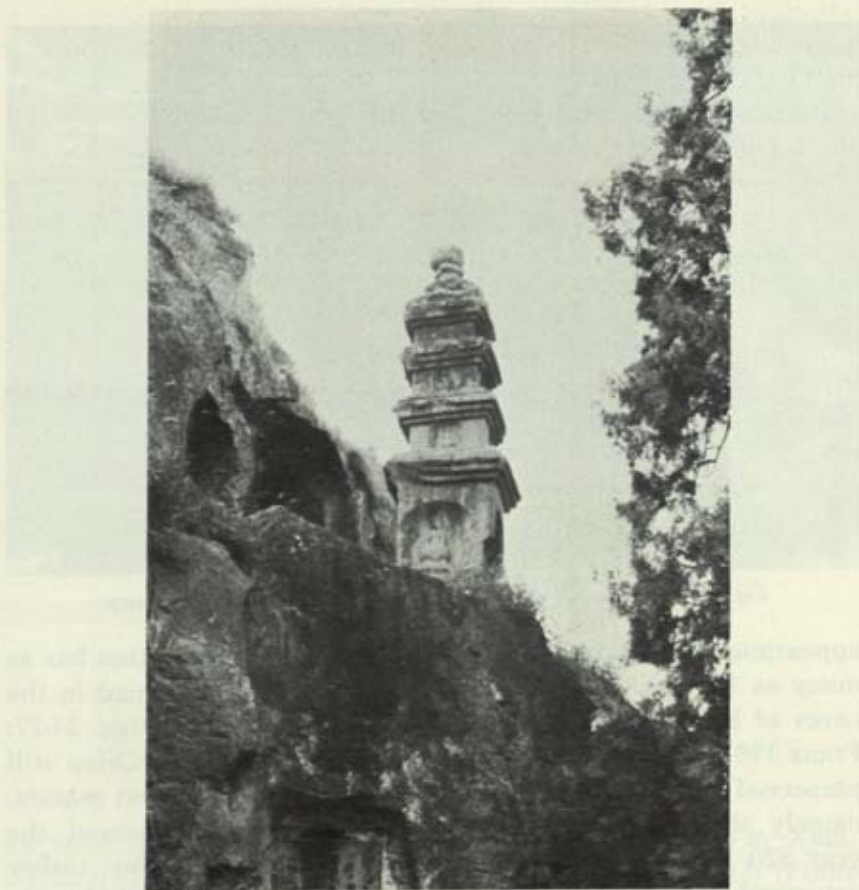


Fig. 10 — 'Gesimspagode', Lung-mên.

centuries since building activity in these caves was terminated in 494, when the capital of Datong was moved to Lo-yang in central China. The northern Wei commissioned the carving of caves and rock reliefs after the year 495 in Lung-mên in the environs of the new residential city. It was here, in the course of the 6th century, that a new type of pagoda came into prominence, one which I have termed 'Gesimspagode' or corniced pagoda. This type then supplanted the niched pagoda. The storeys in this new pagoda type have been reduced to a minimum in height, the niches have been eliminated, and in place of the projecting roofs we now find a series of cornices. These are structured as ring-shaped cornice tori, and determine the overall



Fig. 11 — 'Gesimspagode'; rock-cut reliefs, Lung-mên; 6th century.

appearance and shape of the corniced pagoda, which often has as many as 13 storeys. Their form can be clearly discerned in the caves of Lung-mên (figs. 10, 11) (Franz 1978a: 38-40, figs. 24-27; Franz 1981b: 99-100, figs. 15-21). The oldest pagoda in China still preserved as a structure is also in the form of a corniced pagoda, namely the Pagoda of Sung-yue-ssu, constructed around the year 520 AD. Its basic layout is not square-shaped, but rather octagonal (figs. 11, 12) (Franz 1978a: 52 f., pl. XXVIII 69), but its superstructure clearly reflects the basic type of the corniced pagoda, in which it is the cornices alone which determine the pagoda shape and in which the niched storeys have been reduced to an absolute minimum. Its time of origin can be dated back precisely to the period in which the niched pagoda was replaced in Lung-mên by the corniced pagoda. Numerous examples of the square-shaped form of the corniced pagoda have also been preserved in China from subsequent centuries⁴. As an example,

⁴ Franz 1978a: pls. XXX 79-80, XXXI 81-84 (by mistake fig. 79 has been reproduced once more in fig. 80: the funeral pagoda on the Sung-shan of 602 reproduced as fig 73). Cf. the literature cited in fn. 2 and 138 (Boerschmann 1925; 1931). The type of the 'Gesimspagode' is well represented by the 'Gesimspagode' near the temple of the White Horse in Lo-yang (Franz 1981b: 100, fig. 22).



Fig. 12 — Small Wildgoose-pagoda, Xian; c. 685-707.

we need only mention the small Wild Goose pagoda in Xian, constructed toward the end of the 7th century (fig. 13) (Franz 1978a: pl. XXXI 83, 84).

It is conceivable that the form of the corniced pagoda arose from an attempt either to simplify the complicated and costly wooden constructions necessary as supports for the projecting roofs, or indeed to do without them entirely. The corniced pagoda might then be understood as an attempt to provide, so to speak, only the general overall shape of a pagoda tower divided into storeys — so as to satisfy the conception associated with the pagoda of being a tower-like structure with a horizontal division into five, seven or thirteen sections — but avoiding the complicated and demanding wooden constructions otherwise entailed.

The square-shaped corniced pagoda underwent an additional simplification of its cornice divisions in the 7th and 8th centuries, principally in the form of a small votive pagoda. Examples



Fig. 13 — Funeral pagodas; brick. Yung t'ai-sze. Sungshan, Honan; the second dated AD 602. (After Boerschmann).

of this reduced form of the corniced pagoda have been preserved above all in Korea (fig. 14) (Franz 1978a: 59-62, pls. XXXIV-XXXV 93-99). In Japan, a further stage of simplification, undoubtedly under the influence of Korean corniced pagodas, led to the development of pagodas with cornices that have become thin, board-like horizontal dividing structures (*sekito*). A good example of such a pagoda embellished with a large number of board-like cornices has been preserved in the oldest imperial city of Japan, in the countryside of Yamato, in Asuka, in the area of the temple Kawara-dera (fig. 15) ⁵.

⁵ Cf. also the 'Gesimspagoden' of the Japanese monastery Toshodai-ji at Nara (Franz 1978a: pl. IV).



Fig. 14 — 'Gesimspagode', Korea.

It might be possible to associate the third of the small, miniature-like pagoda models from Dai-la in the Museum in Brussels (fig. 16) (Cf. Catalogue 1961: 22, under no. E. 18 [dated 700-900]) with a corniced pagoda. At first glance, it would appear to be only a coarse reproduction of a niched pagoda with projecting roofs, as in the two other small pagoda models. The divisions between the storeys and the niches here have only been hinted at or are shallowly engraved. It is also quite conceivable though that what we are dealing with here is the representation of a corniced pagoda, namely a pagoda already reflecting the simplified structure with horizontal cornices instead of projecting roofs; these cornices are hinted at or suggested in the hori-



Fig. 15 — Japanese 'Gesimspagode' (*sekito*). Kawara-dera temple, Asuka.

zontal dividing lines. The vertical indentations below the cornices might then be interpreted as structural suggestions of consoles or other similar supporting wooden constructions. The height of the stories has been graphically reduced in comparison with the horizontal divisions. We might thus assume that a corniced pagoda, such as is found in the Lung-mên caves, served as the original: torus-like cornices combined with wooden constructions. Similar and comparable structures also appear on pagodas still preserved in China, as in the pagoda from Lin-tai (fig. 17) (cf. Franz 1981b: 100, fig. 22; Franz 1978a: XXIX 73-74). In view of the coarse manner of construction of the model, however, such conclusions and comparisons should be arrived at or made only with the greatest caution.



Fig. 16 — Five-storied 'Nischenpagode' (or 'Gesimspagode'?); red terracotta, ht. 18.7 cm. From Dai-la, Tonkin, Vietnam. Musées Royaux d'Art et d'Histoire, Brussels, Coll. Huet 498. (Photo A.C.L., Brussels).

The niched pagoda would thus appear to be a type which, when it turns up in model reproductions in Tonking and Annam, has already been supplanted in northern China by new pagoda forms, if one accepts the dating into the 7th-8th centuries. Or perhaps it was the case that Tonking adhered in a conservative manner to the type of the niched pagoda. It may be that southern China, via which the form of the niched pagoda coming from the

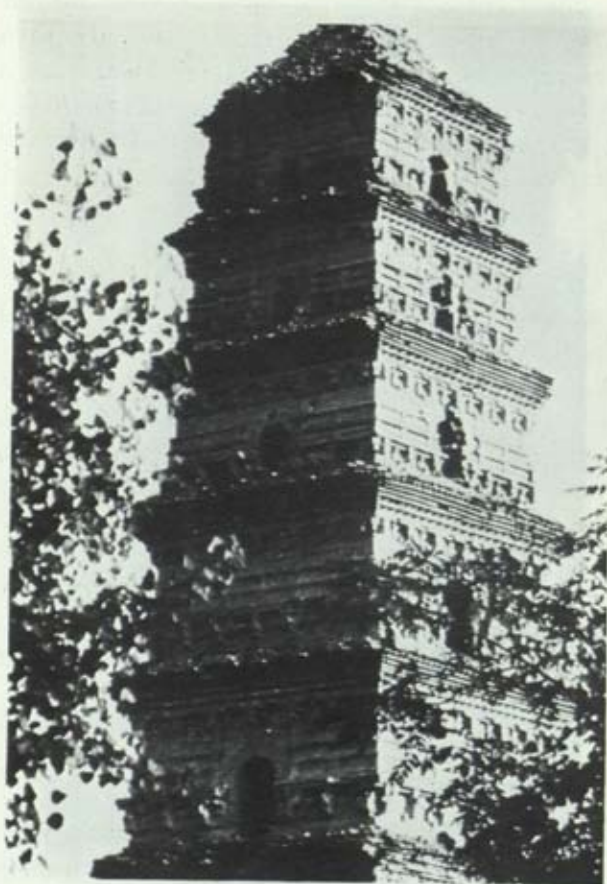


Fig. 17 — Pagoda with imitation of wooden structure. Lin-tai, North of Xian, China.

North undoubtedly was transmitted to the neighbouring country to the South, also maintained a conservative preference for the niched pagoda, and thus chose to do without the new wave of innovations from the North. In any event, the niched pagoda represents the oldest demonstrable pagoda type in China. At the same time, the niched pagoda indicates the origin of the pagoda as a development out of the Buddhist tower *stāpa* known from Central Asia. These pre-stages can still be demonstrated in sites with Buddhist ruins which have been preserved in Central Asia in the Chinese province of Sin-kiang, in the oases along the ancient 'silk routes'.

We can also, at the same time, note here the path over which Buddhism, as it spread eastward, transmitted the forms of the Buddhist sacred structures from Central Asia, and ultimately from India, to China and East Asia. In this connection, the types of sacred structure originally created in India underwent considerable and far-reaching changes and transformations. The 'tower stupa', with its niched structuring in, for the most part, stepped storeys, served as the immediate model for imitation. This had originally developed from the multilevelled, square-shaped *stūpa* base, which came into being in the Gandhara area (Pakistan) in Gandharan art during the 2nd and 3rd centuries AD (Franz 1977; 1978b). The tower *stūpa* appears principally as a monument rising up like a tower in the two cities of the Turfan oasis; for example in Yar, in the *stūpas* surrounding the central, five-partite tower *stūpa* in the Temple of 100 *stūpas* (Franz 1978a: pl. XIII 25-26; Franz 1980)⁶ or in Chotscho (cf. Franz 1978a: pls. XI and XIV), where numerous tower *stūpas* have been preserved, scattered over the countryside, containing niches and series of niches in their individual storeys. In Yar, we can make mention of the tower *stūpa* located in the 'Great Sanctuary' (Temple no. II at Yar) (Franz 1980: 24; Franz 1981b: 123-31). This multiple-storeyed tower *stūpa* with niche construction is transformed into a Chinese pagoda by the addition of projecting roofs — which derive from the tradition of the multiple-storey wooden tower construction in China — in storey-wise fashion to the tower *stūpa*. This process of 'sinicization' of the tower *stūpa* appears to have already been completed in the niched pagodas, such as are found around the year 480 in the caves of Yün-kang. An important piece of chronological evidence for the hypothesis that this process of sinicization of the tower *stūpa* took place during the period from 460 to 490 is provided by the votive pagoda, dated by an inscription to 466, which stems from the monastery temple of Chonq-fu in China and is today on display in the Historical Museum in Taipei (Franz 1978a: pl. XVI 34-35; Franz 1981c). The individual storeys here have not been provided with a Buddha niche, but rather with Buddha figures which extend in rows across the storey walls.

⁶ Cf. also the 'Gesimspagoden' of the Japanese monastery Toshodai-ji at Nara (Franz 1978a: pl. IV).

A look at the origins and precursors of the Chinese niched pagoda in Central Asia thus makes it clear how the canonically sacred constructional type of the tower *stūpa*, imported by Buddhism into China, was combined with the tower structure (with storey-wise projecting roofs) developed from Chinese wooden architecture.

Under the influence of the tower *stūpa* made of stone or clay brick, the earliest niched pagodas were — at least in their nucleus — likewise constructed of stone and clay brick. It is not certain whether — and if so, to what extent — there also were Buddhist pagodas completely made of wood in China of the 5th and 6th centuries. The niched pagoda had been introduced into China by Buddhism as a closed walled construction made of stone or brick. The traditional elements of wooden construction then had to be combined with this. The niched pagoda — or the tower *stūpa* with niche divisions — remains as a nucleus; the projecting wooden roof constructions are then added on to this with the aid of more or less differentiated wooden constructions. In two caves at Yün-kang, nos. 2 and 39 (Franz 1978a: 35f., figs. 19-20, pls. XXIII 57, XXIV 58-59), wooden pagodas have been represented in their structure in the fashioning of the central pillar of the cave. In imitation of traditional Chinese wooden constructions, the wooden tower construction has been attached to the nucleus of the closed niched pagoda⁷. In Cave no. 39, a five-storeyed tiered 'Nischenpagode' with five rows of niches in each storey as a nucleus has been combined with projecting roofs; these roofs rest on a wooden construction consisting of tripartite consoles and inverted Y-posts (Franz 1978a: 35, fig. 20). In Cave no. 2, the nucleus of the niched pagoda appears completely enclosed by a multiple-storeyed wooden tower construction; this appears as a tower structure enclosed in itself and based exclusively on wooden construction⁸. It is also noteworthy

⁷ At Yün-kang there are still to be seen the fragments of pagodas, that had been cut out of the bedrock before cave III (after Mizuno). They were shaped as copies of wooden roof-pagodas, today almost totally destroyed by erosion.

⁸ Cf. Mizuno & Nagahiro 1952: vol. VIII-IX, pl. 70 (cave III, outside wall, West Stūpa). These free standing 'Nischenpagoden' testify that this type of pagoda was a usual pagoda-type in the period of their construction (c. 480-90) in Northern China, in the surroundings of the capital Datong.

here that the wooden manner of tower construction has been combined with a section made of stone or brick in the form of a niched pagoda. Except for these reproductions in the two caves of Yün-kang, there is in China no evidence documenting the existence of wooden pagodas from the early period of 5th to 7th centuries. In Japan, on the other hand, early examples of Buddhist pagodas constructed exclusively of wood have been preserved from the 7th century (Franz 1978a: 62-67, pls. XXXI-XXXVIII 102-108, colour pl. 11); these temples must have had mainland prototypes, either in Korea or China. The question thus arises whether — and to what extent — one is justified in drawing conclusions about Chinese wooden pagodas. Another associated question: did, during this period, there also exist in China pagodas constructed exclusively of wood alongside the niched pagoda and cornice pagoda?

It is not possible to deal with this problem here in any detail, but it is quite suggestive that the Japanese wooden pagodas likewise show a structure consisting of tripartite and inverted Y-constructions, such as appear in Cave no. 39 in Yün-kang. In Japan, favourable circumstances and the great reverence for ancient art have served to preserve several examples of wooden pagodas dating from the early period of Japanese Buddhism (6th to 10th century), whereas these have been lost in China and Korea.

In this connection, we should also make mention of the stone and brick pagodas in China in which wooden constructions have been imitated, even if the wooden superstructures reproduced here are not as richly developed as in the Japanese wooden pagodas of the period of the 7th to 9th centuries. As an example, we can note the pagoda in the village of Lin-tai near Xian (fig. 17) (Franz 1977; 1978b).

Two of the terracotta pagoda models in the Museum in Brussels can quite possibly be regarded as reproductions of wooden pagodas. The diagonal pattern on the walls may indeed be intended as a reproduction of wooden constructions (Huet 1942: 51) (figs. 18, 19)⁹. A further fragment, containing a reproduction of the corner of a pagoda, may also point to a pagoda

⁹ Height: 0.09 m respectively 0.05 m. One model with niches filled with Buddha images, the other with open niches.



Fig. 18 — Fragment of 'Nischenpagode' with Buddha images in the niches; red terracotta, ht. 9 cm. From Tonkin, Vietnam. Musées Royaux d'Art et d'Histoire, Brussels, Coll. Huet 495. (Photo A.C.L., Brussels).

Fig. 19 — Fragment of 'Nischenpagode' with open niches; grey terracotta, ht. 5 cm. From Tonkin, Vietnam. Musées Royaux d'Art et d'Histoire, Brussels, Coll. Huet 501. (Photo A.C.L., Brussels).

made of wood (fig. 20) (Huet 1942: 54, figs. 12-13). The model does not contain a reproduction of a wooden construction working with the customary projecting consoles; instead, the projecting roof rests in the model on a quite simply reproduced construction consisting of three projecting cornices. The walls are covered with floral designs. The cylindrical brick coverings on the projecting roofs have been faithfully reproduced, with ornamental circular terminal discs, which have also been preserved in several original pieces among the other objects in the Huet collection. The manner of the projecting roof makes it probable that we are not dealing here with a structure made exclusively of wood, but rather with a combined construction of brick and stone walls with wooden roof projections. On the other hand, the pagoda, fashioned throughout in wood, is based on a superstruc-

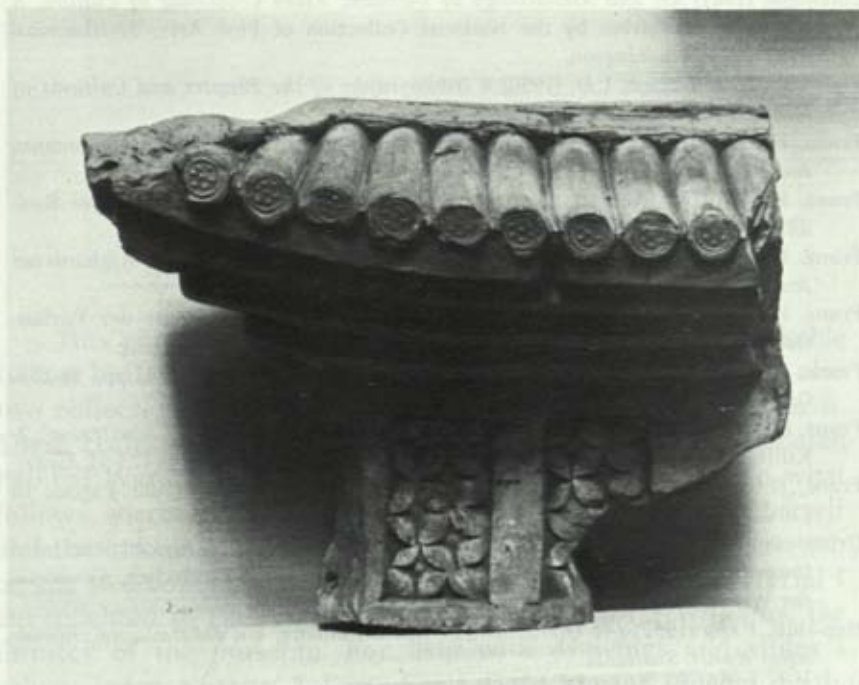


Fig. 20 — Fragment of a model pagoda including corner of a story: red terracotta, ht. 21 cm. From Dai-la, Tonkin, Vietnam. Musées Royaux d'Art et d'Histoire, Brussels, Coll. Huet 502. (Photo J.S., Brussels).

ture laid out around a five-part post-and-beam construction. A central, four-sided wooden mast is connected at its four corners with four additional weaker wooden pillars, and the projecting roofs presuppose a complicated system of projecting and balanced tiers of beams, supported by projecting consoles.

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T. RICHARD BLURTON

Indian Antiquities in Hastings' Durbar Hall

This paper is submitted to make better known a remarkable Indian building, the Durbar Hall of Hastings Museum; and also two collections of Indian prehistoric material now housed in it. These collections are made up of i) ceramics of Russet-coated Painted Ware type, and ii) South Indian lithic material. In what follows, there is first a brief description of the Durbar Hall itself and the circumstances of its construction, and then information on the two collections. For permission to publish this material I am indebted to Hastings Corporation and Victoria Williams, the Curator of the museum. For help with drawings and slides I acknowledge Natalie Tobert, Scott Quinney and Snehal Shah. Finally, mention must be made of the research undertaken into the history of the Durbar Hall and the Brassey family, by the previous curator of Hastings Museum, David Devenish. This research I have freely drawn upon and used with his permission; it is herewith acknowledged.

Hastings in the county of East Sussex, situated on the coast between Dover and Brighton, may seem an unexpected location for collections of prehistoric material from South India, let alone ones housed in a Durbar Hall. However, this small town whose fortunes now rest mostly on tourism and fishing, has in the past, had an interesting connection with the subcontinent.

The Brassey Family

The link between India and Hastings is largely due to three generations of one local family — the Brasseys. The Brasseys were a typical product of Victorian England, making their fortune through railway construction in the first generation, and

then diversifying into politics and the colonial service in the second and third generations, respectively. In the subcontinent Thomas Brassey Snr — the first of the line — built the Delhi to Amritsar railway, amongst others. His son, also Thomas Brassey, strengthened this Indian connection, for he travelled widely, circumnavigating the globe several times in his yacht 'Sunbeam'. These travels were popularised by the books of his first wife, Annie. In her accounts, she included descriptions of their visits to South and Southeast Asia. Wherever they stopped on their voyages, Annie collected material for her 'museum', the emphasis of which was mainly antiquarian and ethnographic. Besides visiting India in this unofficial capacity Thomas Brassey Jnr also travelled there when appointed President of the Royal Commission on Opium. This official connection was perpetuated in the person of his son-in-law, Freeman Freeman-Thomas. The latter is better known by his later title of Marquis of Willingdon, under which name he held office as Viceroy of India (1931-36). (In this context it is interesting to note the presence of Brassey Road in New Delhi, no doubt named for his wife Marie (née Brassey).

Thomas Brassey Jnr (raised to the peerage in 1911 as Earl Brassey) was closely involved with the Royal Colonial and Indian Exhibition of 1886, which was held in London and opened by Queen Victoria in May of that year. This exhibition was designed to illustrate the industrial products and artistic accomplishments of the British Empire. Amongst the displays was an area called the 'Indian Art Ware Courts'. These were lavishly constructed and represented different parts of both British and Princely India. Another part of the exhibition was the area known as the 'Indian Palace'. This was made up of various halls and included a 'Durbar Hall'.

The Durbar Hall (figs. 1-2)

At the close of the Exhibition, Lord Brassey bought a quantity of the carved woodwork — some from the Art Ware Courts, and some from the Indian Palace. These he had re-erected in his house in London (in Park Lane, where the Hilton Hotel now stands), and used the resulting chamber as a study. In the year following his father's death, the second Lord Brassey gave the



Fig. 1 — Hastings Museum, Durbar Hall, main entrance. (Photo by Irene Rhoden; courtesy, Hastings Museum).



Fig. 2 — Hastings Museum, Durbar Hall, the Saharanpur Door. (Photo by Irene Rhoden; courtesy, Hastings Museum).

woodwork in the Park Lane study, along with a large amount of his mother's ethnographic collection, to Hastings — the town closest to the Brassey country seat of Normanhurst. Hastings Corporation eventually re-erected the hall in 1931 in a specially constructed extension to the municipal museum.

Although not reflecting the original design, the layout in Hastings today follows closely that used in the Park Lane study. It is made up of a square ground-floor chamber, 27 1/2 ft across. Today this room is filled with show-cases. Above this chamber is a second storey made up of a wide gallery and a central light-well. The two are connected by a staircase on the North side.

The lower chamber is constructed of woodwork from the Indian Palace — particularly that part in the original exhibition structure known even then as the Durbar Hall. Many of the decorative panels are of deodar wood. It is clear from a Persian inscription in this lower chamber that the craftsmen involved came from Bhera Shahpur, in the Panjab. They are named in the same inscription as Mohammed Bakhsh and Mohammed Jum'a. Access to the lower chamber today is through a 3-arched entrance, no doubt originally from the Panjab Court Screen. Its provenance — Lahore — is recorded in a second Persian inscription. This is situated above the doorway, and is executed in the form of a dhow. The decorative motifs in this lower part of the chamber corroborate its Panjabi provenance. Floral and geometric ensembles predominate. Four Indian brass lamps are suspended from the ceiling.

The second-floor gallery comes from that part of the Indian Art Ware Courts given over to the Bombay Presidency, and known as the Bombay and Baroda Court Screen. This was presumably constructed in Gujarat, as the main donors for its construction were the rulers of Baroda, Bhavnagar, Junagadh and Kutch. The iconographic tradition represented here is clearly different to the Panjabi one featured on the lower floor.

The central section of this upper storey is reserved for a light-well, which connects the upper gallery with the lower chamber. Around this square light-well runs a balustrade. From the centre of the ceiling above the light-well hangs a large brass lantern, with glass bowls suspended from it. The sides of the light-well itself are decorated with panels of teak, carved with geometric designs. Surrounding the light-well is an arcade con-

structed of teak. The constituent elements of this arcade are — columns, capitals, impost blocks, brackets and a number of friezes. The brackets are decorated with carvings of animals' heads, while one of the friezes contains many lively depictions of human heads, animals and floral compositions. Most of this section appears to have come from the state of Bhavnagar. Above the arcade are further carved panels in which are set stained glass windows. At the level of these panels are placed, on ledges, two fine South Indian bronzes of Śiva and Pārvatī. Set within the arcade, and thus farthest from the light-well, are vertical show-cases which today house ethnographic displays.

Other parts of the chamber in which Indian regional styles of wood-carving are illustrated today include —

i) a door, listed in the records as coming from 'a Buddhist monastery in Thibet'. It is now situated on the upper floor, and was used in the Park Lane study. Despite the records, its provenance is not certain, given the presence in the decoration of a scalloped arch, which would suggest some degree of Muslim influence. Lahul or Spiti would be more likely origins for this handsome piece, rather than Tibet proper.

ii) a marble door, probably from the Rajputana Court in the 1886 exhibition, also now on the upper floor and used to frame a marble bust of Thomas Brassey Snr.

iii) a fine teak doorway with its surround, from Saharanpur, in Uttar Pradesh (fig. 2). This is now located on the South side of the lower chamber. Especially noteworthy is the fine Gaṇeśa figure in the expected position in the tympanum.

iv) a richly carved window surround with railings and shutters, from Kashmir. This piece has no connection with the original Durbar Hall, but has recently been acquired from the disbursement of the collections of the Wellcome Foundation.

The Collections

Having briefly presented the Durbar Hall itself, I now turn to the two collections of prehistoric material housed there.

i) South Indian ceramics (fig. 3)

This collection of South Indian pottery of Russet-coated Painted Ware is made up of 15 pieces, of which 4 are pot-stands (1-4), 2 are lids (5 and 6), a further 2 are squat, biconical pots (7 and 8), while the remaining 7 are made up of single examples of the following — large open-mouthed pot (9), large closed-mouthed pot (similar to a contemporary water-carrying pot) (10), a small closed-mouthed pot (similar to a modern water-drinking pot) (11), a carinated, open-mouthed pot (12), a lipless bowl/cup (13), fragmentary open vessel, being the only example in the group to have a flattened base (14), and a 4-footed vessel (15). With the exception of these last two, and the lids and stands, all the vessels are round-bottomed. Most of the vessels display the distinctive signs of the technology of their production, which is clearly that of the spun wheel, and paddle and anvil. Concentric rings at the shoulders of pots, 'pat' marks on the belly and rounded bases, are the tell-tale indicators.

This technique is still common in peninsular India today and has been well-documented. It is characterised by an initial stage of throwing on a low wheel, which is spun on a stationary pivot, by means of a stave. At this juncture the detail of the neck and shoulder of the vessel are defined, while the lower part is left only barely formed, sometimes with the base still open. The pot is then left to dry, and after it has reached the 'leather hard' stage, it is worked with a paddle and anvil. With these tools, the lower walls of the vessel are extended, smoothed, and joined together at a rounded base. They are then left to dry once more, until ready to be fired. Just before the firing, slipped decoration is added. This present-day ethnographic information seems to accord well with these prehistoric wares in the Hastings collection.

The basic decoration of the pots in this collection is in the form of an iron-rich slip which, when fired, produces a characteristic deep red colour. Some of the vessels exhibit a yet further form of decoration. A comb, dipped in a white pigment, was drawn over the body of the pot. This produced an undulating, wavy pattern which is visible on the shoulder of some of the pots. A clear slip was then added prior to the firing. This slip, on top of the white decoration, gave a yellowish tinge to the pattern beneath; the original white of the application is only observable



Fig. 3 — The collection of Russet-coated Painted Ware in Hastings Museum. From left to right: nos. 11, 10, 9 (back row); 13, 12, 14, 7, 8 (middle row); 5, 6, 15, 1, 2, 3 & 4 (front row).

where the slip is cracked. The large open-mouthed vessel (9) clearly displays this wavy-patterned form of decoration, as it does also the beginning and end of the combing on the neck of the pot (fig. 4). This combed form of decoration is one of the diagnostic features of the so-called Coimbatore Ware. The lipless bowl/cup (13) has a similar combed decoration, as do the two biconical vessels (7 and 8) — the 'waves' in the latter again being confined to the sloping shoulder of the pot. A variation of this form of under-slip decoration is shown on the large closed-mouthed pot (10), which has the same white decoration beneath a slip. The decorative motif is not, however, the abstract 'wave' pattern, but a simple series of sprigs of vegetation, which are painted on the body of the pot, from top to bottom (fig. 5).

Besides this elegant wavy patterning, there is also a cruder criss-cross decoration. This is seen scored into the shoulder of the water-drinking pot (11). This pot also displays one of the so-called potter's marks, which have previously been documented on wares of this type (fig. 6). Debate has surrounded the function of these marks, some suggesting that they were made by individual potters or potter's workshops, while others have seen in them some form of labelling, or means of denoting possession. Casal, for instance (Casal 1956: 70), writes that they are '*certainement des marques de propriété*'. The evidence at present does not allow of a definite answer to this problem. This example is roughly cruciform, though with an extra arm attached at the top, and facing to the left.

Finally, vessels (7)-(14) inclusive, are burnished to give a high gloss to the outer surface.

This completes the repertoire of the external decoration of this group. As far as the interiors are concerned, there is only one variation from the undecorated. This variety is easily visible in the large open-mouthed vessel (9), which displays a finely burnished glossy black interior to the neck (fig. 4). Extrapolating from the ethnographic record, one can suggest that this effect was produced through the application, immediately prior to firing, of a slip containing, in suspension, a reducing agent such as cow dung. Another method for producing this same effect, would require the pots to be inverted in the kiln, with the mouths filled with dung or green matter, to produce the necessary reducing atmosphere inside the vessel. Thus the interior would be



Fig. 4 — No. 9 showing combed decoration.



Fig. 5 — No. 10 showing decoration in the form of twigs of vegetation.



Fig. 6 — No. 11 showing potter's mark.

blackened, while the exterior would be reddened by the overall oxidising atmosphere in the kiln. The gloss on the interior of the neck would have been obtained by burnishing, just as it was on the exterior.

Again looking at the present tradition in rural South India, it is likely that pots such as these large water-carrying/storing vessels would have been stacked, up-ended, in the front of the kiln close to the draught channel; broken examples from previous firings would have provided vents for smoke from the kiln. Smaller vessels, such as the biconical pots, would have been packed behind the larger pots, while pot-stands and the like, would have been piled up on top of the other assembled vessels, filling the interstices. The whole would then have been covered with broken sherds, and finally earth, before the firing of the combustible material (already laid out in the base of the kiln before the vessels were stacked). To produce the external deep-red colouring, an oxidising atmosphere would have been required, and a large quantity of wood or field refuse would have been necessary. In Karnataka today, red-fired pots are, for this

reason, more expensive to make, than the commoner grey wares. They are considered more luxurious, and are seen as items of status. This may partly explain the reason why the funerary vessels — of which these are surely examples on account of their fine state of preservation — are usually of this red fabric. Again, as is the case in modern examples, the firing was not done at a temperature high enough to thoroughly fire the interior of the pots. Where breaks occur (8, 9, 10 and 11), the difference in the well-fired exterior and the poorly fired, less-fused interior is clear.

Much of what appears above concerning decoration, is best exemplified by the pots (7-14) which can be characterised as fine wares, compared to the remainder. These remaining wares are the four pot-stands (1-4), finely made in themselves, but simple and undecorated; the two lids, both now broken, but clearly capable of closing the mouths of the two large water-pots, and the 4-footed vessel (fig. 7).



Fig. 7 — No. 15: the four-legged pot.

This footed vessel is so dissimilar to the other pots in the group that were it not for other instances of this form of vessel

appearing in similar assemblages, one could be forgiven for imagining that this was an intrusive piece. However, two similar vessels from Dharmapuri District, Tamil Nadu (illustrated in Narasimhaiah 1988: pl. X), clear any doubt as to its origin, and contemporaneity with the other vessels in the group. This contemporaneity is further established by a 4-footed vessel from an analogous assemblage, which is now in the collections of the British Museum, and whose provenance is given as probably from Coimbatore, in Tamil Nadu. The fabric of the Hastings piece is crude and gritty, with no slip or decoration — either internal or external. It is hand-formed. The firing was clearly conducted at a low temperature, as only the very surface carries a terracotta colouring; the interior (visible at the broken feet) is dark grey and poorly fired. This poor quality of firing produced a very brittle fabric, which, considering the accessibility of the relevant technology to produce better fired ceramics (as in the rest of the group) leads one to suspect that this was deliberate. Again an ethnographic parallel comes to mind. The terracotta votive figurines made by tribal groups in eastern Gujarat are similarly fragile, and once deposited at the forest shrines disintegrate almost immediately — no attempt being made to prevent this. Once the offering has been made, the votive has no further use; it is not required to last. In the same way, perhaps, once the funerary container was deposited in the grave, it was not required to survive. Some such idea may have been in operation amongst the megalithic peoples who produced this funerary pottery.

The function of the Hastings example is undocumented, but it seems possible that this vessel, out of the entire group, could be considered an actual funerary container — as opposed to being grave goods — if the comparative material is considered. It has been noted before that there is a definite connection between footed vessels and funerary contexts (Allchin & Allchin 1982: 332, where legged urns and pots are listed as characteristic forms of one of the main types of megalithic burial complexes). An early example of a footed urn burial has been recorded at the Chalcolithic site of Inamgaon, in Maharashtra (Dhavalikar 1977: 46-51, pl. VII A), and has been dated to c. 1100-800 BC on the basis of a calibrated C14 measurement (Allchin & Allchin 1982: 285). Our example is of a smaller size, and the exact shape, and the fact

that the legs are solid — unlike the Inamgaon example — sets them apart. Also, if the whole Hastings group is to be seen as one contemporary ensemble, then the early date for this central Indian example is way out of line. This earlier example is merely quoted to establish the connection between footed vessels, and burial. The already mentioned specimens from Dharmapuri (Narasimhaiah 1980: pl. X) are further examples of the coincidence — as well as being closer in form and date to the Hastings vessel. The footed sarcophagus from the cemetery of Souttoukeny, near Pondichery (Casal 1956: pls. XXIIb, XXIII), is the grandest example of this connection between footed ceramics and burial. It is also interesting as its date is more in keeping with the presumed date of the Hastings group. However, the sarcophagus is of a quite different scale to this modest pot in the Hastings collection, besides having 15 rather than 4 feet!

The chronology of the Russet-coated Painted Ware is still a matter of uncertainty (I am indebted at this point to my colleague, Dr McIntosh for her guidance through the conflicting arguments). These wares are apparently present at Early Historic settlement sites in the South, from the Late Megalithic Period onwards. They appear to have a very broad time span, and only have some chronological anchorage when found in connection with the sequence of imported Arretine, and other Roman-period wares — or their local imitations. We can therefore only say that these ceramics are certainly well-established by the 1st century BC. Most authorities would also concede a date in the 2nd or even 3rd century BC for what is, after all, a very substantial group of wares. (Narasimhaiah 1980: 178, however, does not accept a date earlier than 150 BC for the Russet-coated Painted Ware tradition).

The geographical origin for this ceramic tradition, which is recorded from Kerala in the Southwest to Andhra Pradesh in the Northeast, is equally uncertain. First labelled as Coimbatore Ware, and thus suggesting a Southwest Tamil Nadu location, it has been pointed out in the most recent survey of the material (McIntosh, forthcoming) that this nomenclature reflects nothing more than an early concentration of archaeological work in the Coimbatore area. McIntosh also suggests (*ibid.*) that a more southerly — and indeed earlier — origin for the tradition should be looked for; that is, in Kerala, in the 4th century BC.

The Hastings collection does not, unfortunately, have any more exact provenance than that it came from 'Madras'. Whether this refers to the city of that name, or the area of southern India administered as the Madras Presidency during the British period, is uncertain. On account of the wide provenance of these Russet-coated Painted wares, it is possible that either of these geographical locations would fit the data. The collection entered the museum in 1976 and was the gift of a Miss Owen. The accession numbers are as follows — 976.102-116, plus one un-numbered piece. As well as the collection in the British Museum mentioned above, there is a further group of similar material in the *Musées Royaux d'Art et d'Histoire* in Brussels.

ii) Lithic material (figs. 8-10)

This group of stone artefacts is made up of 19 pieces, all but one of which come from peninsular India. Amongst the southern group there are ten axes and eight choppers. They are all unpolished, and clearly bear signs of their manufacture. They are made of the familiar reddish quartzite, used so often in the production of tools in the southern Indian Stone Age. The collection was made by H.W. Seton-Karr, about whom it has been said that he 'presented collections of prehistoric implements found by himself in Somaliland, Egypt and India to over 200 museums and public institutions throughout the world!' (*Who Was Who* 1929-40). Examples from the Fayyum of Egypt are also recorded in Hastings Museum, and the two African collections are further represented in the holdings of the Indian Museum in Calcutta. There is no documentation at Hastings for the collection. A clue as to provenance, however, is to be found on one of the axes, which has written on it 'Gazeepet, Madras', which no doubt refers to the town of Kazipet, near Warangal in the modern state of Andhra Pradesh. (The reference to Madras is probably to be explained in the same way as it is in the ceramic collection, above. My thanks to Dr Yolande Crowe for information on the location of Kazipet). In this respect it is noteworthy to mention that the author recently saw in the Hyderabad Museum a display, in the course of arrangement, of stone tools of great similarity to this collection — thus partially confirming this Andhran provenance.

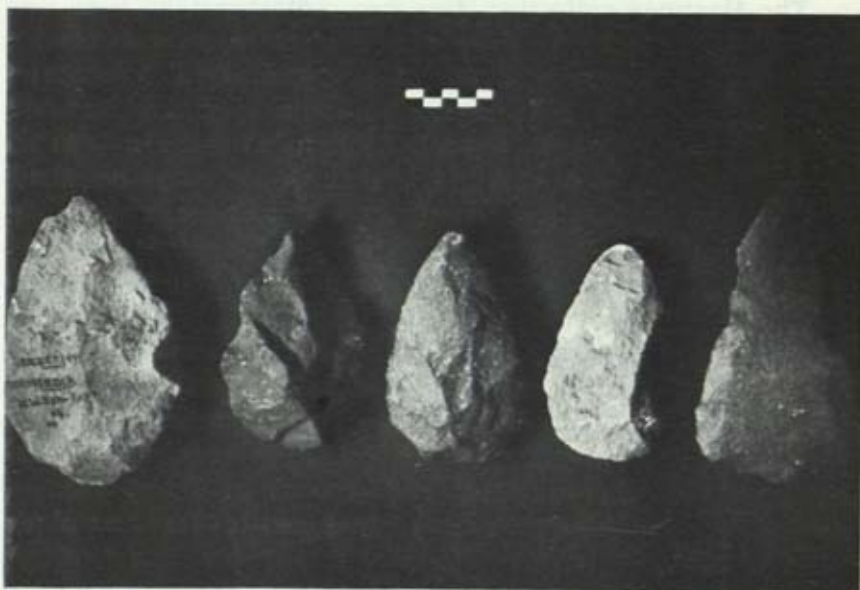


Fig. 8 — Axes from the Seton-Karr collection in Hastings Museum.

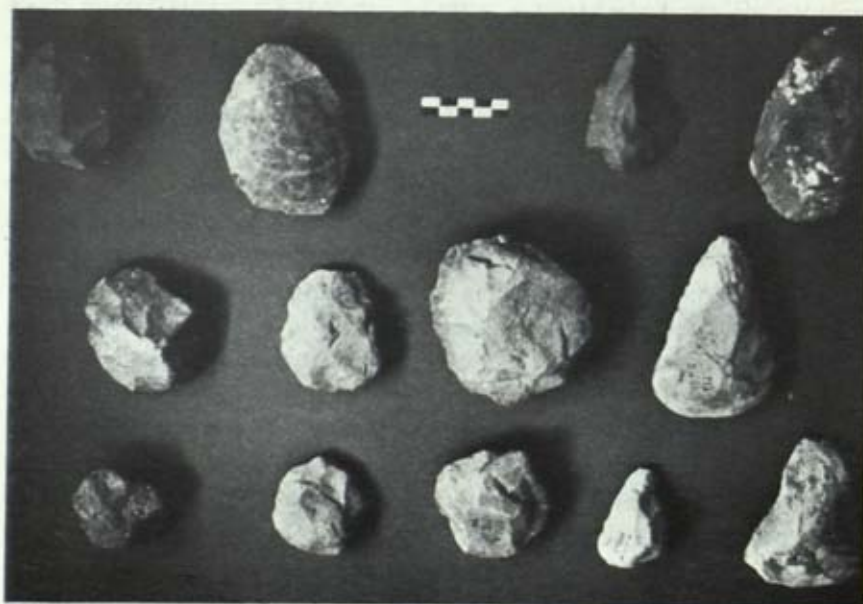


Fig. 9 — Axes and choppers from the Seton-Karr collection.



Fig. 10— The single northern Indian axe from the Seton-Karr collection, from Banda.

The single example in this collection which does not come from southern India is a polished stone axe (fig. 10). According to the black ink labelling upon it, it comes from Banda, in the United Provinces. This would provide a probable provenance for this piece in the moderne state of Uttar Pradesh, at the foot of the Vindhya hills. This part of India is certainly well-known for the large number of stone age sites situated in the valleys of the rivers which run down from the Vindhya to the Ganga/Yamuna basin.

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