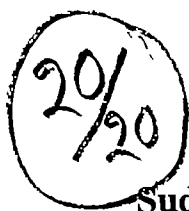# Journal

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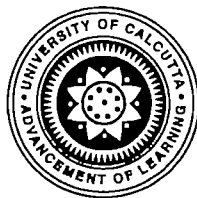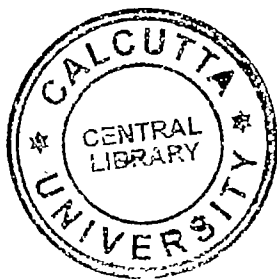
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J.N. Banerjea (1895-1966)

This Volume is dedicated to the memory of Dr. Jitendranath Bandyopadhyay, Former Carmichael Professor, Department of Ancient Indian History and Culture, University of Calcutta.

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Biographical Sketch of J.N. Banerjea*

D. C. SIRCAR

The Asiatic Society in particular and the world of Indologists in general became poorer by the sad demise of Jitendranath Banerjea on the 12th of May, 1966. His relations with the Society were long and fruitful. An active member since 1938, Jitendranath was elected a Fellow of the Society in 1950. He ably served the Society as Historical and Archaeological Secretary in 1954 and 1955 and from 1961 to 1964 and also as General Secretary from 1956 to 1959. He contributed a few learned papers to the publications of the Society and reviewed a number of books in the Society's Journal. He was the recipient of the B.C. Law Gold Medal for the year 1961. In the field of Indological studies, Jitendranath was regarded as a great specialist in the Brāhmaṇical religious systems and iconology as well as in Indian numismatics, and his disappearance from the field created a void which shows no prospect of being filled up in many years.

Jitendranath belonged to a respectable Kulīna Brāhmaṇa family of the village of Śikhirā in the Hooghly District of West Bengal. He was born at Meerut in UP on the 16th of August, 1895. He passed the Matriculation Examination of Calcutta University in 1912 from the Maharaja's High School at Kalna in the Burdwan District of West Bengal, and graduated four years later, with First Class Honours in History, from the Scottish Churches College, Calcutta. In 1918, he obtained the M.A. degree of Calcutta University in History and was placed in the First Class. He was awarded the degree of Doctor of Philosophy of the same University in 1942 on his thesis entitled *Studies in the Development of Hindu Iconography*.

Soon after he had obtained the Master's degree, the far-sighted educationist, Asutosh Mookherjee, recruited young Jitendranath for the newly instituted M.A. course in Ancient Indian History and Culture in the University of Calcutta, as Assistant to the then Carmichael Professor, D.R. Bhandarkar. And from 1918, he continuously served his *alma mater* till his retirement in August 1959 after 41 long years. Sometime after his appointment at the University, Jitendranath was promoted to the post of a Lecturer in Ancient Indian History and Culture and finally occupied the Chair of the Carmichael Professor from July 1952 to August 1959. In 1958, Jitendranath was elected Dean of the Faculty of Arts and was also nominated Vice-President of the University College of Arts. On the occasion of his retirement from Calcutta University in 1959, Jitendranath's friends and pupils presented him with a Felicitation Volume entitled *J.N. Banerjea Volume* (Calcutta, 1960).

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* Adapted from an Obituary Note appearing in the Asiatic Society's *Year Book* for 1966, pp. 128-31, and Banerjea's *Paurāṇic* and *Tāntric Religion* published by our Centre of Advanced Study in AIHC in 1966.

Jitendranath's *magnum opus* is *The Development of Hindu Iconography* which was published by the University of Calcutta in 1941, a revised second edition of it appearing fifteen years later in 1956. This work on Brāhmaṇical inconology is of outstanding merit and is not likely to be antiquated or superceded in the near future. His Bengali work entitled *Pañcopāsunā*, published in 1962 and dealing with the five popular Brāhmaṇical religious systems (Vaiṣṇava, Śaiva, Śākta, Saura and Gāṇapatya), was awarded the Rabindra Prize by the Government of West Bengal. He contributed a number of papers to learned periodicals and also some chapters to such publications as the Dacca University's *History of Bengal*, the Bhāratīya Vidyā Bhavan's *History and Culture of the Indian People* and the Indian History Congress' *The Comprehensive History of India.*

Jitendranath's reputation as a front-rank Indologist brought him many laurels. He was Correspondent [for life] of the Archaeological Survey of India, A Corresponding Member [from India] of the Commission Internationale pur une Histoire du Development Scientifique et Culturel de I'Humanité of the UNESCO and a Charter Member of the International University Foundation of New York, USA. Jitendranath presided over the Ancient India Section of the Indian History Congress at its Patna Session in 1946, the Annual Meeting of the Numismatic Society of India at Cuttack in 1949 and the History Section of the Nikhil Bhārat Vaṅga Sāhitya Sammelan at its Lucknow Session in 1954. The Indian History Congress honoured him by electing him General President for its Allahabad Session in 1965. Unfortunately, he could not attend the Session of the Congress owing to failing health. His Presidential address, read out at the Congress, contains some interesting personal reminiscences. As a tribute to Jitendranath's scholarship, Maria-Therese de Mallmann dedicated to him her *Les Ensignments Iconographiques, de l' Agnipurāṇa.*

After his retirement, Jitendranath enjoyed for sometime the UGC's research stipend meant for retired teachers and delivered a course of lectures each at the Universities of Lucknow and Calcutta respectively in 1962 and 1965. In his Dr. R.K. Mookerji Endowment Lectures at Lucknow University, he dealt with the light thrown by archaeological data on the development of religious systems like the Vaiṣṇava and Śaiva. In April, 1965, Jitendranath delivered six lectures on Paurāṇic and Tāntric Religion at the UGC Centre of Advanced Study in Ancient Indian History and Culture, University of Calcutta. He also presided over the seminars on Indian Mother-goddess and Iconography of Tārā organised by the Centre on the same occasion. Unfortunately, he fell ill before the conclusion of the lectures and seminars.

As a man, Jitendranath's character was marked by sweetness of behaviour and mildness of temperament. He was a perfect gentleman, absolutely unassuming and unostentatious.

The author of these lines attended Jitendranath's lectures on Indian Numismatics in the Post-Graduate Classes as a student of Ancient Indian History and Culture, Calcutta

University, in 1929-31. When therefore Jitendranath became incapacitated, by illness and failing eye-sight, to see his lectures on Paurāṇic and Tāntric Religion through the press and the burden fell upon the shoulders of this pupil of his, the latter undertook the task gladly thinking it to be a sort of indirect payment of *guru-dakṣiṇā*, howsoever little and insignificant. It was indeed a great disappointment to him that Jitendranath passed away when the last few pages of the work were being printed off.

J. N. Banerjea: An Assessment of His Contribution to the Study of Indian Iconography

Sudipa Ray (Bandyopadhyay)

Professor J. N. Banerjea (1895-1966) figures luminously in the list of modern scholars who devoted themselves to the study of Indian iconography. His area of academic interest was fairly wide, covering different branches of Indological Studies. A specialist in the Brahmanical religious systems and iconology and Indian numismatics, he also showed an in-depth knowledge of alien rituals and divine imagery in the process of drawing objective analogy. He also exhibited remarkable acumen in analyzing the iconographic transformation of some folk goddesses of ancient and mediaeval India in the cult-icons of orthodox sects. His special forte was the study and analysis of Brahmanical iconography. He contributed a good number of articles on this subject to learned periodicals and popular journals like *Journal of the Indian Society of Oriental Art*, *Indian Historical Quarterly*, *The Indian Antiquary*, etc. He was also commissioned to contribute some chapters on iconography in such scholarly works as Dacca University's *History of Bengal*, Bharatiya Vidya Bhavan's *History and Culture of the Indian People* and Indian History Congress's *A Comprehensive History of India*. His Bengali work called *Pañchopāsunā* (1960) while dealing with five popular Brahmanical religious orders threw valuable light on some aspects of Brahmanical iconography as well. But his magnum opus was *The Development of Hindu Iconography* (1941). Soon after its publication the work was adjudged as a work of "outstanding merit, not likely to be antiquated or superseded in the near future".[1] This contention is as true today as it was at the time of its publication. From an absorbed study of the work it appears that to J. N. Banerjea iconography was not merely the study of the ritualistic and liturgical bearings of the icons or characteristics of their forms; his investigation also pertained to a sensitive awareness of the entire concept of divine imagery in view of the visual phenomenon of the form concerned. In this respect the approach of J. N. Banerjea was more iconographical than iconological.

From his writings one can get a glimpse of his unique methodology in the study of Brahmanical iconography vis-à-vis that of earlier writers. According to him the earlier writings on the subject suffered from regional compartmentalization or from the lack of proper utilization of varied source-materials available for the purpose. While commenting on Gopinath Rao's book *Elements of Hindu Iconography* (2 Vols. 1914-16), Professor Banerjea observed "none of these works (H. Krishna Sastri's *South Indian Gods and Goddesses*, B.C. Bhattacharya's *Indian Images, Part-I*, J. Dubreuil's *South Indian Iconography*, the Brahmanical section of N. K. Bhattasali's *Iconography of the Buddhist and Brahmanical Sculptures in the Dacca Museum*, etc.) can claim to be as full and

comprehensive as the monumental work of Gopinath Rao. But comprehensive as the latter is, it still lacks certain features which are essential for the study of Hindu Iconography".[2] Elaborating on this observation, J. N. Banerjea pointed out a few limitations of Rao's work on the subject: (i) Rao mostly cites South Indian specimens to illustrate textual prescriptions of iconographic features of Brahmanical images; (ii) the individual iconographic types have seldom been discussed by him; (iii) in tracing the development of these iconographic types Rao has not made a careful and systematic analysis of the numismatic and glyptic remains of India which was indispensable when earlier sculptural types of gods and goddesses were not available in the sculptural repertories of pre-Kushana, Kushana and Gupta periods and (iv) the monumental and epigraphic data embracing materials of iconographic importance have not been fully made use of by Rao.[3]

Keeping in view all these facets of iconographic study prior to J. N. Banerjea, a reasonable evaluation of his contribution to the study of the subject may be attempted.

At the very outset of his study, *The Development of Hindu Iconography*, Professor Banerjea clearly defined the lines in which the study of Hindu iconography should be conducted and how the varieties of relevant materials should be scientifically treated.[4] His method of collecting data for the purpose was comprehensive inasmuch as that it took into account source materials representative of different regions of India. This method not only widened the scope of study of the subject but also expanded the geo-cultural horizon of the investigation. In collecting data for his study Professor Banerjea not only utilized all the textual materials relevant to his investigation, but also made a systematic analysis of the numismatic and glyptic remains and the earliest monumental relics and epigraphic records. The materials for investigation were collected from different regions of India— Northern, Eastern, Southern, Central and Western India, so that regional variations in the development of Brahmanical iconography could be studied in their proper perspective. The utilization of source materials like numismatic and glyptic remains or earliest monumental remains and epigraphic records helped him in determining the earliest iconographic features of some divinities of Brahmanical pantheon and their consequent transformation. Professor Banerjea's study threw much valuable light on the changes that were introduced in the development of Brahmanical iconography.

Another aspect of his methodology was the splendid blending of the deductive and inductive processes of reasoning. This may be illustrated by a few examples from his investigative analyses. For instance when he perceived a close similarity between early Vaishnavite images of South India and the description of the *dhruva-beras* in *Vaikhānasāgama* through deductive reasoning, he moved from the general to the specific; again, while explaining the true iconographical import of Trimurti of Elephanta he took recourse to inductive reasoning and moved from the specific to the general. In this particular case he refused to accept the identifications made by scholars like Gopinath

5

Rao and Stella Kramrisch and specified it as representing a composite form of Śiva where his two aspects, *saumya* and *ghora*, are combined with his Śakti Umā.[5]

Apart from adopting these logical methods to arrive at a conclusion, Professor Banerjea often took recourse to the method of cross-referencing to establish his argument. While identifying the origin of icons or following their development, he not only referred to textual references but also tried to substantiate his claims by referring to archaeological evidences and vice versa. This method of arriving at a dependable conclusion is rarely found in the methodologies adopted by scholars prior to Professor Banerjea.

In his study of Brahmanical iconography J. N. Banerjea was not merely concerned with the study of the characteristics of the principal icons or 'image proper' but also the interpretative aspects of Brahmanical imagery in this country. His interpretative study of the chronological development of Brahmanical iconography shed abundant light on the constant changes that took place in certain well-defined religious practices of the Hindus, thereby expanding not only the existing pantheon of a particular cult but also giving rise to several new iconographic representations of Brahmanical deities and transforming the already existing ones.

Pursuing this interpretative study of Brahmanical icons J. N. Banerjea explored the source of the development of syncretistic images like Hari-Hara, Ardhanārīśvara, Vishnu-Lokeśvara and Mārtanda-Bhairava. He showed how sectarian animosity and sometimes attempts towards reconciliation between the principal rival sects led to the concoction of mythological tales, which in their turn created interesting images of god-heads in hybrid or sometimes in composite forms. To illustrate this point J. N. Banerjea mentions the favourite mode of representing Lakulīśa in one of his Bengali articles.[6] Though scholars on iconography prior to J. N. Banerjea noticed and explained a few of the syncretistic icons of the Brahmanical fold, it was Professor Banerjea who first reasonably explained the characteristic traits of such icons and identified them.

In one of his scholarly essays, *'The Representation of Sūrya in Brahmanical Art'*, this interpretative approach of Professor Banerjea to Brahmanical iconography reached its high watermark.[7] He showed how symbolic representations of the divinities of an earlier period were transformed into anthropomorphic attributes of Brahmanical icons, and how the imagery of some Brahmanical gods or goddesses owed some of their distinctive features to the statuary of the countries of the Middle East. According to him, 'in ancient Indian art the Sun-god was represented by various symbols, such as spoked wheel, rayed disc, lotus-flower in various forms and the like. When he came to be anthropomorphically represented, these wheel and lotus flower symbols were not totally discontinued, and we know that the wheel was placed in one of the hands of Vishnu, one of the Ādityas, and lotus flowers were placed in both the hands of the image of Sūrya himself'.[8] It may be noted here that the wheel and lotus as solar symbols figured independently in a large

number of coins and seals of ancient India. In this context Professor Banerjea put forward some well-founded arguments in support of his contention. Again, to demonstrate the extent of the influence of alien statuary on Brahmanical imagery, J. N. Banerjea considered some of the significant features of a particular type of Sūrya image, namely the boots, the close-fitting garments, the girdles of the waist zone, etc., as akin to Iranian draperies. "The alien character of these features was completely lost sight of, and their presence came to be accounted for with the help of ingenious stories invented by the Indian myth-makers", says Professor Banerjea.[9] In this connection he also shows how this alien characteristic of the Sūrya image was gradually discarded and South Indian artists had no inhibitions in carving a Sūrya image with his legs bare.

The investigative genius of J. N. Banerjea attained a new dimension when he explained and substantiated the process of transformation of some of the folk goddesses of ancient and mediaeval India into minor goddesses of the Brahmanical pantheon. He showed how sometimes "popular myth evidently concocted with a deep sectarian bias unwillingly hints" at the manner of such transformation.[10] While commenting on this particular aspect of the development of Hindu iconography he explained how these popular myths introduced new attributes to such transformed cult-goddesses, and how after the transformation a particular cult-goddess became practically obsolete in her place of origin and gained popularity in a region far off from that. To illustrate this point, Professor Banerjea showed convincingly how Jyeshthā of South Indian origin gained popularity under another form or name, Śītalā, in the eastern regions of India like Bengal and Orissa.[11] Regarding this particular iconographic transformation of a folk goddess into a Hindu cult-goddess, Gopinath Rao in his book had mentioned that the worship of this goddess became practically obsolete in southern India. But he had not explained the reasons behind the gradual abolition of her worship in her place of origin, nor had he traced her transformation into a cult goddess of an orthodox sect in far-off regions. J. N. Banerjea's investigative genius not only explained those reasons, but also traced her further transformation.

Another notable contribution of J. N. Banerjea was the interpretative analysis of the eight erotic reliefs carved high on the wall in the Vārāhī temple at Chaurashi, a village near Kakatpur in the Puri district of Orissa. This important center of Tantric worship in Orissa has attracted the attention of several art historians. Debala Mitra, for instance, has described the architectural features of the Vārāhī temple at Chaurāshi in great detail in an essay.[12] Professor Banerjea went a step forward and explained the significance of the eight erotic reliefs that appear in the top sections of the vertical outer flat ribs of the main temple. According to him the eight reliefs illustrate the *asta-kāmakalā-prayoga* (the eight stages of ritual love-making) as described in an unedited Sanskrit Tantric text described in its colophon as *Kaulachūḍāmaṇi*, written in Oriya script. Professor Banerjea observes that though "one cannot be sure about the exact age of the unique Oriya

manuscript of the *Kaulachūḍāmaṇi Tantra*, it is very curious that its description of a part of the Vāmāchārī Kaula ritualism should so remarkably correspond to these interesting erotic reliefs carved on the walls of an early medieval Śākta shrine."[13]

Professor Banerjea's contribution to the study of Brahmanical iconography has been widely acclaimed by scholars. But he had his detractors too. One scholar, for instance, observed that his book is "not helpful for identifying images".[14] It would be unfair to expect that a book titled *The Development of Hindu Iconography* will serve as a guide for identifying images. Though he was not a pioneer in this field of study, he was undoubtedly a new pathfinder in many respects. His dynamic approach to the subject not only widened the scope of investigation, but also solved many of the intricate problems connected with the development of Brahmanical iconography. His approach to the subject of study was indeed unique. The merging of iconography and iconology in his investigative analyses lent an entirely new dimension to the subject. No wonder that many later scholars of this field of study found it worthy to tread the path laid down by him.

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12. 'Four Little-Known *Khākharā* Temples of Orissa', *Journal of the Asiatic Society*, Vol. II, No. 1, 1960, pp. 3-7.

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Position of Iron in the Proto-Historic Phase in West Bengal

Asok Datta

Introduction:

The disintegration of the Indus Valley Civilization around 1750 B.C was followed by the development of different agriculture based settled village communities throughout the Indian sub-continent as a counter productive force of the Harappan urban decay. These early village communities having effectively settled in different alluvium zones were operating under different tech-cultural levels. Naturally, these early agricultural communities are marked by regional and sub-regional diversities. But they shared one common character which makes them quite unique in a diverse ecological backdrop. They were basically agriculturists. Hence, agriculture was their common economy. They are designated under different regional names on the basis of specific trait identities. In some areas copper was the principal metal technology whereas in some other areas, iron technology seemed to have dominated over copper. These early agricultural communities can broadly be placed between C 1750 BC to C 600 BC (the beginning of historical period in India). This period is therefore very crucial for understanding the historical process in India. It is indeed true that these early agricultural communities developed in close interaction with each other without losing its own cultural identities.

The proto-historic phase in West-Bengal was earlier designated as chalcolithic (Dasgupta 1964, Chakrabarty and Hasan 1982; Ghosh 1984; Datta 1981 etc.) on the basis of stone and copper technology. But in view of the recent excavations at a number of sites, the nomenclature "chalcolithic" needs to be changed. To project this dimension of new concept, we propose to examine the following issues connected with this problem. The issues are:

1) Position of iron technology.
2) Nature and composition.
3) Its impact on socio-economic change.

Introducing the background:

The state of West Bengal having 8.87 million hectare of land has a total population of 52 million (1962 census report). These figures comprise 8% of India's total population and 2.7% of the total landmass. 5.57 million hectare of land in the state comprising almost 63% of the total land coverage is agricultural land (Banerjee, 1978-1979). 93 % of the total landmass is alluvium while only 7% is hilly (Bose, 1978). The average annual rainfall in the state is moderate ranging from 140mm to 400mm. Major drainage systems are Ajay, Damodar, Mayurakshi, Kasai, Suvaranrekha, Teesta, Mahananda, Bhagirathi/Hoogly,

Rupnarayan etc. Rice is the major crop followed by wheat, potato, sugarcane, jute and other cereal and pulses.

Physiographically the state can be divided into four distinct units. The units are:

a) Sub-Himalayan region on the north.

b) Western plateau fringe with lateritic soil.

c) Deltaic plains of the east.

d) Coastal alluvium with saline water of the south.

Of these above units, the western plain is the major concern of the present paper. Because the proto-historic settlements in the state are found to have flourished within this geographical limits. Geomorphologically, this region can again be divided into three distinct morpho-units viz. laterites, older alluvium and newer alluvium. The protohistoric sites are found to have developed over these morpho-stratigraphic units of different ages and elevations (Ghosh and Majumdar, 1991).

Position of iron:

Altogether seventy eight Chalcolithic sites have been discovered so far in the state, but the material quality of this culture differs significantly in each soil formations. Only twelve out of seventy eight sites have been excavated yielding valuable documents pertaining to the larger question of redefinition of this culture. These excavated sites can again be classified into two groups on the basis of the position of iron in its material life. Bharatpur, Mahisadal, Hatigra, Tamluk, Baneswardanga, Nanoor etc. have yielded iron from its mid-level of Chalcolithic occupation. But in sharp contrast, sites like Mangalkot, Pandurajardhibi, Pakhanna, Bahiri, Tulsipur, Dihar etc have yielded iron from the very beginning of Chalcolithic occupation. Radio-carbon dates from five different sites are available which show the span of Chalcolithic culture ranging from 1440 to 540 BC. The earliest date of Chalcolithic culture being 1440 BC is found at Bharatpur which reads as 3290±135 B.P while the lower limit of chalcolithic culture in West Bengal is provided by a radio carbon date from Mahisdal which gives a date of 540 (PRL 867/2490+150). These two sites are closely located in the lateritic zone, but yielded iron from their mid-level of Chalcolithic occupation. But Pandurajardhibi, Mangalkot, Pakhanna and Bahir which have yielded iron from the very beginning of Chalcolithic occupation are date(by radio carbon methods to 1000 BC 950 BC 900 ·BC and 800 BC respectively. So, w(can presume the beginning of iron technology in the state around 1000BC. In view o the absolute dates provided by the radio-carbon methods, it appears therefore to conclud(that initially the technology of iron smelting was not known to the Chalcolithic people, but in course of their south-ward migration (the assumption is based on the nature of settlement pattern) they acquired the technology of smelting (as the knowledge of technology of copper smelting was already known to them). Quite naturally the knowledge

was utilized to the benefits of economic growth. This change is manifested in the progressive development of iron tools found in different successive levels of occupations.

Nature and Composition:

Technology is one of the major aspects of human culture which helps man in securing better from the living. The metal technology of the proto-historic West Bengal includes mainly copper and iron. However, iron technology played a more significant role than copper technology in the socio-economic transformation. Recent excavations have yielded iron objects comprising sickle, axe, dagger, chisel, sword-blade, peg, nail, rod, disc, spearhead etc. together with huge amount of iron ore, slag and evidences of mud furnaces, suggesting the prevalence of a strong iron technology. At the same time it is needless to emphasise that due to the highly humid climate, constant exposure to seasonal floods and highly corrosive nature of iron specially under conditions in Bihar, West Bengal and Orissa, it is difficult for iron to remain in a satisfactory state of preservation (Sharma 1983). But despite these shortcomings, representative samples have been retrieved (Tripathy, 1990) which can throw a significant light to bring about the nature and character of iron technology found to be associated with BRW culture in West Bengal.

In recent years, archaeo-metallurgical studies from limited number of excavated sites like Pandurajardhibi (De and Chattopadhya, 1989) Bahiri (Chakrabarty, 1993), Hatigra (Ghosh, Nag and Chattopadhya, 1987-88), Mangalkot (Datta 1991, 1992, 1995a, 1995b, 1995c, 2001, Ray and Mukherjee, 1992), Dihar (Datta,1995b) etc have been made with a view to review the nature and character of iron technology in the proto- historic phase in West-Bengal. On the basis of the stratified evidences, chemical and metallographic studies of iron objects, the development of iron technology during proto historic phase can be classified into two stages. Accordingly, stage I can be placed within a time range between c 1000 BC and c 700 BC. Iron implements comprises sickle, axe, dagger, chisel, point, nail, peg, rod, sword, blade, knife, etc. The nature of the artifacts clearly shows that the implements of stage I were directly connected with hunting activity while the tools of stage II are directly involved with agriculture based economy. Distribution shows a clear and basic change in the demands of the nature of artifacts in stage II.

The distribution of impurity pattern, specially the high percentage of silicon found in the artifacts and slag specimens of stage I indicates that much of the iron was lost in the slag due to unsuccessful reduction under below temperature. Since, the BRW people independently developed the smelting technology, they initially used low grade iron ores like laterite and limonite (having 25% to 30% iron, Chattopadhyay, 1991) and fed them with charcoal in mud furnace with one or two bellows. The bloom was them collected and reheated for forging. The slag was removed by hammering. The hammered metal was then beaten into thin stripes and later several such stripes were forged welded together

to shape the metal into suitable tools (Bharadaj, 1973). In stage I, due to inadequate furnace management, the artifacts suffer from corrosion and brittleness. However, during the subsequent stage II there had been significant improvement in the total technology as evidenced by the discovery of more sophisticated iron objects like sickle, axe, dagger, chisel, etc. The evidence of shallow mud furnaces have been found at Pandurajardhibi, Mangalkot, Dihar. Moreover, the specimens from Pandurajardhibi and Hatigra show fewer impurities, suggesting the possibilities that reduction was undertaken in a controlled temperature. Even so, the evidence of carbon content in the specimen of stage II artifacts definitely indicates the knowledge of carburization. The evidence came from Pandurajardhibi (De and Chattopadhyay,1989), Hatigra (Ghosh, Nag and Chattopadhyay, 1987-88).

It appears therefore that the iron smelting communities of stage II were producing mild steel iron knowingly or unknowingly around 6th/7th century BC. Moreover, a bronze specimen of stage II at Mangalkot (Ray and Mukherjee, 1992) shows the production of bronze by alloying tin with copper. It appears that the BRW people in West Bengal acquired the knowledge of alloying process. We can conclude therefore that the innovation of high technical knowledge coupled with fast growing demands of iron implements might have initiated a process of interaction between the economic growth on the one hand and social change on the other.

Impact on Socio-Economy:

Around C 4th BC the rural economy of west Bengal was gradually transformed into urban economy. The area where this economic transformation happened quickly and successfully was lower Bengal. In fact the BRW culture gradually merged into historical period through a distinct transitional stage as directly evidenced from the excavation at Mangalkot (Datta,1990) and elsewhere around 4th century BC. This transformation is very much evident in Ajoy / Damodar / Rupnarayan valleys while lower Bengal was an extension of colonization by people during early historic period around 4th century BC. This means that east of Bhagirathi / Hoogly was practically low marshy land and people entered this area with a strong iron technology. The area was cleared both for settlement and agricultural land. Initially, the settlements were conglomerations of modest mud and wooden structures with rural economy but gradually taking advantage of the geographical location and situation, the early settlers of this region were involved in an interactive trade both overseas and overland which generated wealth. Naturally the modest conglomeration of mud and wooden structure turned into burnt brick houses in early urban centers with or without fortification. Quite naturally this region played the most crucial role in early urbanization of Bengal.

In this crucial socio-economic process, iron happens to play a significant role. Stage II

of iron technology of BRW culture which spans over 700 B.C to 400 B, is very significant and important too as during this time a number of changes are noticed:

1) The extension of settlement area in each site.

2) Increase in population density.

3) Paintings on ceramics were more sophisticated and elaborate than ever before and along with this etching design also became frequent on black polished ware. (Datta, 1988-89).

4) Introduction of luxury items like flesh rubber, bone comb, flower vase, beaker, semi-precious stone beads, gold objects etc.

5) Evidence of community hall measuring 11m×3.53m with sand, potsherds, and pebble paved floor supported by a series of post holes at Dihar suggests some kind of social order.

6) Appearance of mother cult (found at Pandurajardhibi and Mangalkot) also suggests the significance of fertility concept in a fast growing agriculture based society.

7) Introduction of iron objects like nail, peg, rod, chisel, etc were definitely connected with building materials.

8) Introduction of mild steel and knowledge of alloying process are invariably connected which together with other elements brought about change in the material culture of the people.

It is therefore quite reasonable to assume that these changes in the material culture are finally responsible for a socio-economic transformation between 7th century BC and 4th century B.C. In the process, iron technology played the most crucial role because the technology was capable by this time of producing the necessary tools for cultivation of crops, trade and commerce, and arts and crafts and metallurgy etc (Tripathy, 1990).

Conclusion:

Making an overview, it appears that the BRW people around 4th century BC gradually merged into historical period through a transitional stage. Before the beginning of the historical period there had been a significant change in the material culture of the people and these changes are found in different areas particularly in the economic front. The appearance of more urban elements like flower vase, beaker, flesh rubber, sophisticated iron implements etc indicates the growing demands of these objects in a fast growing sedentary life under sustained economic growth. Extension of settlement areas are noticed during this stage. Naturally what was a conglomeration of numerous small settlements became semi-urban centres during this time. The settlement sites of Pandurajardhibi, Mangalkot, Baneswardanga, Natsal, Eruer, Tamluk, Pakhanna etc may be treated as semi-urban centres with catchments sites around them. All these changes were effected by a

strong iron technology which basically ushered a new era of prosperity and growth finally leading to second urbanization in Bengal during early Christian era.

Culture of any period is determind on the basis of traits contained in the culture. In the present case the most dominant and determining factor of material culture is iron. But since, the iron technology did not happen to emerge with the beginning of Chalcolithic culture in Bengal which is around 1500 BC and since it appeared first around 1000 BC or little earlier or the middle phase of chalcolithic culture, we propose to divide the entire length of protohistory of Bengal into two phases viz. Chalcolithic phase from 1500 BC to 1000 BC when iron was absent and instead copper played the crucial role in economy, and iron age from 1000 BC when iron was introduced as a strong metal technology virtually replacing the older copper technology, and since then it continued to play the most dominant role in economy. So, on the basis of our discussion, the protohistoric period between 1000 BC to the beginning of the historical period may be designated as iron age in Bengal.

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Archaeological Investigations at Thandikudi, Tamil Nadu

K. Rajan

Introduction

Kodaikanal, occupying the huge landmass between Upper and Lower Palani hills, remains to be a popular hill resort right from the British times. Due to its excellent climatic condition, vibrant and serene location, the British administrators and Christian Missionaries started settling in and around Kodaikanal towards the beginning of the 20th century. They were the first to take initiative in recording the archaeological wealth of this region in the pre-Independence era. As far as the antiquity of Kodaikanal region is concerned, the earliest human settlement goes back to pre-Iron Age times. This region was associated with a Sangam Age chieftain Kodaiporunan (*Purananuru* 205). Peruntalaisattanar, the Sangam poet, narrated that the chieftain had performed *velvi* which suggests that the brahmanical influence has reached this region as early as Sangam Age.

The archaeological sites of this region is placed on the archaeological map through the works of A.V. Rosner S.J., Rev. Heras S.J., Anglade and Aiyyappan as early as in the early part of the 20th century. S.J. Hosten first reported the Iron Age burial at Parappar falls near Senbaganur. Again Anglade reported stone circles entombing cist burials in the places like at Palamalai, Perumalmalai, Munjikal, Senbaganur and Mulaiyur ridge in 1928. He reported these cist burials as buried dolmens (Anglade and Newton 1928:12). In 1936, A.V. Rosner S.J., excavated a cist at Tevankarai on the slopes of Perumalmalai. In 1939, Rev. Heras S.J. excavated a cist at Mulaiyar. Quite interestingly all the above sites have yielded dolmens in association with cist burials. Father Anglade and Newton have described the dolmens of the Palani Hills in their paper which is published in Memoir No. 36 of the Archaeological Survey of India (Anglade and Newton 1928:1-18). Therefore, the credit of bringing Iron Age monuments like dolmens, stone circles and urn burials of Kodaikanal region to the academic world goes to Anglade. He first used the traditional route from Palani to approach Kodaikanal. He brought to light the groups of dolmens at Kamanur, Pachchalur, Tittaikudi, on the ridge south of the Mulaiyar and nearer to Kodaikanal on the slopes of Machchur and Perumal hills in the Vilpatti valley and at Pallangi and round Palamalai. Many of these, however, are little more than ruins, or heaps of stones; and sometimes the remains just enough to show the existence in former times. Anglade carried out excavations at Perumalmalai, Senbaganur, Tevankarai valley and Mulaiyar ridge. His findings are presently displayed in Senbaganur museum. His path-breaking work brought the attention of the scholars like Aiyyappan. Next to Anglade, the region received the attention of Aiyyappan, a renewed anthropologist, in 1940 (Aiyyappan 1940-41:373-379). Aiyyappan had excavated two cists at Vilpatti. It yielded number of black and red ware

potteries, which were displayed in Madras Government Museum. Allchin had made a fair attempt to give a date to these sepulchral monuments by comparing these potteries with other Iron Age potteries. M.Saranya, Research Scholar, took an extensive survey tried to get maximum number of monuments irrespective of the inaccessible terrain (Saranya 2003). Some of the sites that need attention are Kathavumalai, Kottaikal-teri, Idunja-kuli, Perunkanal, Kumarikundu, and Sankarpettu. The special features of Iron Age burials are discussed elaborately by taking into the account of the previous work. To understand their distributional pattern, the Iron Age monuments of this region are compared with the monuments of the plains.

Besides, an attempt is made to record the epigraphical wealth of this region also. This helps to understand the continuity of the culture and its transformation. A trade guild inscription datable to 13th century is found in the village Thandikudi. The scholars like S.Rajvelu, C.Santhalingam and V. Vedachchalam recorded such lithic evidences in the places like at Periyur, Kilavarai, Polur and Manjampatti (Santhalingam 1997:77-79). These inscriptions help to understand the settlement pattern and the emergence of new settlements particularly in medieval times. Further it gives information about the socio-economic condition and close relationship that existed between the king and the hillock people. The king's direct involvement in settling the disputes that emerged between the contending parties shows the importance given by the king to this region. In addition to epigraphical records, a few memorial stones are also recorded in the village at Thandikudi.

The available data accumulated through the previous and present explorations are sporadic in nature and it is very difficult to draw any continuous cultural process. The terrain played a greater role in the formation of settlements. For instance, nearly 90% of the archaeological sites of this region fall within the range of 4000-5000 MSL. This altitude provides a congenial environment for the growth of forest products like pepper and cardamom. This commercial product, probably, would have attracted the attention of the early settlers. Therefore, a conscious attempt is made to understand the cultural wealth of this region through two seasons of excavation carried out in the year 2004 and 2006.

The Site

Thandikudi (Long.77° 38' 40" E Lat. 10° 18' 25" N), one of the major villages on Palani hills, is situated about 44 km northeast of Vattalakundu in lower Palani hills in Kodaikanal taluk of Dindugal district (**Fig. 1**). This can be approached either from Ayyampalayam or from Pannaikadu. The former village lies at the foot hill about 15 km east of Vattalakundu. The latter village Pannaikadu lies adjacent to the Vattalakundu- Kodaikanal road but one has to take diversion at Uttu. Thandikudi lies at the height of 4400 feet above the mean sea level. The village is surrounded on the four sides by the two hills namely Kathavumalai, and Arugkanalmalai and all the down streams that comes from the

surrounding hills flows as a small rivulet namely *Periyar odai* on the southern side of this village. This odai joins with the major river Marutanati near Cinnakodalangkadu.

This village is well connected by the major traditional trade routes. There are two major trade routes. One connects Palani, Chinnamanur, Uttamapalayam and Kambam. Another connects Madurai, Uttamapalayam and Kambam. Both the routes are land routes. Madurai and Palani are well connected with other trade centres. The sites mentioned above had epigraphical records to attest its closeness with trade guilds. For instance, Uttamapalayam is a Jain centre and it yielded Roman coins recently (Santhalingam1997a:57-59). Some 13th century inscriptions found at Chinnamanur speak on the trade that had taken place in this region (*SII* 23:430, 431 and 434).

The archaeological material unearthed at this village clearly suggests that this village is in continuous occupation since pre-Iron Age times. Anglade who first visited this site reported disturbed dolmens that found on the roadside leading Manalur (Anglade and Newton 1928:1). In the present explorations, Cist burials are identified in two locations, one at Talaikadu in the premises of the Coffee Board and another at Bommaikadu. The former site lies behind the Coffee Board office near Labourer's quarters. The latter site lies a km away from Thandikudi on the road leading to Pannaikadu. According to the villagers, there are a quite number of cist burials scattered in the area between Talaikadu and Bommaikadu. Due to the hidden nature, all of them could not be recorded. All these cist burials are exposed while levelling the land for coffee plantation. The density of the forest, thick vegetation and the intensive coffee plantation prevent the explorer to record all the cist burials. However, the availability of the cists and their size clearly suggest that this site is once survived as a huge burial complex. Intensive search and enquiries are made to locate the habitation mound finally yielded the result. The habitation mound is identified beneath the present occupation. A modest attempt is made to excavate the habitation in the available open area. Due to the nature of the terrain and the continuous cultivation would have destroyed the mound. According to the villagers, one of the disturbed cists is yielded quite a number of carnelian beads, iron swords and few pots. The excavated findings found at Senbaganur by Anglade in 1954 also suggest this.

A group of dolmens is found on the way to Murugan temple. This can be approached through Coffee Board from Thandikudi. These dolmens are locally called as *petthu.* There are eight complexes at this site found in disturbed condition on the rocky surface. Among them, two complexes are found just below the rocky surface and the remaining six complexes are found on either side of the road leading to Murugan temple. Of the six complexes, two are on the right side of the road and remaining four on the left side of the road while approaching from Coffee Board side. There are nearly fifty dolmens at this site. There is no specific cardinal direction followed in the construction of the dolmens. The available slope in the built up area determines their direction. It is observed that the

openings are found in the lower end. This type of construction would have helped in preventing the rainwater percolating directly into the chamber. Since the inclination of the chamber in line with the slope of the terrace, the percolation and seepage of water is totally prevented as the rainwater drains along the slope.

The village witnessed continuous occupation without break from pre-Iron Age times to the present day. Among the inscriptions, notable one is of the trade guild inscription. In total, four slabs are identified. The first one is installed on the northern side of the village on the way to Perung-kanal. The boulder like structure with conical top is installed in the open ground and is worshiped as a *kodakka-muntai*. It is exposed about two feet above the ground level. There is a square box in which certain engravings are seen. The second one is embedded into the soil in the Muttalamman koil street and near the shop of one Mr.Gobinath. This inscribed slab needs to be examined further after unearthing from the street concrete. The third one is installed, behind the house of Mr.Sundaramurthy, in a street corner leading to Madurai Veran koil. According to the villagers, this rectangular slab is almost 120 cm in height. Presently, this slab is exposed to a height of 45 cm above the present ground level. There are symbols like bow and arrow, sword, sun and moon that clearly points to an inscription issued by certain trade guilds.

Trade Guild Inscription

A rectangular slab erected in front of the Pattattu Vinayakar temple had an inscription in Tamil script engraved on both sides. The front side had 16 lines and backside had 17 lines. The epigraphical record is issued during the 12th regnal year (1280 AD) of Kulasekhara Pandya (**Fig. 2**). In this inscription the name of the village Thandikudi is mentioned as Tantrikudi. *Tanri* (*termenalia bellerica*) means a variety of tree having a great medicinal value and are grown in abundance in this area even today. *Kudi* means a village. In later days, the name Tantrikudi became Thandikudi. It records the agreement carried between the *urar* of Tantrikudi and the *urar* of Manalur after removing the enmity that existed between the two villages earlier. The cause of the previous enmity is not specified. The village Manalur is mentioned as *malaimandalattu aiyyappolil perurana manalur* thereby indicating that the village, lying in Malaimandalam, is one of the prominent villages of this region in which the trade guild Aiyyapolil resides. A stone smith Vallalapperuman Uyyan of Mayindramangalam engraved this slab. The Mayindramaggalam may be identified with the village Mangalakombu located about 4 km from Thandikudi on the road leading to Vattalakundu.

Memorial Stones

Nearly three memorial stones are identified in this village. All of them are installed in and around the Pattattu Vinayagar temple. Out of three memorial stones, one installed has three lines inscription. The inscribed memorial stone is installed on the left side of

the entrance of the Vinayagar temple under the pipal tree (**Fig. 3**). The record says that this is rose in memory of one Desa-andi who died at Kombai. The Kombai may be again identified with Mangala-kombu. The suffix *kombu* in the village Mangala-kombu would have stands for *kombai*. The sculptural representation and the palaeography of the script suggest that this would have installed in 17-18th century AD. The 60 cm tall memorial stone has hero with an attendant on the top and the inscription at the base. Hero in a standing posture holds a gun in his left hand and sword in his right hand. He has a tuft at his left. He has a broad eye, sharp nose and long ears. He wears a necklace and an undergarment. The attendant, shorter than the hero, is depicted on the right side of the hero. He is in standing posture with folded hands (in *anjali* posture) rose up to the waist level of the hero.

The second memorial stone is found in side the compound wall of the Pattattu Vinayagar temple. The hero facing to his right holds bow and arrow in charging posture. The quiver is hanging on his right shoulder. He wears head gear and anklets. A sword is tugged at his waist. The undergarment is ended with knots on both sides. The third memorial stone is installed opposite to the Pattatu Vinayagar temple near the road. In this, hero standing erect holds a sword with point facing top in his right hand. Left hand rested on the waist. Remaining things could not be recognised as the stone is defaced. Besides, two portrait sculptures are identified opposite to the Pattattu Vinayagar temple. Beautifully sculptured slabs are installed on a platform. Both of them are in *anjali* posture with a tuft on their right.

Excavation

Burial Complex

The cemetery occupies an area of more than 40 hectares (100 acres) with much concentration on the right bank of the river Marudanadi. It extends along the right bank starting from the Forest Bungalow on the west and Bommakadu on the east. The forest bungalow lies opposite to the village near the famous temple Murugan koil. The Bommakadu lies on the left side of the road leading to the major village Pannaikadu. The burial complex whether extended beyond this area could not be ascertained due to the terrain nature. The impressive complex of about 1000 burials is found to be distributed in the undulated rocky terrain dissected with numerous water bodies and channels. Only a few burials exposed with better landmarks could be counted. Remaining more than five hundred burials are hidden in nature and only a part of the cist or capstone is exposed. These are the burials left by the people through the years. There could have been many more burials earlier as the cultivators have removed many of them. The intensive coffee and cardamom plantation that had taken place in this region destroyed nearly half of the burial complex. About one third of these burials are still in better preservation. Most of

the burials are cairn-circles. In a few of them, cist is partially exposed due to the removal of the cairn packing by the cultivators of the field. The intensive cultivation particularly coffee and cardamom damaged the burials. The burials are locally known as *pettu*. It consists of four types of burial namely pit burial, urn burial, cist burial and dolmen. Each type has sub-types. For instance, the cist burial had simple cist, transepted cist and double cist varieties. Of the four types, in the first seasons of excavation (2004), cairn circles enclosing cist burial capped with huge capstone alone is alone opened. In the second seasons of excavation (2006), all the four types have been excavated. The limited availability of the fund restricted the excavator to expose only ten burials and it has been numbered as Meg. I to Meg. X **(Fig. 4)**. The graves Meg.I to Meg. IV had been excavated in the year 2004 and the remaining graves in the year 2006. A brief description and salient features of each burial is discussed below to understand the basic components of the site.

MEGALITH-I

Megalith No.I (Meg.I) is an undisturbed cairn circle lies in the Coffee Board premises located opposite to the present village. It lies on the elevated field overlooking the east flowing river Marudanadi. The river flows about 500 m north of the site. This is comparatively a larger stone circle noticed in this part of the burial complex. The east facing cist is with a huge capstone placed at the centre of a circle **(Fig. 5)**. The cist with passage on the east is exposed 55 cm above the present ground level. The eastern orthostat has a trapezium shaped porthole at the centre. The massive capstone weighing 4 tons placed over the cist. After placing the huge capstone perfectly over the cist, undressed boulders of irregular in size are placed at the ground level around the cist to form a circle. The cist is oriented east-west and is almost square on plan. In front of the chamber, a rectangular passage is constructed.

The careful exposure of the burial reveals that the funerary rituals are performed inside the cist to a larger extent. All the grave goods seem to be a single time deposit, placed directly on the floor slab of the cist. In total, there are 41 pots of different shapes placed in association with four urns. The four urns rested on the four corner of the chamber are the main constituent of grave goods **(Fig. 6)**. All other pots are either placed below or around these four urns. The placement of various grave goods like bowls, basins, plates, four legged jars, small pots, ring stands, big sized pots, lids, swords, daggers, L-shaped object, etc., clearly suggest that they started placing the grave goods from the west.

One of the notable iron objects recovered from this burial is a sword. This sword is placed on two ring stands and on a black and red ware bowl. The sword is placed in east-west orientation with tip on its east. The bowl is found below the hilt portion. At the centre and at the tip two ring stands of black slipped ware. The placement of the sword over a bowl and two ring stands deserves ones attention. This mid-ribbed sword

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does not carry wear and tear marks and it seems they specially acquired this sword after his death. The careful placement denotes some significance that associated with the deceased.

MEGALITH-II

Megalith No.2 (Meg.II) is located about 200 m east of Meg.I in a field called Velammal-Sethu Thottam which lies on the left side of Thandikudi-Pannaikadu main road (**Fig. 7**). It is a cairn-circle having inner diameter of 3.70 m. Though smaller in dimension than Meg.1, it showed some interesting architectural features. At the time of excavation the western half of the circle is completely removed. The capstone and part of the passage is completely exposed. The north western part of the capstone is broken due to vandalism. Further excavations conducted inside the cist revealed that it is disturbed with out removing the orthostats. They would have entered into the cist through the breakage made in the north western corner of the capstone. After removal of the capstone, a perfect cist and a passage on the east are exposed. The chamber is bifurcated in to two chambers by erecting a transept slab almost at the centre. The transept connecting northern and southern chambers slab had a round porthole. The northern chamber is further bifurcated into one more chamber on its northwest corner by placing a small rectangular slab. Two portholes are found, one on the transept slab and another on the eastern orthostat against the southern chamber. The front porthole scooped on the eastern orthostat is broken. The chamber did not yield any appreciable antiquities. A total of 8 carnelian beads, diminutive iron pieces, black and red ware plates and few black slipped potsherds are collected.

A passage is constructed against this porthole. The base of the porthole and the base of the floor slab of the passage coincide. On the floor level crushed black and red ware potsherds along with two black slipped ring stands were collected.

MEGALITH-III

Megalith No.3 (Meg.III) is located about 7.60 m northeast of Meg.II at angle 40° in a field called Velammal - Sethu Thottam which lies on the left side of Thandikudi - Pannaikadu main road. It is a cairn-circle. At the time of excavation the western half of the circle is completely removed. The eastern half and the capstone partially embedded in the section. The capstone is placed perfectly on the cist. Further excavation conducted inside the cist revealed that it is also disturbed. The capstone, however, is moved from its position to make space to enter into the chamber. Again it is replaced in the same position. On the removal of the soil around the capstone a wall like structure appeared on the southeast quadrant of the circle. The southwest and northwest quadrant of the circle is completely removed. The remaining circle wall has two courses of stone blocks placed at the ground level. The inner edge of the circle is lined with small blocks whereas the outer edge of the circle has boulders and triangular shaped blocks. The gap between the

inner and outer edges is filled with small blocks of stones to form a perfect circle. After removal of the capstone, a perfect cist and a passage on the east are exposed. On the whole, it is a simple cist with passage on the east. A round porthole is observed on the eastern orthostat. This is covered with a circular stone on its interior which is fallen inside the chamber. The chamber did not yield any appreciable antiquities. Three urns covering with a lid is placed in east-west orientation on the floor slab against the porthole. At the base of these urns, black and red ware bowls, black slipped ring stands, plates, carnelian beads and U-shaped iron piece are collected. Disc shaped etched carnelian beads littered at three points are recovered. Eight carnelian beads are collected on the south east corner and two on the southwest corner. A solitary bead is collected almost at the centre of the chamber.

MEGALITH-IV

Megalith No. 4 (Meg.IV) is located in the cultivated field locally called Bommakadu. The Iron Age circle under investigation lies about 1.5 km south of Thandikudi and 33.70 m east of the main road leading to Pannaikadu. The river Marudanadi flows 250 m away from the site. Though this is disturbed completely, it is one of the biggest and architecturally one of the best burial complexes so far excavated in this region. The circle stones and capstones are completely removed. After removal the earth, a perfect cist and a passage on the east are exposed (**Fig. 8**). The cist is divided lengthwise by placing a transept slab resulted with northern and southern chamber. The northern chamber is further sub-divided into one more chambers by placing a slab in north-south orientation. This chamber lies on the western end of the northern chamber. The southern chamber would have been divided into one or two more chambers. It could not be recognised as the slab is removed. In total there are three chambers at present. The cist had two round portholes. The first porthole is found on the main east-west transept slab connecting southern and northern chamber. The second porthole is found almost at the centre of the transepting slab connecting northern main chamber and the small chamber. The shape of the main porthole made on the eastern orthostat could not be recognised because of its broken nature. The chamber does not yield any appreciable antiquities as it is completely ravaged. However, total of 296 etched button shaped carnelian beads (**Fig. 9**) and 48 quartz beads of different dimension have been collected (**Fig. 10**).

+. Besides two rectangular four-holed spacer beads were collected. Of which one is carnelian and another is soapstone. In addition to these beads, iron arrowheads and knife, black and red ware bowls, lids, dishes, black slipped ware ring stands and lids and few bone pieces are collected. A few russet coated potsherds are also collected. A tiny gold piece is also recovered. The amount of beads and other objects collected from the cist clearly indicates its significance.

MEGALITH-V

Megalith No.V (Meg.V) (10°98'08" N77°39' 00"E) is located on the elevated flat surface at the distance of 890 m from Thandikudi with bearing of 133°. The famous temple Murugankoil dedicated to Lord Muruga lies at the distance of 1.07 m with bearing of 109° from Meg.V. At the time of discovery, it is found with a circle consists of eight boulders placed on the ground surface encircling a huge capstone placed perfectly on the cist. After removal of the capstone, a perfect cist with a passage on the east is exposed. On the eastern orthostat, a trapeze shape porthole was exposed. A bench attached to the western orthostat is found on the southern part of the chamber. Below this bench, 40 carnelian beads and black and red ware and black ware pieces were collected and again on the eastern and western end of the bench 19 carnelian beads were collected (**Fig. 11**). On the northern part of the chamber below a stone slab 93 carnelian beads, black and red ware, red ware and iron peaces were collected.

MEGALITH-VI

Ever since the dolmens of Palani Hills have been explored by Anglade and Newton (1928) and by Aiyappan (1940-41), there is hardly any attempt made to excavate the dolmens of Palani hills. The main reason for the slackness is attributed to its emptiness in its content. After Aiyappan, there is hardly any systematic exploration in this region. Only recently, M.Saranya, the Research Scholar of Tamil University, makes an earnest attempt to locate all the dolmen sites of Palani Hills (2003). She could able to locate more than 50 dolmen sites in Palani hills. The previous and present surveys suggest that the Palani dolmens are unique in many ways. Unlike the sites in the plain, dolmens of Palani hills are found in groups with in an enclosure wall. Further, these dolmens are found within the range of 3000 to 4000 MSL. The present group of dolmens placed with in a stone enclosure wall is also disturbed like others dolmens but still it has been excavated to understand the architectural feature of these graves. As there was no dolmen excavated after independence, it is decided to open one such dolmen at Thandikudi.

This dolmen (Meg.VII) is located (10°18' 07"N Latitude and 77°38' 28.7"E Longitude) on the rocky surface having elevation of 1385 m MSL. It lies at the distance of 724 m southwest of Thandikudi near the famous Murugan koil with 205° bearing. The bedrock where the dolmen is situated slopes downward from north to south. This dolmen has enclosure walls made of stone blocks roughly rectangular in shape. It was found to be sloping north-south along the longitudinal direction parallel to the rock bed slope. The enclosure wall is almost covered with cairn packing. The southern front portion is disturbed by the removal of the over-lying cairns. There was discontinuous and different number of stone courses on the enclosure wall implying the disturbance made during course of time. The top layer of the dolmen is found with an irregular heap of cairns mixed with

thin sand deposit and over which grass topping. By observation of the orthostats projecting above the cairns, existence of three chambers running longitudinally north-south could be seen. The capstones were broken and removed except for a chamber in the eastern side, which had two slabs of broken capstone lying haphazardly one-over other.

Upon clearance, a rectangular shaped enclosure wall made of rectangular faced stone blocks of different sizes were noticed As the enclosure wall is disturbed, one could not get the complete picture of the courses. However, on the northern side there is an existence of full courses numbering four. The outer face of the wall is placed with perfection. These walls are very regular, made up of rough blocks of no fixed size, some rather large, and cleverly adjusted without any trace of mortar. No chisel marks were noticed on these blocks. The layers were placed with technical perfection by the way of proper placement of stones of different size to avoid vertical cracks on the wall and to provide better interlocking. On removal of the overlying cairns, three dolmens facing south constructed side by side are exposed **(Fig. 12)**. These dolmens were placed within an enclosure wall in north-south axis with passage on the south. These dolmens are built by leaving a gap of 30-50 cm between the two consecutive dolmens. There are hardly any appreciable antiquities recovered due to extensive vandalism.

MEGALITH-VII

Megalith No.VII (Meg.VII) (10°18'19"N 77°38'26"E) is one of the earliest graves so far excavated in this region. It is dated to pre-Iron Age level based on the material collected from the grave. It is located on the elevated flat surface at the distance of 463 m from Thandikudi with 233° bearing. The famous temple Murugankoil dedicated to Lord Muruga lies at the distance of 13.40. It is a stone circle entombing a pit burial. At the time of discovery, this burial is exposed with circle boulders. Fifteen boulders have been placed in a circular form with a 5 m diameter. A capstone placed at the centre of the circle is partially exposed. The grave goods were placed in rows one above the other in an east-west axis in a rectangular pit dug into the natural soil. The narrow pit at the base has filled with fine soil. It served as cushion for the grave goods placed over it. A ring stand of red slipped ware is placed on the western most end of the narrow pit. After filling the narrow pit with fine soil, two small thin slabs were placed on both end of the pit. The slab placed in the eastern end is square in shape and the one on the western is rectangular in shape. The first row of grave goods was placed in east-west axis starting from western most point. All the pots numbering twenty six were placed with mouth facing east. The first bottom layer or row consists of fifteen pots containing urn (1), red slipped pot (5), red ware lipped pot (1), red ware bowl (4), black and red ware dish-on-stand (or shallow bowl-on-stand) (1), black and red ware deep bowl (1), black on red ware basin (1) and red ware ring stand (1). The top layer consists of 11 pots containing red slipped pot (4), red ware bowl (2), black and red ware dish-on-stand (or shallow bowl-on-stand) (1), red ware ring stand (2),

black on red ware pot (1) and red ware *vanali* (1) (**Fig. 13**). One of the important and interesting features to be noted down is that all the pots have been placed with mouth facing east. This phenomenon is also noticed in the urn burial (Meg.VIII) exposed near to this burial. The whole grave goods are covered with fine soil up to the mouth of the pit. To demarcate the pit, small stone pieces are placed on the boundary of the pit. Two small stones one on the eastern end and another on the western end are placed. Capstone is made up of four pieces. These four pieces of capstone are placed in east-west orientation covering entire pit below it. The eastern and western edge of the capstone touches the circle boulder. Of the four pieces of the capstone, the eastern most rectangular flat slab is bigger in size and covers almost half of the pit. The second capstone placed on the western most end. There is a gap of about 46 cm between the eastern and western capstones. This gap is covered with two more overlapping slabs. There is a 20 cm soil cover between the capstone and the grave goods. Irrespective of the soil cover, the pots have been crushed due to the weight of the capstone. Around this capstone, twelve boulders were placed at the ground level in circular. The capstone is covered with 40 cm soil. On the whole, it is a stone circle on the surface level and is a pit burial in the sub-surface level. Whether there is any cairn packing at the time of disposal of the dead could not be ascertained. Therefore, as on today, one may designate it as a pit burial enclosed with a stone circle.

The interesting feature of this pit burial is the non-availability of the iron, carnelian bead and the presence of black-on-red ware. So, it is unique in many ways. The pots in a row are placed in a pit like in neolithic-chalcolithic graves. The grave goods are placed with mouths of all pots facing east. Like Meg.VIII, this burial also yielded black painting on red surface on selective pots akin to chalcolithic pots. The non-availability of the iron and the availability of the black-on-red ware suggests to its early date. It can be safely placed in pre-Iron age level.

MEGALITH-VIII

Megalith No.VIII (Meg.VIII) (10°18'20"N 77°38'26"E) is located on the elevated flat surface at a distance of 477 m from Thandikudi with bearing of 232°. It is a simple urn burial placed in a pit. A coarse red ware urn is placed at the centre of the pit in a slanting position with mouth facing east. This urn was closed with a red ware pot which is completely crushed again due to the weight of the boulder. Around the urn on its southern side, row of pots were placed in a systematic manner all facing east (**Fig. 14**). Such phenomenon, mouth of all pots facing east, is observed in Meg.VII. On the western end near the base of the urn, a beautiful black on red ware is placed. The pot is applied with a red slip over which black painting is executed. The neck portion is executed with diagonal crisscross mat impression design. The shoulder portion of the pot is executed with leaves at regular interval. The leaf design has a conical top and bottom. Such black-on-red ware is noticed in chalcolithic levels of central India and in neolithic-chalcolithic levels of

Karnataka and Andhra Pradesh. Such black-on-red ware pots are unearthed first time in Tamil Nadu. Next to this black-on-red ware pot, a red pot with out-flared rim with short neck and globular body is placed. Next to this red ware pot, a black and red ware ring stand holding a black and red ware deep bowl on top is placed. The leaf design in black colour is executed on the exterior surface but below the ring portion. The design is identical to the one noticed on the basin of Meg.VII. Next to this, a red ware basin like pot (*vanali*) with a beautiful raised handle on both ends is placed on its eastern most point. Below this basin, two pots are noticed. The first one is a small bowl of a black slipped ware and the second one is a long necked black slipped ware bowl with prominent carination at the centre. The interesting feature of this pit burial with urn internment is unique in many ways. The urn is placed in a pit in slanting position with mouth facing east and is covered with a lid. The grave goods are placed only on the southern side of urn in a row with mouths of all pots facing east. Like Meg.VII, this burial also yielded black painting on red surface on selective pots akin to chalcolithic pots. This grave curiously did not yield any iron piece, carnelian bead and any human bones. The non-availability of the iron and the availability of the black-on-red ware suggests to its early date. It can be safely placed in pre-Iron age level.

MEGALITH-IX

Megalith No. IX (Meg.IX) (10°18'14"N 77°38'25"E) is located in the cultivated field locally called Dr. Senthilnathn Estate at a distance of 582 m from Thandikudi with bearing of 225°. It is a cairn-circle having a huge capstone at the centre placed on a cist. It is partially exposed at the time of excavation. After removal of the capstone a perfect cist with a passage on the east are exposed. A trapeze shaped porthole is found on the eastern orthostat. This porthole is closed with another slab from the passage. The chamber does not yield any appreciable antiquities. However, two etched button shaped carnelian beads, two iron coil, a knife and an arrow head were collected on the floor slab at the depth on 180 cm. The double-edged knife is placed near the porthole. Besides, black and red ware, black ware and red slipped ware pots were collected. A ring stand of black slipped ware also collected. All of them were crushed due to the tight packing. One of the interesting features of this grave is the placement of four quartz pieces each at the four corners of the chamber.

MEGALITH-X

Megalith No. 10 (Meg. X) (10°18'15"N 77°38'25"E) is located in the cultivated field belongs to the Dr. Senthilnathan. The circle stones and capstones are completely removed by the cultivators at the time of investigation. After removal of the bushes and the topsoil, double cists have been exposed (**Fig. 15**). Such double cists have been exposed first time in Tamil Nadu. The northern chamber and the southern chamber had independent passage on the east. The northern chamber yielded appreciable antiquities mainly consists of beads

of quartz (**Fig. 16**), carnelian, agate and steatite. Besides the beads, two pieces of urn pieces are also recovered. The first one, being a knife, is appeared opposite to the porthole. The second one being an arrowhead is placed on the floor. Broken piece of bowls of black and red ware, ring stands of black slipped ware and pots of red slipped ware were collected at different levels particularly below the porthole level. Micro beads, beads of carnelian and quartz are appeared from the level of porthole. The list of beads collected from the chamber is given below:

The southern chamber does not yield any appreciable antiquities except beads of quartz, carnelian and agate. Besides the beads, a sword is collected on the floor slab near the western orthostat. A bowl of a black slipped ware is placed on the floor slab against the southern orthostat.

Chronology

The excavation carried out in two seasons had a limited control over the chronology. However, the six graves opened in the second seasons of excavation yielded a tangible evidence to understand the specific chronological aspect. Fortunately, all the six graves are of different varieties and each had its own chronological implication both in form as well as in content.

The ceramics of Thandikudi had two types. The first one belongs to the pre-Iron Age level and the second one belongs to the Iron Age level. The potteries of pre-Iron Age receive special attention as it had some unique shapes and designs particularly the black-on-red ware basin, ring stand and pot, lipped pot of red ware (or spouted vessel), black and red ware dish-on-stand and basin (or deep bowl) with raised lugs above the rim (*Vanali* like object) collected from the pit circle and urn burial. These types of pots were not so far reported from any part of Tamil Nadu both in excavation as well as in exploration. The special shapes and designs also help indirectly to date some of the graves to pre-Iron Age level.

Such pre-Iron Age ceramics have been reported in the graves of Kodaikanal region and were presently housed in Madras Government Museum. These ceramics were collected by Aiyyappan through his excavation in 1940 (Aiyyappan 1940:313-379) and have been studied by Allchin in the year 1957. Later, the fine aspects of these ceramics have been published (Allchin 1974). However, he promptly notes "it is evident that far more excavation and field work will be needed before it becomes possible to establish the full history of the many divergent forms of graves associated with the South Indian Iron Age and loosely called 'Iron Age'". As pointed out by Allchin, the lack of excavation prevented him to come to a definite conclusion. Irrespective of this lacuna, he analysed those pots extensively and dated them to pre-Iron Age and early Iron Age. He dated the pre-Iron Age pots to c.1300-1000 BC as they were reported from late neolithic levels at Piklihal, Maski, Hallur, T. Narashipur and Sanganakallu. Further he suggests that these grave group shares six of eight traits with pre-iron contexts of south India.

Therefore, the ceramics recovered from the present excavation in Meg. VII and VIII are very crucial to date these graves. The important factor that needs to be observed besides the above said unique types of potteries is the non-availability of iron objects in the graves of Meg. VII and Meg. VIII. Further, these two graves also yielded very limited number of black and red ware pots. The grave (Meg. VII) had only three specimens out of 26 specimens. Like wise, Meg. VIII also had a solitary example. These are in contrast to the one collected from the chamber burial. In cists and dolmens (Meg. I, II, III, IV, V, VI, IX and X), the black and red ware, iron and beads of carnelian dominate the repertoire. Importantly, all these graves did not yield any black-on-red ware. The absence of iron and carnelian beads and presence of black-on-red ware in one group of graves like in pit burial (Meg.VII) and urn burial (Meg. VIII) and the absence of black-on-red ware, iron and carnelian in another group of graves and presence of iron and beads in large numbers provide a clue to understand the different phases of graves. The following table would give the nature of repertoire.

S.No.	Grave	Nature of ware	Type	Total No.
1.	Meg. VII	Black-on-red ware	Basin	1
2.	,,	Black-on-red ware	Pot	1
3.	,,	Red ware	Urn	1
4.	,,	Red ware	Lipped pot (spouted vessel)	1
5.	,,	Red ware	Bowl	6
6.	,,	Red ware	Ring stand	3
7.	,,	Red ware	basin like pot (*vanali*) with a beautiful raised handle on both ends	1
8.	,,	Red slipped ware	Pot	9
9.	,,	Black and red ware	Dish-on-stand	2
10.	,,	Black and red ware	Deep bowl	1
11.	Meg.VIII	Black-on-red ware	Pot	1
12.	,,	Black-on-red ware	Ring stand	1
13.	,,	Black and red ware	Bowl	1
14.	,,	Black slipped ware	Miniature bowl	1
15.	,,	Black slipped ware	Long necked bowl with carination	1
16.	,,	Red ware	Pot	1
17.	,,	Red ware	basin like pot (*vanali*) with a beautiful raised handle on both ends	1

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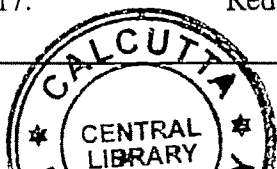
In the above table, the Meg. VII yielded black-on-red ware basin (or deep bowl) and pot. The Meg. VIII yielded black-on-red ware pot and ring stand. The painting in black colour has been executed on the exterior surface. Such black-on-red ware pots have been reported in chalcolithic levels of Central India and in neolithic-chalcolithic levels of Karnataka and Andhra Pradesh. The excavation at Ramapuram in Kurnool district of Andhra Pradesh reported with such varieties in neolithic-chalcolithic level. It is to be noted here that among the two graves (Meg. VII and VIII), the pit burial seems to be slightly earlier in date than Meg. VIII. The reason arriving to this conclusion is the placement of grave goods and the type of urn. In Meg. VII, the graves are placed in east-west axis with urn at the western most point. The urn is placed horizontally with mouth facing east. This urn is comparatively smaller in size. Whereas the urn in Meg. VIII is placed in a slanting position with mouth facing east and the grave goods are placed around the urn at the bottom. Based on the above evidence, the two graves (Meg. VII and VIII) of Thandikudi may be safely dated to pre-Iron Age dating between 1500 BC-1000 BC and the remaining eight graves could be dated to Iron Age dating between 1000 BC-500 BC.

It is quite interesting to note that the pre-Iron Age graves are located on the highest point of the burial complex just opposite to the habitation mound on the other bank. As the burial complex grows through the subsequent years, the graves moved progressively away from the habitation. The comparative study made on the graves suggests that people buried their dead near to the habitation in an elevated field on the opposite bank of the river Marudanadi and from then they progressively moved along the bank. In total, ten graves have been opened. These graves could be placed in chronological order based on the content as follows pit burial (1), urn burial (1), simple cist (4), double cist (1), cist with bench (1), transepted cist (1) and dolmen (1). Nearly seven varieties of graves have been identified among the ten graves opened in two seasons of excavation. Many more such varieties may come up if one opens more graves within the burial complex. Therefore, one needs to take extensive excavation in different locations within the Palani and Kodaikanal hills to place the chronology of each variety on a firm foot.

Sum-up

The explorations and subsequent excavations carried out in the pepper and cardamom growing Lower Palani hills reveals the continuous occupation from pre-Iron Age times down to the present day. The occurrence of dolmens, cists and urn burials points to the convergence of the different cultural traits. The pit burial with two rows of grave goods placed in a pit all facing east, east facing urns and graves goods, black-on-red ware, four urns placed directly on the floor of the cist, double cist and beads of quartz and steatite micro beads are some of the unique features encountered for the first time in Tamil Nadu. The similarity between the architectural features of the graves and grave goods like quartz beads, iron objects and pottery that encountered at this site and in the plains show the

cultural contact. The occurrence of beads of carnelian and quartz in large numbers suggests their long inland trade contacts. In exchange of these precious materials, they would have traded spices and forest goods. The inscriptional evidences speak on the trade and the trade related disputes occurred at this site. The limited excavation is provided only a glimpse of the enormous data on the nature of the society that survived in the wooded forest. Any future excavation may throw much light on the nature of the site.

Acknowledgements

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In Quest of the Antiquity of Leprosy: The Early Indian Context

Sukla Das

From the viewpoint of a medical historian, detailed perception of illness recorded in diverse cultures is of immense significance.[1] Large lacunae, however, exist in our knowledge of the diseases of antiquity owing to paucity of crucial details, leading often to hypothetical analyses. In spite of multifarious constraints, it has to be admitted that history of human diseases has become the most fascinating area of research in socio-cultural history.

Admittedly, one cannot ignore the importance of biological aspects unique to diseases but social, cultural and individual considerations do contribute to the expression of diseases in society.[2] Of all diseases, leprosy is considered one of the most important from the historical, geographical and cultural point of view.[3] It has been a great scourge since time immemorial and is one of the six diseases identified by WHO as a priority health problem in the present world.[4] Significantly, in the global perspective more than 60 per cent of infected persons are in India.[5]

Leprosy is identified as one of the major tropical illnesses, and the tropical belt still offers a germinating ground of diverse health problems.[6] Leprosy caused by parasites is a chronic communicable granulomatous disorder affecting mainly the skin and peripheral nerves. Though the precise mode of transmission remains uncertain, the pathogen is usually thought to enter the body through the mucous membrane of the upper respiratory tract or through close and repeated skin contact.[7] Some medical scientists contend that the infection may even be transmitted through insect bite, since the disease organism has also been found in insects.[8] The causative agent *Mycobacterium laprae* was discovered by a Norwegian physician, G. H. Armauer Hansen in 1873. Hence it is also known as Hansen's disease.[9] In almost all cultures throughout history, leprosy has aroused dread and loathing.[10]

One of the oldest records of leprosy dates back to 1400 BC in Egypt.[11] In a review of the history of leprosy, K. Manchester has cited the earliest skeletal evidence as that from Ptolemic Egypt (2nd century BC).[12] It is of equal antiquity in India[13] as can be deciphered from the Vedic texts that furnish a fairly long list of disease experiences.[14] Clinical leprosy finds no place in the Hippocratic Corpus.[15] It is generally believed that the disease was brought to the West from India with the returning army of Alexander the Great in 327-326 BC, and the process of diffusion started with Roman colonization.[16] One can however accept the assumption that perhaps spread of leprosy was attendant upon development of communication, troop movements, and commercial intercourse.[17]

The principal diseases that occur in the Vedic texts, more or less clearly discernible in their nature and relationship to those mentioned in subsequent classical medical

compilations of ancient India, include *yakṣmā* (tuberculosis), *takman* (fever akin to malarial fever), and *kilāsa* (leprosy and skin disorders).[18] Some ancient medical terms appear to cover a wider range of meaning than is expressed by their modern equivalents. The words *kilāsa* and *kuṣṭha* in the Vedic texts, according to J. Filliozat, denote all sorts of dermatoses, leprosy being one of the severe forms.[19]

The term *kilāsa* is rather problematic. In the Ṛg Vedic text the word '*kilāsa*' denotes a spotted deer of Maruts.[20] By the time of the *Atharva Veda*, however, it signified a disease.[21] Sāyana considers it as *śveta kuṣṭha* or a skin disease[22] and Macdonell and Keith interpret it as a type of leprosy.[23] The Vedic concept of diseases is a queer blending of both rational and irrational phenomena. However, the concept of disease began changing from the Atharva Vedic phase.[24] In the *Atharva Veda* the etiology of kilāsa is stated in different ways. On the one hand it highlights physical contact and inheritance factors, while on the other it links the disease with sins committed by the patient and hostile witchcraft hurled by a rival.[25] The *Atharva Veda* significantly located *kilāsa* confined to the skin as well as its penetration into the bone,[26] presumably to highlight different degrees of affliction.

A perusal of the Atharva Vedic hymns indicates that medical men had evolved their own strategies to combat the disease, which included chanting of hymns addressed to the dark coloured rajanī plant to drive away afflictions,[27] application of herbal ointments to make the skin uniform,[28] exposure to sunrays,[29] use of the medicinal plant *kuṣṭha*[30] described as best of all herbs (*uttamā*)[31] having all the healing properties[32] prescribed for universal remedy (*viśvabheṣaja*),[33] and tying up of herbal amulets having the potential for dispelling malevolent forces on patients.[34]

Amulets formed a separate mechanism for administering medicine. Significantly, use of antelope horn in making amulets for patients also finds mention in the context of the treatment of hereditary diseases (*kṣetriya*)[35] to which category *kilāsa* was also included. Use of horn as a curative practice appears to be of remote antiquity. It is important to note that horns form one of the cardinal motifs of the seals discovered from the Indus culture sites and E. J. Mackay suggests that people valued them for their medicinal properties.[36] John Marshall discovered several pieces of antlers through archaeological excavations, and he too conjectures that they were used as medicine.[37] Use of horn in healing is specifically recorded in the Bower Manuscript or Navanitaka Manuscript on medical practices discovered from Kashgarh in Chinese Turkistan in 1890, suggestive of the continuity of an antique medical tradition.[38]

Distinctive mention in the *Atharva Veda* of the name Āsurī-śyāmā who first made remedy for leprous spot (prathamedam kilāsabheṣajamidam)[39] needs pointed attention. Sāyana takes Āsurī in the sense of a female Asura[40] but scholars have also interpreted it as a plant. Asuras or the non-Vedic people were presumed to possess wisdom to detect

medicinal properties of many plants: they have been documented in the *Atharva Veda*.[41] Could it be a pointer to that direction? For it has been acknowledged that the *Atharva Veda*, the oldest literary monument of early Indian medicine, had incorporated many usages and practices from the diverse medical traditions of the non-Vedic people.[42]

Atharva Vedic medicine, admittedly, was a magico-religious system and the healer was not a mere physician but a priest-physician supposed to have the power to drive away evil forces through prayers, magic, witchcraft, amulets, charms, and propitiation of divinities.[43] But from the prominent figuring of numerous herbs and plants in the text with special reference to their healing power, it appears that knowledge of herbal pharmacy was gradually expanding. It marked the surfacing of empirico elements in early Indian medical practices.

Cutaneous afflictions find mention in the early Buddhist texts too.[44] Of the five principal diseases recorded in the *Dīghanikāya*, leprosy is one, and in the long list of diseases furnished by the Niddesa, kilāsa is included.[45] The Jaina *Ācaranga Sūtra* also speaks of it.[46] The continuity of the early medical tradition is seen maintained in the early Buddhist and Jaina literature.[47] It was probably derived from a common source of medical lore.[48] Pāṇini, brought up in Takṣaśilā, the reputed centre of medical studies, named several diseases along with the word '*kuṣṭhī*' or one afflicted with leprosy.[49] This is indicative of its prevalence as an alarming ailment. Kauṭilya even speaks of medicine administered through the nose to treat leprosy.[50] On the whole an awareness centred round leprosy had fairly been formed.

In classical medical texts of early India like the *Caraka* and *Suśruta Saṃhitās, kuṣṭha* finds meticulous elaborations pinpointing its etiology (*hetu*), pathogenic materials (*dravyam*), symptoms (*liṅgam*), and degrees of possibilities of cure and disease management.[51] Seven types of *mahākuṣṭhas* (major kuṣṭhas) mentioned in the texts[52] appear to be variants of leprosy,[53] while the eleven *kṣudrakuṣṭhas* (minor *kuṣṭhas*) were probably other cutaneous disorders.[54]

The *Atharva Veda* made a subtle distinction between *kilāsa* and *palita*.[55] According to some scholars *palita* was either leukoderma (*svitra*) or a stage of *kilāsa*.[56] The *Suśruta Saṃhitā* on the other hand differentiated *kilāsa* from *kuṣṭha*, the former being confined to skin (*tvak*) and marked by absence of secretion, though it could at some stage be incurable.[57] It underlines the changes that occurred in disease perception, and *kilāsa* might have deflected from its older connotation.[58]

The concept of *tridoṣa* (*vāyu-pitta-kapha*) and their equilibrium was considered essential for maintenance of health in ancient India.[59] The *kuṣṭha* varieties were considered by the Saṃhitā texts as actions of deranged *tridoṣa* as well as the work of parasites.[60] Tridoṣa derangement was specifically attributed to wrong diet, improper daily regimen, and sins and offences committed by the patient in his previous birth.[61] *Mahākuṣṭhas* were

understood to be highly contagious, communicable through touch and using the bed, the eating vessel, and the costumes and cosmetics of the patient.[62] It was also thought to be inherited by the children of the affected patients.[63]

Symptomatic enumerations furnished by these texts point that manifestation of leprosy resemble other skin disorders with roughness of skin marked by patches, itching sensations and rapid growth of ulcer.[64] The early cosmetic symptoms were followed by a loss of feeling or numbness of the affected areas[65] and eventual invasion to deeper tissues and organs.[66] The advanced symptoms included damage to the body, falling away of body parts (*praputāni cāṇge*), and deformities of limbs.[67] It seems that the knowledge of diagnostics had considerably advanced. Surprisingly, these observations find corroboration in modern medical science as well.[68]

Modern medical approaches lay prime stress on the fact that leprosy is completely curable.[69] Curability of leprosy however was never doubted even in ancient India. In fact the Saṃhitā texts divided the disease into three definite categories: curable (*na kṛcchram*), difficult to be cured (*kṛcchra sādhyāni*), and incurable (*vibarjayet*).[70] For management of leprosy the texts speak of several therapeutic measures including medicinal preparations for internal administration and external application,[71] fumigation in the nose,[72] purgation, blood-letting,[73] and even surgical intervention.[74]

As regards diet, rice, barley and other cereals along with meat-soup is primarily recommended.[75] Modern medical research has established that immunological mechanisms are the most cardinal factors in either susceptibility or relative protection against leprosy, and immunological mechanisms can be suppressed by malnutrition, particularly protein deficiency.[76] Diet recommendation of the Saṃhitā texts probably provided protein supplement to the patients. The concept of immunity (*vyādhi kṣamatva*) finds elaboration in Cakrapāṇidatta's commentary on *Caraka Saṃhitā*.[77] The text says that the disease expresses itself when nutritional and immunological status of the body is low.[78]

The texts have laid equal emphasis on a correct daily regimen and meticulous maintenance of personal hygiene[79] whose relevance has even more strongly been felt now. Early Indian medical professionals identified poor hygiene, social distress, and crowded living as the major risk factors.[80]

It appears that perception of diseases in antiquity was a curious blending of demonstrative accuracy and traditional confusion. Since the Atharva Veda ideology, leprosy was linked with the concept of sin committed by the sufferers.[81] In spite of their rich rational core, the Saṃhitā texts also identified sinful acts of the present and previous life as one of the causal factors of leprosy.[82] According to the *Suśruta Saṃhitā*, leprosy occurs due to murder of a brāhmaṇa, a woman, a good person, and appropriation of goods belonging to others.[83] The idea of sin, thus established, percolated into the vast body of Puranic literature.[84] The Purāṇas played a significant role as the most effective media for

mobilizing popular opinion in relation to *pāpa* (sin) - *puṇya* (merit, virtue) conceptual issues.[85]

Designated as a *pāparoga*,[86] leprosy was thus viewed from a different angle. Consequently, several expiatory rites like feeding of brāhmaṇas,[87] the sacrifice of a white cow,[88] ceremonies in connection with the Maruts,[89] the worship of the sun,[90] and similar other rites were prescribed and innovated as a way to curing leprosy.

It was also believed that there is a magical power of truth (*satya*).[91] A *Jātaka* anecdote narrates how Sambulā cured her husband suffering from leprosy by means of acts of truth (*saccakiriyā*),[92] thus propagating the moral virtue of truthfulness. The belief is perpetuated in the medical texts too.[93] They have laid special stress not only on medicine, diet, personal hygiene and daily regimen, but also on expiatory penances and the avoidance of sinful actions.[94]

Grafting of these extra-medical ideas and attitudes apparently diluted the logical aspect of the texts. It has, however, been suggested that it was only a camouflage to save genuinely scientific contents of the texts from counter-ideology.[95] It was not 'driving out the logical' but a diplomatic compromise for preserving the 'logical'.[96] D. P. Chattopadhyay observes that the ransom thus offered to counter-ideology for protecting science was unfortunately misunderstood by later medical men who had accepted the entire gamut of contents, rational and extra-medical, and allowed to perpetuate sundry superstitions and prejudices to thrive.[97]

The *Suśruta Saṁhitā* makes the profound statement that uncured leprosy is the most painful and troublesome of all diseases or *kaṣṭatara roga*.[98] Considering the severity of leprosy which involved wasting of muscle, deformities and mutilations with eventual paralysis, this disease was much dreaded in comparison to other ailments. It appears that a fear psychosis was being socially created in early India through the concept of sin and divine retribution.[99]

Leprosy had also developed a strong cultural bias since it was believed to be highly contagious and hereditary.[100] This view has been refuted by modern findings. Admittedly, it is a communicable disease but only when there is continual skin contact with the affected person.[101] It is a bacillary disease and therefore not hereditary.[102] No other disease in human history has created such socio-psychological tensions as leprosy and the word 'leper' still has a malignant ring.[103]

Strict social isolation of individuals designated as lepers was rigorously practised in early India[104] to control contagion, and the much maligned word '*kuṣṭhī*' reserved for leper's children[105] is suggestive of indignity and ostracism inflicted on them. Marriage to a leper was sternly prohibited.[106] Matrimonial alliance with families whose any member suffered from leprosy was socially debarred.[107] Kauṭilya even advised a ruler afflicted with *kuṣṭha* to beget an heir by *niyoga*.[108] Sexual transmission of the disease was underlined

in the Saṁṭhitā texts.[109] In fact a leprosy patient had to face multiple stigmatizations: from neuropathic manifestations leading to physical deformities, from moral censorship for being identified as a sinner, and from an unsympathetic social attitude through ostracism. Stigmatization of lepers, however, was not confined to the early Indian tradition. It was in vogue in ancient China,[110] East Asia[111] and Europe[112] with striking exception in the Islamic tradition.[113]

Magic, myth, superstition, prejudice and prohibitions that had been transmitted, internalized and reconstituted over time had formed a conceptual framework in early India within which this health problem was perceived and perpetuated for centuries. Even though the knowledge of diagnostics advanced, a rational approach to leprosy could not develop surmounting old orthodox beliefs and notions by exploding the myth of *pāparoga* and articulating the fact that *kuṣṭha* is like any other disease.

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When is a Rose Apple not a Rose?

MICHAEL W. MEISTER

For more than a hundred and fifty years *jambū* has been assigned as part of the Latin name given in colonial times to India's 'rose apple'.[1] This moderately small fruit tree, *Syzygium jambos* (syn. *Eugenia jambos*),[2] "has several common names, including [...] rose apple, Malay apple, Malabar plum, and jambu. The edible fruit is shaped like a small pear. The plant is native to Southeast Asia but is naturalized in India," as reported by that modern fount of partially accurate knowledge, the Wikipedia.[3] That *Eugenia jambos* was not a native plant in ancient India, however, can be confirmed from a number of botanically oriented sources.[4]

Through another information search-site,[5] we find:

> Continent Jambudvipa (*Rose Apple Island*), also known as *Sudarshandvipa*, forms the innermost concentric island in the above scheme of Puranic dvipas or continents. Its name is said to derive from Jumbu tree (another name for the Rose Apple, a kind of black plum). The fruits of the Jambu tree are said to be as large as elephants and when they become rotten and fall upon the crest of the mountains, a river of juice is formed from their expressed juice. The river so formed is called Jambunadi (Jambu river), which flows through Jambudvipa is said to comprise nine *varsas* or *zones* and eight *mountains*.

That the rose apple might be an inappropriate fill-in for the mighty *jambū* tree described in the *Mahābhārata*, located on a mountain at the center of the human-inhabited continent of Jambudvīpa, might seem obvious from one of its early colonial period notices. *The American Druggist* reported in February 1887:

> The Jambu tree plays an important role in Hindu mythology. The Purānas, in particular the Vishnu-Purāna, in giving an account of the created world, places the immense mount Meru in the centre of a group of seven large insular continents, one of which comprises India herself. Upon the mountain Gundhamādhana, situated upon this continent, stands an immense Jambu tree, eternally alive and bearing flowers and fruit, forming, as it were, the great standard of India. From this tree the whole continent receives the name Jambu-dvīpa, and this was subsequently used by the Buddhists as a name for India itself. The legend says that this gigantic tree bears fruit as large as elephants: when they fall upon the crest of the mountain from being over-ripe, they pour out juice enough to from the Jambu River, the waters of which are drunk by the inhabitants and render then content and happy. [...] All this, and much more that could be said, shows in how great esteem the Jambu tree has always been held in India.[6]

The American Druggist's source at the time for describing the *jambū* fruit and its importance was probably H.H. Wilson's 1840 translation of the *Viṣṇu Purāṇa*. Wilson had written that

> From the Jambu-tree the insular continent Jambu dwipa derives its appellation. The apples of that tree are as large as elephants. When they are rotten, they fall upon the crest of the mountain; and from their expressed juice is formed the jambu river, the waters of which are drunk by the inhabitants: and, in consequence of drinking that stream, they pass their days in content and health, being subject neither to perspiration, to foul odours, to decrepitude, nor organic decay.[7]

Scientifically skeptical Americans in *The American Druggist*, however, further reported that "Prof. Dymock describes the fruit and bark as follows: 'the fruit, unless imporved by cultivation, is about the size and shape of an olive, of a purple color, and very astringent.' [...] At present there is only very little of the seed available here in New York, but an invoice is shortly expected."

That an olive and elephant are not the same has eluded conventional wisdom for more than a century. The earliest references to Jambudvīpa surviving are probably those in Aśoka's inscriptions,[8] and certainly it is early Buddhism that makes much of this continent's singular significance:[9]

> The continent is ten thousand *yojanas* in extent; of these ten thousand, four thousand are covered by the ocean, three thousand by the Himālaya mountains, while three thousand are inhabited by men.
>
> Sometimes in Jambudīpa there are as many as eighty-four thousand cities; this number is sometimes reduced to sixty thousand, forty thousand, or even twenty thousand, but never to less. In the time of Aśoka there were eighty-four thousand cities, in each of which be built a monastery. In the *Aṅguttara Nikāya* it is said that, in Jambudīpa, trifling in number are the parks, groves, lakes, etc., more numerous the steep, precipitous places, unfordable rivers, inaccessible mountains, etc.

I have made a point of citing 'soft' as well as 'hard' sources, in this era of the Internet, partly because the distinction between soft and hard evidence is not merely a modern one but has been an important distinction for well more than a hundred years. Anyone using the series of reformulated Gazetteers of the British period knows how prose could often be repeated, reprocessed, and mis-cited (if at all). 'Knowing' often is more 'soft' than not.

A. Nugteren has recently conveniently summarized current knowledge about *jambū:* "In the *Jātaka and Lalitavistara* accounts of the events preceding the Bodhisattva's birth, it is said that he chose Jambūdīpa [...] as the continent where he was to be born. [...]

The *jambū* is the rose-apple tree (*Eugenia Jambolana*), which also figures in the story of the Bodhisattva's first meditative experience."[10] I might point to Alexander Cunningham's discoveries of the *stūpa* at Bharhut, however, and its exceptional narrative reliefs to show that this identification of *jambū* was somewhat less certain early in the nineteenth century. Among scenes at Bharhut was one showing a tree, altar, and six deer (**Fig. 18**), which Cunningham labeled: "The *Jambu, or Eugenia Jambu.*—The tree here identified was recognized by my native followers. It is apparently a holy Tree, as it has a throne beneath it surrounded by a number of spotted deer."[11] The deer are both stags and does, and gather around the sacred tree as if its fruit were the wisdom offered by the Buddha himself.

There is another relief at Bharhut that is actually labeled *jabū Naḍode puvate*, "the Jambū tree on Mt. Naḍoda" This shows two figures between a tree and an altar, two arms of a tree-spirit extending from the tree to offer a 'bowl' of food and a vessel of water (**Fig. 17b**).[12]

Such images at Bharhut can introduce a whole body of sculptural evidence that has too often not been brought into the discussion of *jambū*. As we know from continuing debate about another important mythic plant from ancient India, *soma*, there may be no single botanical answer and there may indeed have been shifting substances and sources over a very long time to fill the role.[13] To have physical representations of *jambū* from the early centuries BCE, contemporaneous with early Buddhist engagement with the symbolism of Jambūdvīpa, is a remarkable and largely overlooked opportunity.

My own search for *jambū* began with a different object, an unparalleled sixth/seventh century CE sculpture I helped excavate at Kafirkot above the west bank of the Indus River in Pakistan.[14] This three-faced seated figure holds a scepter, topped by a cluster of distinctively long pointed leaves from which an aureole of 'seeds' began (**Fig. 17d**). With a variety of 'soft' and 'hard' evidence to muster, I came to see this as a *jambū-dhvaja*, a term Monier-Williams cited from the *Mahābhārata* in reference to the "enormous Jambu tree on Mount Meru visible like a standard to the whole continent."[15]

But what was this *Jambū*? A shrub with olive-sized fruit form Southeast Asia? This seemed imporbable. My 'hard' evidence to change this identification has been from sculptures. My 'soft' evidence can come substantially from colonial scholarship itself. For that, let me turn to another great monument to British learning in India, *Hobson-Jobson*. In that exceptional nineteenth-century compendium a debate about botanicals represented at Bharhut has been recorded: "among the Bharhut sculptures [...] there is a fruit represented which is certainly very like the custard-apple [itself another imported plant]"; to this, however, a new edition's editor, W. Crooke, added his own annotation: "Dr. Watt says: They may prove to be conventional representations of the jack-fruit tree or some other allied plant."[16]

Jackfruit—that was a new idea. *Hobson-Jobson* gave a citation from Pliny that called

the jack the fruit "whereof the Indian Sages and Philosophers do ordinarily live"; from other sources, a single jackfruit, up to three feet long and weighing seventy-five pounds, was said to be able to feed four ascetics at a time.[17] More recently, Nugteren has cited the *Vṛkṣāyurveda* that "Someone who plants a *jambū* tree would tend towards the *dharma* of an ascetic (*yati*)."[18]

The vignette from Bharhut first cited by Cunningham, with a tree his "native followers' had identified as *jambū*, is framed to the left and right by remarkable representations of both mature and young jackfruits and leaves, growing from the meandering wish-fulfilling vine of the coping (**Fig. 18**). I reproduce representations of jackfruit from both Bharhut and Amaravati in **Fig. 17b**, and a detail of the Bharhut narrative labeled *jambū* published by Coomaraswamy.[19] Scale, texture, leaf, and significant associations with ascetics, sweetness, etc. contribute to my conviction that Dr. Watt was correct that these are jackfruit, if not also *jambū* itself.

Jackfruit (*Artocarpus integrifolius*) is "believed indigenous to the rain forests of the Western Ghats of India"; it "thrives in the Himalayan foothills and from sea-level to an altitude of 5,000 ft. in the south"; "The exterior of the compound fruit is green or yellow when ripe. The interior consists of large edible bulbs of yellow, banana-flavored flesh that encloses a smooth, oval, light-brown seed. [...] There may be 100 or up to 500 seeds in a single fruit"; "Jackfruit is the largest tree-borne fruit in the world, reaching 80 pounds in weight and up to 36 inches long and 20 inches in diameter"; "Male and female flowers are borne in separate flower-heads. Male flower-heads are on new wood among the leaves or above the female. [...] The female heads appear on short, stout twigs that emerge from the trunk and large branches, *or even from the soil-covered base of very old trees* [my emphasis]."[20]

This unique characteristic of the jackfruit can bring me back to *Hobson-Jobson,* which cites the Chinese pilgrim Hwen T'sang, ca. 650 CE: "Sometimes the fruit hangs on the branches, as with other trees; but sometimes it grows from the roots"; and Ibn Batuta, ca. 1335: "fruits borne nearest to the ground are the *barkī* they are sweeter and better flavoured"; and Nicolo de' Conte, ca. 1440: "the fruit is also found growing from the roots of the tree underground, and these fruits excel the others in flavour, wherefore they are sent as presents to kings and petty princes."[21]

If I return to the *jambū-dhvaja* in the hand of my sculpture from Kafirkot (**Fig. 17b**), I can now make a few further observations. Its cluster of spiky leaves resembles leaves of the jackfruit and seems reminiscent of two motifs—a 'leaf-basket' and 'vase-of-plenty'—found within sets of eight auspicious signs (*aṣṭamaṅgala*) in reliefs from early Mathura, ca. frist c. BCE/CE. Vase-of-plenty (*pūrṇaghaṭa*) motifs shown in somewhat later and conventional *aṣṭamaṅgala* sets are filled with lotuses;[22] these early sets (**Fig. 17a**) instead have bundles of leaves that bring to mind brass pots filled with jackfruit leaves still used in home rituals in Bengal today.[23]

The 'leaf-basket' motif, replaced in later sets by a full-blown lotus, has received little interpretation. V.S. Agrawala considered it not among symbols "that may be readily identified"; U.P. Shah counted it as a "full-grown flower" based on later Jaina sources, but conceded that these earlier "Mathurā finds represent a stage anterior to the tradition recorded in the Jaina canons", N.P. Joshi called it simply a "basket with garland."[24] Gritli Mitterwallner, however, presciently made a connection between this motif and the basal motif of a rarely discussed *linga* from Mathura (**Fig. 17c**):

> the foot of *linga* No. 15.657 [in the Government Museum, Mathura] is enveloped by leaves, which form a bowl containing some unidentifiable substance (pearls, grain, rice?). The leaf bowl calls to mind similar bowls in the hands of worshipers of Buddha, Jinas, or Brahmanical deities in cult reliefs from Mathurā, and of the leaf bowl that is one of the *mangala* symbols on the rims of *āyāgapaṭas* and *cakras* dating from the Kuṣāṇa period.[25]

Without explanation, Coomaraswamy much earlier had labeled this 'basket' motif in *mangala* sets 'puṇṇa-pacchi', a full pouch (*pacchi* can also mean the pouch that contains the genitals).[26] What I add to this discussion is the description of auspicious jackfruits that grow upward from the tree's roots. It is these rare sweet fruits that are represented in these early *aṣṭamangala* sets at Mathura. "Large as an elephant," fit for kings, and food for sages, these seed-filled fruit fit well the ethos of India's early experiments in developing an appropriate vocabulary of symbols.[27]

A final physical example from Mathura now can come into focus, a long lintel from the Mathura site of Bhuteśvara, dateable, according to N.P. Joshi, in the first century BCE [28] On the reverse are a series of "mythical animals" (winged lions). On the obverse are composite winged figures with leonine bodies and human torsos that bear offerings toward a tree, a phallic *linga* at its base, both enshrined by a square *vedikā* fence. Two composite leonine figures to either side of the tree shrine offer garlands. A further figure to the far right carries a filled 'leaf bowl' in his left hand, of the sort described by Mitterwallner, and three opening lotuses in his right hand. Between is a third figure holding a branch of another plant in his right hand.

Most remarkable, however, is a plant represented behind the single garland bearer that survives on the lintel to the left. Tucked behind his rump (and probably once held in the hand of a second offering-bearer) is an up-turned fruit—a direct match for the up-turned 'leaf-basket' of early *aṣṭamangala* sets and the base of the Mathura *linga* discussed by Mitterwallner (**Fig. 17a,c**). I have called this a '*jambū-linga*' and compared it to the '*jambū-dhvaja*' in the hand of the sculpture excavated at Kafirkot (**Fig. 17d**).[29]

That this emblem no longer is understood—or recognized as the auspicious *jambū* fruit of its period—seems clear enough from the modern confusions I have documented, yet

the visual and conceptual evidence is compelling. In the confusions, too, I think there are remnants of memory. A number of sources point toward the Jambukeśvara temple in Srirangam near Tiruchirappalli, the *sthala-purāṇa* of which tells the story of a *liṅga* under a *jambū* tree.[30] The Madras District Gazetteer reported in ca. 1931 that the "old white naval tree (*Eugenia jambolana*) still exists near the (*sanctum sanctorum*)."[31] Schulman identified this *nāval* tree as wood-apple (*Feronia limonia;* syn. F. *elephantum*), known widely in contemporary India as *bel*; Nugteren instead identified "*naval*" as *jambu* (*Eugenia jambolana*) in Tamil, Sahni, on the other hand, recorded that the black plum (Jamun; *Syzgium cumini*), in Tamil was *Neredam* and in Gujarati *Jambu*, and so the confusion goes on.[32] Most significant certainly is what Nugeren calls the "same mythic landscape."[33] and not the facticity of which plant to call *jambū* today.

> A late-nineteenth-century source reiterates this landscape particularly well: JAMBU—The Jambu (*Eugenia Jambos*) is included among the great Indian cosmogonic trees. It is called, says Prof. De Gubernatis, the Fruit of Kings, on account of the great size of its fruit. According to the *Vishṇu Purāṇa*, the continent *Jambudvīpa* took its name from the tree Jambu. The fruits of this tree are in point of fact very large, but the fruits of the Indian mythological Jambu attain to the size of an elephant; when they have ripened they fall from the mountain, and the juice which exudes feeds the river Jambu [...]. In the cosmogonic forest of the Himalaya towers the tremendous bulk of the Jambu, and from its roots four great rivers, whose waters are inexhaustible, takes their source. It bears during the entire *kalpa* of the renovation an immortal fruit, like unto gold, great as the gold vase called *Mahākala*. This furit falls into the rivers, and its pips produce the golden seed which is carried away to the sea [...].[34]

From Vedic sources, Nugteren can speak of the cosmic tree: "It is like Puruṣa, of whose feet one (*ekapada*) covers all beings, and whose other three feet measure out the heavens. This links up with the epic Sūrya, who is composed of two parts, a visible part that radiates light, and a dark, invisible part which is called the leg (*pāda*)."[35] From the story told in the late *sthala-purāṇa* of the Jambukeśvara temple—where an ascetic sitting in a *jambū* grove gave a fruit that fell in front of him to Śiva, then swallowed the seed after Śiva spat it out—she can conclude: "That, in this narrative, the tree is said to have sprouted inside the ascetic and to have stuck its branches through the crown of his head may be no more than a product of the universal imagination concerning the interconnectedness of man and nature."[36] There can be little better an example of shared mythical landscape than that, to which, perhaps, the scupture from Kafirkot and representation of jackfruit from Bharhut can serve as illuminating physical reminders and markers for *jambū*'s early existence and importance.

When is a Rose Apple not a Rose?

Notes and References:

1. Diana L. Eck, "Rose-Apple Island: Myths that Made Up India," *India Magazine*, Feb / March 1996. Monier Monier-Williams, *A Sanskrit-English Dictionary*, New ed. (Oxford: Oxford University Press, 1899), p. 412, was initially more cautious, listing *jambu* as "the rose apple tree (Eugenia Jambolana or another species); [...] N. of a fabulous river (flowing from the mountain Meru; formed by the juice of the fruits of the immense Jambū tree on that mountain)."

2. www.tradewindsfruit.com/rose_apple.htm (accessed Sept. 7, 2004): "shrub to medium-large tree"; www.crfg.org/pubs/ff/roseapple.html (accessed August 15, 2007): "The rose apple is a highly decorative evergreen large shrub or small tree growing to about 20 feet."

3. en.wikipedia.org/wiki/Syzygium_jambos (accessed June 21, 2007). The Jamun (Java plum), however, is a different species (*Syzygium cumini*), K.C. Sahni, *The Book of Indian Trees* (Mumbai: Oxford University Press, 1998), p. 109, that recently has been claimed to be the true *jambū*, see Dominik Wujastyk, "*Jambudvīpa*: Apples or Plums?" Charles Burnett et. al., ed., *Studies in the History fo the Exact Sciences in Honour of David Pingree* (Leiden: Brill, 2004), pp. 287-301.

4. www/tradewindsfruit.com/rose_apple.htm: "Native to southeast Asia."

   www.crfg.org: "The rose apple is native to the East Indies and Malaya."

5. www.answers.com/topic/jambudvipa (accessed June 21, 2007): "The Jambu tree, from which the continent takes its name, is a vast tree thought to be located in the Himalayan region."

6. *The American Druggist* (New York: William Wood & Co., Feb. 1887), p. 86.

7. H.H. Wilson, ed. and trans. *The Viṣnu Purāṇa: A System of Hindu Mythology and Tradition* (London: Oriental Translation Fund of Great Britain and Ireland, 1840), p. 116.

8. Romila Thapar, *Aśoka and the Decline of the Mauryas,* 2nd ed. (Delhi: Oxford University Press, 1973), pp. 68, 199, refers to Aśoka's "claim that Jambudvīpa was fit for the gods after the propagation of his policy of Dhamma" and to "the Minor Rock Edict at Brahmagiri, referring to the gods in Jambūdvīpa."

9. Exerpted from the entry on 'Jambudīpa' in G.P. Malalasekera, *Dictionary of Pāli Proper Names,* 2 Vol. (London: J. Murray, 1937-38), p. 941.

10. Albertina Nugteren, *Belief, Bounty, and Beauty: Rituals around Sacred Trees in India* (Leiden: Brill, 2005) p. 147.

11. Alexander Cunningham, *The Stūpa of Bharhut: A Buddhist Monument Ornamented with Numerous Sculptures Illustrative of Buddhist Legend and History in the Third Century B.C.* (London: W.H. Allen and Co., 1879), p. 46.

12. Heinrich Lüders, ed , *Bharhut Inscriptions,* rev. E. Waldschmidt and M.A. Mehendal (Otacamund: Government Epigraphist for India, 1963), p. 170 Lüders translates this as "The rose-apple tree on Mt. Naḍoda."

13. See, for example, R.G. Wasson, *Soma, Divine Mushroom of Immortality* (New York: Harcourt Brace/Jovanovich, 1968).

14. Michael W. Meister, "Discovery of a New Temple on the Indus," *Expedition, the Magazine of the University of Pennsylvania Museum of Archaeology and Anthropology* 42.1 (2000): 37-46; idem, "Image Iconopraxis and Iconoplasty in South Asia," *Res: Anthropology and Aesthetics,* 51 (2007): 13-32.

15. Monier-Williams, *Sanskrit Dictionary,* p. 412.

16. Henry Yule and A.C. Burnell, *Hobson-Jobson,* new ed. William Crooke, ed. (London: J. Murray, 1903), pp. 284-286.

17. *Hobson-Jobson,* pp. 440-443; Pliny, *The Historie of the World, Commonly Called the Naturall Historie of C. Plinius Secundus,* trans. Philemon Holland (London: A. Islip, 1601).

18. Nugteren, *Belief, Bounty, and Beauty,* p. 81.

19. Ananda K. Coomaraswamy, *Yakṣas,* pt. 3 (Washington, D.C.: Freer Gallery, Smithsonian Institution, 1931), pl. 11, 25, 37, reprouduces these reliefs but does not identify the plants. Of the coping meander, however, p. 74, he does state that a somewhat later text might suggest that a wish-fulfilling vine emitted from an elephant's mouth as at Bharhut "is here conceived as 'torn by Airāvata from the Wishing-tree of Paradise.'".

20. Compiled from www.scholarshipsinindia.com/answer/jackfruit.html and Julia F. Morton, *Fruits of Warm Climates* (Miami: Julia F. Morton, 1987). pp. 58-64.

21. *Hobson-Jobson,* p. 442.

22. Alex Wayman, "The Mathurā Set of Aṣṭamaṅgala (Eight Auspicious Symbols) in Early and Later Times," in Doris Meth Srinivasan, ed. *Mathurā The Cultural Heritage* (New Delhi: Manohar Publications, 1989), pp. 236-246.

23. Pika Ghosh, "Household Rituals and Women's Domains," in Michael W. Meister, ed., *Cooking for the Gods: The Art of Home Ritual in Bengal* (Newark, N.J.: Newark Museum, 1995), pp. 21-25.

24. Vasudeva S. Agrawala, "Mathura Āyagapaṭṭas", *Studies in Indian Art* (Varanasi: Vishwavidyalaya Prakashan, 1965), p. 179, U.P. Shah, *Studies in Jaina Art* (Banaras: Jaina Cultural Research Society, 1955), pp. 110-112; N.P. Joshi, *Mathura Sculptures* (Mathura: Archaeological Museum, 1966). p. 77.

25. Gritli v. Mitterwallner, "Evolution of the *Liṅga*," Michael W. Meister, ed., *Discourses on Śiva* (Philadelphia: University of Pennsylvania Press, 1984), p. 20 and Pl. 2,3.

26. Coomaraswamy, *Yakṣas,* p. 79: "*paṇṇa-pacchi or paṇṇa-puṭa (pūrṇa-puṭa),*" by which he may have meant to indicate a ripe citron (*pacanī*) or full parcel (*puṭa*). Monier Monier-Williams, *A Sanskrit-English Dictionary,* p. 631, defined *puṭa* ad "a fold, hollow space, slit, concavity [...]; a cloth worn to cover the privities."

27. Doris Meth Srinivasan, *Many Heads, Arms and Eyes: Origin, Meaning and Form of Multiplicity in Indian Art* (Leiden: Brill, 1997), p. 6: "Vedic man believed that the act of parturition involves the emission of forms somehow already present (as seeds;? as potentialities) in the womb."

28. Joshi, *Mathura Sculptures,* p. 80 and pl. 10, 11. Susan L. Huntington, *The Art of Ancient India. Buddhist, Hindu, Jain* (New York: Weatherhill, 1985), p. 161, provides a reproduction of the entire surviving front of this lintel (Fig. 8.41), but dates it to the second century CE.

29. Michael W. Meister "Giving Up and Taking On: The Body in Ritual," *Res, Anthropology and Aesthetics* 41 (2002): 92-103; idem, "Image Iconopraxis and Iconoplasty."

30. David Dean Schulman, *Tamil Temple Myths: Sacrifice and Divine Marriage in the South Indian Śaiva Tradition* (Princeton: Princeton University Press, 1980), p. 45; Nugteren, *Belief, Bounty and Beauty*, pp. 296-299.

31. Madras District Gazetteers, *Statistical Appendix for Trichinopoly District* (Madras. Supt. Govt. Press, 1931). p. 144.

32. Schulman, *Tamil Temple Myths,* p. 45; Nugteren, *Belief, Bounty, and Beauty*, p. 296' Sahni, *Book of Indian Trees,* p. 109.

33. Nugteren, *Belief, Bounty and Beauty*, p. 296

34. Richard Folkard, *Plant Lore, Legends and Lyrics: Embracing the Myths, Traditions, Superstitions, and Folk-lore of the Plant Kingdom* (London: S. Low, Marston, Searle, and Rivington, 1884), p. 391.

35. Nugteren, *Belief, Bounty and Beauty*, p. 37.

36. Nugteren, *Belief, Bounty and Beauty*, p. 297.

A Note on Some Recently Discovered Sculptures in Stone and Terracotta from Excavation at Nilkuthi Mound, Karnasuvarna

BIMAL BANDYOPADHYAY

The celebrated Chinese pilgrim Hiuen Tsang during his tour in search of Buddhist sites through the Indian sub-continent in the first half of seventh century AD proceeded from Tamralipti to Karnasuvarna. We come to know from the account: "The pilgrim goes on to tell that from Tamralipti he travelled north-west for over 700 li to The Kie (Ka) lo-na-su-fana (Or Karnasuvarna) country. This was about 4450 li in circuit and its capital was above 20 li in circuit. The country was well inhabited and the people were very rich. The land was low and moist, farming operations were regular, flowers and fruits were abundant; the climate was temperate, and the people were of good character and were patrons of learning. There were more than ten Buddhist monasteries, and above 2000 brethren who were all adherents of the *Sammatīya* school; there were 50 Deva-temples and the followers of the various religions were very numerous... Besides the Capital was the Lo-to-wei (or mo)-chih Monastery, a magnificent and famous establishment, the resort of illustrious brethren... Near his monastery were several topes built by Aśoka at spots where the Buddha had preached and also a shrine where the past Buddhas had sat and walked for exercise."[1]

From the account we also come to know about Gaudeśvara Śaśāṅka who can be credited with the establishment of a powerful independent kingdom in Bengal spreading his sway over a vast territory of Bengal, Cachhar in the east to Malwa in the west, Benaras, south Bihar, Magadha in the north to Mahendra hill in the Ganjam area in the south. Traditionally, Karnasuvarna has been attributed to be the capital city of Śaśāṅka.

The location of Karnasuvarna has baffled scholars through centuries and various places have been suggested. However, the opinion of H. Beveridge that Karnasuvarna was located in Rangamati of Murshidabad district has been proved as true.[2]

A vast area falling within the villages Rangamati, Chandpara, Chiruti, Jadupur, etc. in Murshidabad district contain vestiges of an ancient settlement, revealed through various mounds, high land, and occasional discovery of antiquities. The villages are situated at a distance of about 15 km from the district headquarter at Bahrampur on the western bank of river Bhagirathi. Formerly the river flowed by the side of the villages, but due to change of course it has advanced eastwards while the dry bed of the old channel remains. Thus high bluffs, rising to a height of almost 12 m from the bed are noticed on the edges of the mounds. With a view to protecting the sites from decay and vandalism, two sites were declared as protected by the Archaeological Survey of India in the early twentieth century: 'Rākshasīdaṅgā' (Devil's mound) and 'Rājakarṇa's palace' (popularly known as

Rājbāḍīḍaṇgā). The former, more conspicuous in height, was excavated by K. N. Dikshit of the Archaeological Survey of India in 1928-29 to find out its significance.[3] Though no proper stratification was possible as the site was badly robbed by brick hunters and treasure seekers, yet its Buddhist character was revealed on the basis of the structural pattern and antiquities. According to the excavator the trial excavation proved that the site was occupied by a Buddhist establishment, probably a monastery in the 6th-7th century AD. After destruction of the earlier building, the site was considerably raised before occupation during the mediaeval period. Whatever the limitations of the excavation, the antiquities had a story to tell as several stucco fragments and heads were found with definite Buddhist leanings. The excavator remarks: 'A distinctively Mahayanist find is the fragment of a crown of a Bodhisattva in which the figure of a Dhyānī-Buddha Amitābha can be made out. The stucco head, of which at least 5 to 6 must be representations of Buddha, exhibit a striking variety of facial expressions which was lacking in the stucco examples from Paharpur. The repose and finish of all terracotta heads leave no doubt that they must be attributed to the late Gupta period.'[4]

Though the Buddhist character of the site was established, the identification of Raktamṛittikā saṅghārāma with the establishment was not possible till the excavator's spade touched the site known as Rājbāḍīḍaṇgā or Rājakarṇa's palace in 1962-63.

The Department of Archaeology, Calcutta University started excavation at the site in Jadupur village in early 1962 under S. R. Das to identify Karnasuvarna, the traditional capital city of Śaśāṇka, with its *stūpas*, monasteries and other monuments mentioned by Hiuen Tsang. The first season's work was very rewarding as one of the seals found from the excavation contained the legend '*Rakta-mṛittikā mahāvihāra*'. Hiuen Tsang mentioned about the monastery located in the suburbs of Karnasuvarna city, capital of Gauḍa in the seventh century AD. Excavation was conducted at the site during the field seasons till 1964-65, 1966-67 and 1968-69. After a gap excavation was resumed in 1971-72 and continued in 1972-73. According to the excavator the excavation unquestionably put an end to the long drawn controversy regarding the identification of Raktamṛittikā vihāra, though location of Śaśāṇka's Karnasuvarna still remained unsolved.[5] The habitational deposits belonged to six phases, marking three periods of occupation from c. 2nd-3rd century AD to twelfth century AD. The main structural remains were in the form of a *pañchāyatana* temple complex and the monastery identified with the Raktamṛittikā-vihāra. The excavations yielded a good number of antiquities. Mention may be made of terracotta and stucco heads, beautiful stucco mouldings, terracotta lamps and other objects, beads in semi-precious stones, game objects, polished stone celts, terracotta figurines, stucco heads, etc. However, the notable objects were the seals and sealings of various sorts, some containing the legend '*Raktamṛittikā mahāvaihārik-ārya-bhikshu saṇga sya*', some others contain individual names.[6]

Though two mounds were declared protected by the ASI, there still remained a vast area within the region containing vestiges of the past. Sporadic finds of antiquities were reported from the region. Therefore, the ASI took up further exploration of the area. In the course of the exploration a site was located in mouja Chak-Chandpara by the side of the old indigo planter's quarter, known as 'Nilkuthi mound'. The site though used for cultivation had the potentialities of an important archaeological mound. It was undisturbed by modern constructional activities. Subsequently, the mound was declared protected by the ASI and with a view to probe the area, excavation was conducted from 8th December 2005 to mid April 2006. The objective of this excavation was to find out the stratification of the site and locate the habitational area of Karnasuvarna, capital city of Śaśāṅka.

The identification of Raktamṛittikā saṅghārāma mentioned by Hiuen Tsang as located in the suburbs of the city of Karnasuvarna had been established through the previous excavation but the location of Karnasuvarna itself remained unknown. An attempt was taken to find out the main habitational area of the ancient site.

During the course of the excavation various antiquities were unearthed. Since our purpose is to make an aesthetic appraisal of the sculptures in stone and terracotta we would dwell on these artifacts only. It is to be noted that during the previous excavations at Rākshasīdāṅgā and Rājbādidāṅgā some stone sculptures and a profusion of stucco heads were found. Nilkuthi mound has also yielded a good number of sculptures or fragmentary sculptures, architectural fragments in stone, and terracotta plaques and figures.

The stone sculptures mostly are figures of deities, both of the Brahmanical and Buddhist pantheon, while the architectural mouldings contain mythical or semi-divine figures. Among the sculptures, the most notable one is undoubtedly an image of Sūrya (**Fig. 19**) carved in relief on an almost square stone block (43 x 47 cm) greyish in colour. The material, somewhat porous in texture, is possibly slate stone. On close scrutiny, the block of stone on which the image is carved appears detached from the wall of a temple. Therefore, it is possibly an architectural fragment. The image, an outstanding piece of art, depicts quite early stylistic and iconographic characteristics rarely noticed in stone art found in Bengal. The god stands in frontal pose, holding full-bloomed lotuses in his inwardly bent and slightly upraised hands. He wears a typical robe, rather a coat almost touching his ankles, corners of which are formed in angular folds. He wears boots on his feet, is princely ornamented, and the sword or dagger, a prominent attribute of the Sun god, is seen dangling from the waist girdle. An oval prabhā at the back of the head adds grace to the deity. No companions are seen and the stela is devoid of the ornamentations and associated figures noticed in later sculptures. The low relief of the composition and the flatness of face and expression have some primitiveness about it. This feature and the typical Kushana garment covering the body are indicative of a 2nd-3rd century AD date. Though worship of the Sun god was very popular in wide areas

of Bengal from the 9th to the 11th-12th century AD (as revealed by the discovery of a large number of images from north and east Bengal and other areas), images belonging to earlier epochs are quite rare. Most of the images of the god belonging to the Pāla period follow textual description and therefore the seven horse drawn chariot and two charioteers, and the accompanying figures and physical features as per canonical injunctions are noticed. On the other hand, the earlier depictions of the god, both in stone and terracotta, represent a simpler form where the main deity is the object of attraction. An example in terracotta is the Gupta image found from Mahasthangarh, Dt. Bogra, Bangladesh (**Fig. 20**). The two-armed god appears standing in frontal pose, holding lotus buds in his frontally extended and slightly upraised hands. The disposition of the upper garment is quite unusual, as the garment folds are held in the manner normally noticed in the images of Buddha from Sarnath. The folds of the garment here are placed between the knees; therefore the upper body is bare. The lower garment worn by the deity is more like a tiger skin or something made from the bark of a tree, a sort of garment rarely noticed in images of the Sun god. The god has a placid facial expression so remarkable in Gupta art. The back of the head of the deity has an oval halo, and a beautiful crown adorns the head. The dagger is held in an ornamental sheath on the left side of the waist. As the lower part of the legs is missing, nothing much can be said about the footwear. Yet the high boots, an important attribute of the Sun god, are to be understood from the visible parts of the legs.

In regard to early finds of the Sun god from Bengal, J. N. Banerjea mentions the Niyamatpur and Kumarpur (Rajshahi, Bangladesh) reliefs of the Gupta period.[7] An early image of the god in sandstone of unknown provenance, possibly of the post-Gupta and pre-Pāla period, is housed in Cooch Behar Palace Museum (**Fig. 21**). The metal image found from Deulbadi in Tippera district referred by Bhattasali has been dated to c. 7th-8th century AD. It is the instance of the oldest image of the Sun god listed by Bhattasali.[8] Therefore, it may not be wrong to state that the stone relief of Sūrya found at Nilkuthi mound is the oldest image of the deity found from Bengal.

It seems that in depicting the Sun god, artists of the Kushana, Gupta and pre-Pāla periods did not adhere to the textual injunctions thoroughly. The deity is thus mostly represented alone, without the attending figurines and ornamentations.

A fragmentary terracotta plaque (**Fig. 22**) is another interesting find, datable to the Kushana period (c. 2nd-3rd century AD) on stylistic as well as stratigraphic considerations. The figure is a standing one, possibly two-armed, holding a lotus bud in the right arm and a circular object (discus?) in the left. But the drapery covering the body is unmistakably a coat with marks of folds typically reminiscent of a Kushana garment.

The excavation at Nilkuthi mound has yielded a large number of terracotta figures of various ages. Though much mutilated some of them still bear traces of the high quality

of the creations. Some of the figures and torsos illustrated here (**Fig. 23**), datable to the Gupta period display various hairstyles and ornaments. They are comparable to similar finds from various archaeological sites of Bengal and other parts of eastern and northern India, viz , Chandraketugarh, Tamluk, Vaisali, Kausambi, Rajghat, Ahichchhatra, etc.

The figure of a standing lady (**Fig. 24**) in terracotta is amazingly vibrant with life and is an exquisite piece of art, datable to c. 5th-6th century AD. The female body has been remarkably exhibited along with its grace and charm through the contours of the body in the flexions. The sari with its folds marked in wavy lines and tucked in folds between the legs shows the mastery of the artist. Though the portion above the neck is missing, yet the figure depicts the urban character of the lady of Karnasuvarna. The figure is comparable to the mother-and-child figure found from the excavation at the mound adjacent to Clive House at Dum Dum, North 24-Parganas, West Bengal.[9]

A miniature terracotta plaque containing an early image of Vishnu (**Fig. 25**), a rare piece of sculptural art depicting the god, is an exquisite specimen of pre-Pāla art. The four-armed god stands in *samapadasthānaka* posture, holding a lotus (?) in the right upper arm and a conch in the left upper. The right lower and the left lower arms are indistinct. The *vanamālā* is indicated by incised lines and *appliqué* method. The simplicity of the well-balanced form is indicative of the mastery of the artist in handling terracotta. His limitations, however, are noticeable in carving the lower arms, which are quite unnatural in their disposition. Similar primitiveness in carving is noticed in contemporary stone sculptures as well Comparison can be drawn with an image of Vishnu in stone (**Fig. 26**) found from an unknown provenance in north Bengal and now housed in the Cooch Behar Palace Museum. On stylistic considerations, the terracotta Vishnu can be dated to c. 6th-7th century AD.

The top part of the mutilated stele of a miniature slate stone female goddess is an interesting piece of sculpture (**Fig. 27**). Though it is badly mutilated (only the portion above the neck is available with most part of the left arm and the portion above the waist of the right arm missing), the charming face along with the hair-do and the ornamentation on the hair and ears need appreciation. The slightly oval face, the vibrant lips, the prominent nose, and the finely delineated eyes with wavy eyebrows are all indicative of the artist's mastery. The third eye, marking divinity, is also prominent on the middle of the eyebrows. On her upraised right arm the goddess possibly holds a sword, while the object held in the fingers of her upper left arm is unidentifiable. The fragmentary head probably indicates a fierce goddess. It can be dated to c. 8th century AD on stylistic considerations.

To the same category of artistic excellence can be relegated two fragmentary plaques, one with face and head only and the other with the portion above neck only. In spite of their mutilated condition, the plaques display outstanding artistic merit and speak volumes of the creative genius of the Karnasuvarna artists.

In one of the plaques (**Fig. 28**), the face shows a tendency towards ovalness. Therefore, the chin is less prominent, the lips are full, the nose is prominent, and the eyes elongated with half open eyelids and a distinguishable iris. Deep incised wavy lines indicate the eyebrows and the circular line denotes the divine third eye. The head has an elaborate crown with conical shapes over it for ornamentation; locks of matted hair hang below the crown on two sides. This can be identified as the head of a Bodhisattva.

The other one (**Fig. 29**) also presents the face of a deity, contemplative and manifesting the deep spiritual attainment through the half closed eyes and placid facial expression. The head is surmounted by an elongated *jaṭāmukuṭa*, at the center of which in a slightly cut niche is placed a Dhyānī Buddha. Stylized locks of hair fall on two sides of the head covering the ears. The oval halo has flames of fire. The influence of the tantras is quite clear in this plaque, and possibly this is also a figure of a Bodhisattva. Both the plaques can be dated to c. 8th-9th century AD on stylistic considerations.

Another interesting sculpture (**Fig. 30**) is a badly mutilated figure of a standing deity in a lime stone plaque. The portion below the right upper arm along with the plaque and the lower part of the left arm along with the plaque is missing. The lower half of the legs of the deity is also missing. The standing deity is most probably a two-armed one. The objects held are unidentifiable as the relevant parts of the arms are missing. He is princely ornamented, wearing necklace, waistband, etc. A crown is placed over the head with locks of hair falling on both sides of the shoulder. A circular halo is at the back of the head. As the face is badly mutilated, its beauty cannot be judged. The lower garment of the deity is highly ornamented. The figure is quite proportionate and is an eloquent testimony to the mastery of the sculptor. It is probably the figure of a Bodhisattva (Avalokiteśvara) datable to c. 7th century AD.

The image of Durgāmahishamardinī in a miniature sand stone plaque (**Fig. 31**) is unique, a rare find of the goddess in her four-armed form. She holds a sword in her right upper arm, a *śūla* which pierces the buffalo demon in its neck in her right lower arm, a *khaṭṭāṅga* or a bell in her left upper arm, and the left lower arm touches the hind part of the buffalo in a manner of lifting it up by its tail. The buffalo pierced by the *śūla* appears totally subdued under the right leg of the goddess. The goddess is in youthful vigour, wearing ornaments befitting her. The hair band holds the hair tight and there is a bun-shaped chignon on the head. In execution this is an elegant piece of sculpture, remarkable for its graceful charm and the linear rhythm expressed through the delicate yet strong limbs and multiple flexions of the body showing the great act of subjugating the mighty demon.

Though eight or ten-armed forms of Durgāmahishamardinī is more popular yet the four-armed varieties are not unknown and perhaps worship of the goddess was prevalent in this form in Bengal prior to 7th century AD or even earlier. J. N. Banerjea has cited

the example of a brass image of the four-armed goddess of the reign of Meruvarman, King of Chamba (c. 8th century AD) with an inscription that describes her as Laksana.[10] The goddess here is shown lifting the hind part of the buffalo-demon by holding its tail with her front left hand, piercing its neck with a *trisūla* by her front right, and trampling on its neck with her right leg. The hands at the back hold a sword and a bell. Banerjea comments: 'This standing attitude of the goddess exactly corresponds to the Devīmāhātmya description of the Devī''.[11]

There is no four-armed image of Durgā in the collection of the Bangladesh National Museum, Dhaka. But some such images from Bengal are housed in the Museum of the Varendra Research Society, Rajshahi, Bangladesh. One such image is also available in the Cooch Behar Palace Museum **(Fig. 32)**. An almost identical image **(Fig. 33)** has been found from the excavation of the mound adjacent to Clive House at Dum Dum, North 24 Parganas, West Bengal. Due to the simplicity of form, lack of attending figures and exuberance these images can be placed in an earlier epoch, preferably c. 7th-8th century AD.

It is apparent that a prolific industry of sculpting stone and terracotta figures of deities and cult objects had grown in the area under archaeological probe in our study. In previous excavations the general habitational area could not be located. But now after the excavation at the Nilkuthi mound, from where a large number of antiquities have been unearthed, it can be stated with conviction that this area once formed part of the habitational area of the city of Karnasuvarna. The antiquities, particularly the art objects, definitely suggest the urban character of the settlement. The art objects must have been widely used by an urban population with a taste for refined things. A flourishing socio-economic set-up backed by prosperous trade could have also created a demand for cult objects and various decorative art objects among the people. It may not be a wild conjecture to state that there existed a great center of manufacturing art objects and things like beads, terracotta toys, and domestic articles for purposes of trade in the region.

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Sundaram Shobhanam Bhāratīyam

Harsha V. Dehejia

Sanskrit words for Form and Design, *ākriti* and *rachanā*, both imply a creative process and signal an exalted human activity, for creation in its best sense stems from a sense of joyousness, it is born from a desire to produce something in the likeness of the creator, and arises from a need to create a beautiful shape and enrich and enliven the form, to express a sense of joy and wonder and only then can that *ākriti* take its rightful place in the world we inhabit.

The phrase Sundaram, Shobhanam, Bharatiyam or Beautifully Indian, captures the essence of not only what it is to be proudly Indian but equally makes the celebration of beauty, as we express and represent it in the Indian tradition through the various *ākritis*, a fundamental part of our Indianness. To beautify, to adorn, to decorate and to embellish, not only animates and delights our senses but even more it becomes an important value to strive for, a *purushārtha* or end in itself of life and living, for the celebration of the beautiful pleases our senses but ultimately enriches our spirit. In recognising the value of the beautiful we in the Indian tradition are not only valuing what is created by human hands but equally the creativity that was responsible for the beautiful object. In the ultimate analysis it is human creativity, understood as *pratibhā* or creative imagination, and not so much the creator, that we applaud and venerate. It is the act rather than the actor, the dance rather than the dancer, the *kalasa* rather than the potter, that is important to us. The celebration of the beautiful is a testament and veneration to the creative spirit of mankind and it has been rightly said that we come closest to divinity during and because of the creative process.

It has been said that *rūpam rūpam pratirūpam babhūva*, every form available to the human mind and eye is in the ultimate analysis a replica of a primal cosmic form. This cryptic *sūtra* has many levels and nuances of meanings, but the one central idea that emerges from this, is that the many beautiful forms that surround us and that we create, are primal and very ancient and are born out of pristine archetypal forms. While our religious icons owe their pedigree to the *Purusha* of the *Purusha Sūkta* of the *Ṛg Veda*, the origins of the many forms of village or people's art arise from the primal myth of the *samudra manthan*. What it also suggests is that the beautiful for us in the Indian tradition is not homocentric and does not revolve around mankind. Rather it posits that man lives in a web of interconnections and interdependence, that human reality is not just of the immediate world but is of the entire world and the cosmos around him, that even though his life is spent on earth he seeks a pillar and stairway to the sky, and that myth rather than history is the paradigm within which he best functions. Man therefore

does not stand alone but is connected to the grandeur and majesty of the world around him, the world of trees and blossoms, birds and animals, rivers and mountains, the sun and the moon, the stars and the constellations of the planet, that even a handful of earth on which he stands connects him through the Indra *stambha* or the primal *axis mundi*, and thus creates a bridge to the stars in the sky.

While we celebrate creation in all its multiple manifestations it is futile to seek a reason or the first creator, for the creation of the beautiful is so intimately tied with life itself and is undefinable and beyond intellectual probing. It has rightly been said:

> *vyārtham saundarya-kāraṇasya anveṣaṇam*
> *bhāratīyeṣu jīvane pūrṇā sammilitā kalā*

> It is useless to search for a reason for beauty
> For art is completely integrated with life in India.[1]

One of the ideas latent in this is that the individuality of the creator is not as important as his creation. Thus it is that many of our creations are anonymous, unsigned, unclaimed, unattached to the personality of the artist, but stemming from his lineage and which in turn comes from hidden sources and shared creative well springs of the tradition. These forms are from the repository of the community, the village or the town and not an individual. That these forms are a shared inheritance is a recurrent and underpinning idea of the many beautiful forms of the Indian tradition and becomes the foundation of its culture.

The beautiful in its many and varied different forms and expressions goes beyond the unnecessary and distracting distinction of art and craft, or the needless separation of the sacred and the secular, or the differentiation of the classical from the folk, for neither of these modern and mainly Western dichotomies are relevant in the traditional Indian context, where the beautiful defies categorisation or even definition, and stands self-assuredly alone, and lives in holistic harmony with both the animate and inanimate world around it. Creating objects of beauty and giving them a centrality in our homes and lives points out the importance of bringing grace and dignity into our lived lives, but it does not stop there. We beautify our surroundings and thereby bring a certain elegance and brightness into our homes, but it is more than that; we decorate our living spaces to give it grace and panache but it goes beyond that; we adorn our own selves with the traditional sixteen adornments and this gives us pleasure but there is a higher purpose to creating personal beauty than mere adornment, decoration or vanity. To be in the midst of beautiful forms is to be assured of ancient racial memories and hoary archetypal symbols, of being privy to living myths and timeless metaphors, of touching well loved designs and traditional patterns that have endured for millennia, of experiencing evocative colours and cosmic shapes that have been passed down from one generation to another, and let all of this

work on us at many different levels: magical, religious and aesthetic, and thereby assuring us of dignity, auspiciousness and well being.

While Sanskrit offers a multitude of words for the beautiful, words such as *sundar, lāvanya, mrudulā, shobhā, ramanīya,* it does not have a single word for art. The word *kalā* which we commonly use for art objects denotes *kruti* and even *sanskriti,* or the process of creating, which once again brings to light the importance we give to the creative process and its subjective experience rather than just the object. Art, as it is commonly understood, is for us the expression and embodiment of beauty, and art as such therefore has a very limited significance in the Indian tradition, for our concepts and understanding of the beautiful go much beyond the narrow understanding of art. The Indian tradition is quintessentially mythic in its thought and agricultural in its life style. The twin concepts of myth and agriculture make up our *sanskriti,* our culture and civilisation, and informs our religious ideas and images, our values and behaviour and when it comes to things beautiful we turn away from the world of reality and rationality but instead we turn to the vegetative and animal world, and even more importantly to the world of myth, to draw our ideas and inspiration from the many motifs and metaphors, images and figures, that are so much a part of our life.

All great civilisations have created beautiful objects which embody their concept of beauty, and we in India have not only an ancient but equally a growing and evolving artistic tradition and culture. We have entrusted our deepest thoughts and cherished visions to our artists and artisans, be they poets or potters, women who adorn their thresholds with *rangoli* or who embroider fabrics, *shilpīs* or *sangītkārs.* These objects of beauty, and the discourse around them, have endured, as the enjoyment and contemplation of the beautiful, a hall mark of the *rasika* and is an essential value for us in the Indian tradition, and further defines what is to be cultured and cultivated. The *rasika,* or the cultivated connoisseur, not only enjoys his association with objects of beauty but engages with it contemplatively so that a discourse about *ākriti* or beautiful form can emerge. The beautiful *ākriti* is not only worthy of *artha* or contemplation but we associate *sundar* with *saubhāgya,* the beautiful with what is auspicious, *sundar* with *shringāra* the beautiful with the romantic, and even more we equate *sundar* and *aiśvarya* or beauty and Divinity. It is quite clear then, that representing, understanding and knowing what is beautiful in many different ways is multi-nuanced and is an important part of the celebration of what it is to be an Indian.

The first principle in designing and giving form to an object or creating an *ākriti* is that it be functional, efficient and safe, and it is only when these basic requirements are met that aesthetic concerns can start. Utility is of course important but it cannot limit or exhaust what a sensitive and cultivated person demands from an object. *Artha* or material satisfaction is a basic and primal need and this must obviously be fulfilled. This is the

first order of designing an object. But there is within us a need to go beyond and surround ourselves with things beautiful, to have not only the means but a meaning to life and living, to nurture the *kāmanā* that is at the very core of our being, for it is there that emotion and imagination are experienced, it is there that the joy of participating in what is sensuously beautiful flows like a stream, it is there that the various *rasas* are tasted. It is *kāmanā* or desire to experience the beautiful that leads our mind from the mundane and the banal to the exalted and the sublime, and to usher a sense of grace and dignity to our daily living and bring joy into our quotidian tasks. For the human mind is not satisfied with mere *dharma* and *artha,* or utility and efficiency. There is in the human condition a need for us to use our breath to sing songs and not utter mere words of commerce, a need to make our bodies a vehicle of grace and not of mere function, a need in our environment for adornment and not mere expediency, a need for the beautiful and not mere utility, a need to use our hands not only to work but to touch the stars, to grow not only food that nourishes the body but to plant flowers that will touch our spirit. All of this is the function of our artists and artisans, housewives and potters, craftsmen and designers and everyone that creates beautiful forms. They are our creators, our *prajāpatis.*

Kapila Vatsyayan writes:

> In the *antara hradaya ākāśa* ...is the realization of beauty in perfect form, where a perfect concord exists between viewer and viewed... Perfect form is the model of his inner vision to which he then seeks to give expression through visual or aural forms.. The Indian artist's concern is with design imbued with a consciousness of the totality. He gives this form many forms, always bearing in mind the inner state in which he saw the perfect form. Conscious of mundane living he built a superstructure of refined feeling and sensibility, where a continuous process of distillation, sophistication takes place... where the empirical and the metaphysical are held together as an organic whole. Concepts underlying Indian architecture, sculpture and ...painting bring us back to the image of Man, the *purusha* and the *Purusha* of Upanishadic thought and the *yajña* of the *brāhmanas* in more explicit terms.[2]

This statement by Vatsyayan underscores the inwardness of the beautiful *ākriti*, the beautiful that touches the eye but is realised by the eye of the eye and which in turn is realised by the mind of the mind and touches and awakens the *ātman.*

The *Sāhitya Darpana,* an ancient treatise on art, notes:

> Pure aesthetic experience is theirs in whom the knowledge of ideal beauty is innate; it is known intuitively, in intellectual ecstasy without accompaniment of ideation, at the highest level of conscious being; born of one mother with

the vision of God, its life is as it were a flash of blinding light of transmundane origin, impossible to analyse, and yet in the image our being.[3]

The concept and the realisation of *ātman* is central to Indian thought and has both ontologic and epistemologic significance. If the creation and the enjoyment of *sundar ākriti* or beautiful forms is to be a significant activity and not just for adornment or utility, it must address itself to the *ātman* for that is where the ultimate knowledge of the form resides. It is at the level of the *ātman* that the materiality of the form transforms itself into the rarefied spirituality. It is at the level of the *ātman* that the *pañcha mahā bhūta* of *prakriti* is transformed: *ap* or water becomes *rasa*, *tej* or fire becomes contemplation, *bhū* or the earth is no longer the limited womb that contains but the womb that releases the limitless, *vāyu* becomes the life giving *prāna* and *ākāsh* asserts its infinity and non-temporality. Thus in going from Prakriti to Purusha, Prakriti has not been lost or negated, but transformed, as the objectively sundar *ākriti* or from is realised as the formless subjective *saundarya*. Understood this way *prakriti* becomes the *bīja* or the seed that evolves into the majestic *kalpavriksha* within the *ātman*. This once again frames the creation and enjoyment of *ākriti* within a metaphysical framework.

The *Vāstusūtraupaniṣad* rightly says, *tad shilpa jñānad divya jñānam bhavati*, that is, the knowledge of sculpture results in divine knowledge. This Upanishadic injunction can be enlarged to understand *shilpa* as any object that has been thoughtfully and lovingly made and therefore embraces *ākriti* or design in a broader sense, and the knowledge that a contemplative person derives from this *ākriti* or object then becomes divine knowledge. The onus then is both on the *shilpī*, the maker of the object, and the *rasika* or the connoisseur of that object so that *ākriti* can progress to *jñāna* for this is the mandate of Indian *sanskriti*.

Thus the function of *ākriti* in essence is to create the beautiful so that the mind that tires in the world of daily commerce can rest in realms of inner beauty. As Tagore rightly states "The consciousness of the real within me seeks for its corroboration the touch of the real outside me."[4] (p. 82) Implicit in this statement is the supposition that our inner reality becomes known to us on account of the reality of the beautiful *ākriti* around us, that the infinite that is at the core of our being is awakened by an understanding of the finite but beautiful *ākriti* that surrounds us, that our subjective self must find and feel the objectively beautiful to fully realise itself and ultimately is the assertion that the *purusha* is incapable of realising itself but needs *prakriti*. Thus there are two levels of reality, one outer and the other inner, the one that is defined by *prakriti* or the beautiful and the other that is defined by *purusha* or beauty. 'We become aware of a profound meaning of our self at the consciousness of some ideal of perfection, some truth beautiful or majestic which gives us an inner sense of completeness, a heightened sense of our own reality'.[5] There is for Tagore an inner logic and reality of things that are outwardly

beautiful. Tagore reminds us that the world of objects in which we live, a world of lines and forms, colours and shapes, textures and cadence, words and movement, express vastly more than what they appear on the surface. Therefore an object that is beautiful does not remain merely an object but it leads the contemplative person to a journey of inner discovery. In Tagore's words 'They open the windows of our mind to the eternal reality of man.'[6] Tagore places *ākṛiti* securely within a metaphysical grid of Indian thought and moves it away from the merely psychological or superficial. *Ākṛiti* or beautiful form then takes its rightful place in the domain of Indian Aesthetics and is a window to visual knowledge, and it therefore behooves us to develop a discourse of Indian Forms not just in empirical but in philosophical terms. We must view *ākṛiti* not just from the point of view of the practitioner or the marketer but from the vantage point of the philosopher as well. It is not sufficient to talk about *ākṛiti* in either commercial or psychological terms, to merely refer to it as something that pleases the eye or to look upon it as a source of mental excitement or one that sells well in the markets of the world. Sensual pleasure and excitement are indeed the first response to a beautifully designed space or object, for that is its *raison d'être*, it exists to satisfy those primal needs, but the beautifully designed object goes beyond itself, and expresses in its mute and hushed language, a vision of the culture that defines us, it is in its own silently eloquent way a pointer to our cherished values of the tradition that shape us, and is a testament to the *pratibhā* or creative imagination of the artisan who made it and for us who partake of its beauty. It is because of this that it can qualify to be a source of *divya jñāna* or ultimate knowledge.

If we must distinguish between art and craft, and the artist from the craftsman, a distinction that is basically unnecessary in the Indian tradition as it distorts the holistic nature of what is beautifully Indian, it is important to note that when it comes to *ākṛiti* or beautiful forms we need the craftsman more than the artist to fill our daily life with things beautiful, and the presiding deity of all craftsmen in the Indian tradition is Vishwakarman, the divine artificer, who fashions the chariot of the gods. The prototypical craftsman amongst them all for us in the Indian tradition is the *kumbhar* or the potter who takes a handful of earth and converts it into a *kalasa*, which then occupies a central place in our lives, both sacred and secular. The weaver, who makes fabrics is equally important, for it is he who converts a *sūtra* into a beautiful *vastra*. The carpenter, the metal smith, the *sonar* and even the housewife all occupy a pride of place in our lives for they make objects that we not only use but cherish, with which we adorn ourselves and our spaces to make the beautiful a part of our daily lives and living.

While the *sāmājika* or the person at large may not be able to derive a full aesthetic experience or engage in an aesthetic discourse from the many forms of the beautiful in their surroundings, they must surely feel the satisfaction of carrying on a tradition handed down to them and experiencing a sense of comfort and security from the magico-religious

benefit of what has been created. It is important to remember that many of these creations in homes or havelis are for them visual prayers and not mere adornments. For the *rasika* or the contemplative aesthete, however, the presence and meditation on the many beautiful forms and objects that surround him lifts him from the pedestrian banality and the humdrum of existence to the charm and aesthetic excitement of beauty. It moves him from the mundane and the commonplace concerns of life to the rarefied and sublime states of ecstasy and joyousness. It is a reminder that the creation and the pursuit of the beautiful cannot be an end in itself but must have a higher purpose and thus provide a stairway to domains of *adbhuta* or wonder, and from that sense of wonder it is only an aesthetic leap to the final state of serene and blissful beauty and ultimate knowledge. In that state of bliss, which is best described as *vishranti* or rest, where the senses no longer seek and the mind has stopped seeking, the beautiful has moved from the objectively beautiful to a state of subjective beauty, and our entire being rests, like the *sheṣāshayī* or the recumbent Vishnu, in a state of repose and quietitude. It is abundantly clear that the aesthetics of beautiful forms for the contemplative and cultivated *rasika* in the Indian tradition is a cherished and transcendent experience, a *rasasvadanā*, to be sought and indulged for its own sake, and which in the words of the tenth century aesthetician Abhinavagupta, is close to or parallel to the bliss of *brahman*, it is *brahmānanda sahodara*. In its ability to lead us to a transcendent state of being, the state of beauty has an epistemological ring to it, for it posits an ultimate reality to what is beautiful, it asserts that there is an inner logic of the beautiful and makes objects of beauty a source of visual knowledge, a *ātmajñāna* or ultimate self-knowledge.

Understood in this sense the beautiful is not just adornment but a visual prayer, it is crucial to our being as much as social and economic security. These artistic creations are in the words of Kapila Vatsysyan 'archetypal symbols of human consciousness'.[7] They have come down to us from mother to daughter through trackless centuries, and although they are created by individuals, they have the power and the pedigree of the entire tradition[8] behind them. It is not important to know who created them, for in the intensity of creation and experience, the creators go beyond the individual and transcend the specificity of time and place, class and caste. Many of these representations of everyday art or ritual art such as a *rangolī* or *ālpanā* are lovingly made, wiped away and then made again, or the tribal horse that is made from earth and left under a tree to decompose and from the same earth another horse is made. In so doing they are reminders of the cosmic drama of creation, destruction and renewal, and both by their presence and their process, these beautiful forms become silent messengers of deep and abiding metaphysical insights.

The central question for the *saundarya mīmānsak* or the philosopher of beauty then is what makes an object beautiful, a question that may be hard for the maker of the object to answer, for he works intuitively and follows trackless traditions handed down from father

to son and mother to daughter, and any attempt to answer that question on their part would only distort the truth. For to pry into a creative process is a sacrilege, almost forbidden. It would amount to voyeurism. The traditional craftsman is confident and self-aware but not self-conscious, he is intelligent but not intellectual, his methods are spontaneous and not rehearsed or scripted, his concept of beauty is intuitive and does not follow any *shāstra* and the over all ethos for him in his workshop is one of joyous creativity. There is no room there for the prying eyes of the academic. The craftsman thus is neither academically trained nor expected to respond to a scholarly question, and the burden of that scholarly inquiry falls upon us *rasikas*, who wish to undertake a contemplation about Indian design and form, and that inward journey on our part will reveal to us the strength and an epistemology of Indian Design and Forms. For knowledge without an epistemology is akin to walking in dark and shadowy corridors, even if that journey somehow takes us to our destination. For in Aesthetics the journey is as important as the destination, it is during that journey that we recreate the creative forces that drove the artisan, in that journey we allow our mind to be bathed in the *rasas* that touched the creator, it is in that inward journey that motifs and metaphors decode and reveal to us vistas of meaning and in the end during the process of aesthetic recreation we become creators ourselves and in that final moment of recreation when we discover the object fully that we touch upon our essential self, which is *ānanda.*

That journey should begin by an inquiry into the various forces that serve as an inspiration to the traditional Indian artisan, those thousand points of lights that he turns into his vision of what he considers beautiful, the racial memories that flow through him like an ancient river, the archetypes that live only in the dim shadows of his mind and above all the collective unconscious of the tradition as a whole for the traditional Indian craftsperson functions within the society and not just as in individual . We should examine a handful of his earth and find in it the seeds which nourish his psyche, we should sit with him under the Pipal tree at the end of day as he listens to Puranic stories for it is these that shape his culture, we should visit ancient temples and havelis which are silent and timeless repositories of our cherished spaces, and finally we should read our ancient *shāstras* which enunciate principles of form, all of which are as relevant today as they were then, we must walk the hushed halls of various museums for there the silent objects will speak to us of the glory of a by gone era, of its treasured objects that once sparkled in opulent surroundings. But this is not enough. Form, like tradition, evolves and our journey must not end there. Modern Indian forms take its pride of place in a globalised world, it has crossed oceans and is making its mark in international markets and it would be useful to inquire why an Indian fabric is as elegant in New York as it is in Milan. A multipronged and sustained inquiry such as this would shed light on Indian Design and help us formulate an aesthetic discourse. That is our mandate. Only then will we be

able to say 'yes this is Indian *ākṛiti'* and it reflects our *sanskṛiti,* our civilisation and its culture.

Our starting point in this inquiry of beautiful Indian forms will be to acquaint ourselves with certain fundamental and primal myths which have a bearing on the creation and enjoyment of the beautiful and inform not only our religious rites and rituals but equally our aesthetic sensibilities. And in doing this we confer a valued pedigree on the beautiful object as we connect it to its mythic origins, and make these artistic representations universal and timeless rather than specific and time bound. These beautiful creations do not belong to the individual but to all of us collectively. The birth and the marriage of Parvati, the churning of the ocean, the origin and sons of the divine architect Vishwakarma, the story of rishi Bhavana and the origin of the Padmashalis and the family of weavers, the *Nātyashāstra,* primal yantras and *maṇḍalas,* these are starting points of our inquiry into these beautiful creations. So are *shāstras* or canons on *Shilpa* and *Vāstu* which determine how our abodes and dwellings should be constructed and beautified.

Kapila Vatsyayan rightly connects myths and creativity when she says:

It is the power of creativity to create myths and symbols, verbal and non-verbal, visual or aural through what is called art... It is the harnessing ,as also the release of creative energies, both inner and outer, which characterise the creative moment. Invariably its language of communication is that of myth and symbol, of analogy, of metaphor, or irony, of *sāndhya bhāṣā* in the Indian sense.[9]

There are certain primal Indian forms, forms that have an ancient pedigree and from these countless new forms have emerged over millennia of Indian creativity. There is in these primal forms not only functionality but beauty, they combine utility and meaning at the same time, and are seminal in giving rise to multiple forms, such is their strength. The foremost among these forms are the various *ratnas* that emerge from the *samudra manthan* and which include the *kalasa, kalpavriksha, padma, apsarā, airāvat, aichavaras, kaustabha.* All of these are forms that have emerged from the mythic and formless ocean and carry deep archetypal meanings and have remained foundational in the vocabulary of Indian design. The *samudra* is the metaphor of the collective unconscious of the tradition. We return to these primal forms again and again, they are multidimensional and polyvalent, and from them have emerged many variations of motifs and patterns, they have inspired the potter and the weaver, the toy maker and calligrapher, the jeweler and the stone carver, objects inspired by these forms are sold at fairs and festivals and adorn homes and havelis, and they carry within them the meanings and metaphors inherent in the primal myth of *samudra manthan.* Many of these forms are universal and are shared by cultures across the world, but the way in which we use, represent and understand these forms remains quintessentially Indian, and in that sense we can call them uniquely Indian.

Notes and References:

1. Personal Communication from the late Prof. V. Subranamanian

2   Vatsyayan, Kapila. *The Circle and the Square of Indian Arts*, Roli Books, 1983, p.11

3. *Sahitya Darpana*, III. p. 2-3.

4. Tagore, Rabindranath, *The Religion of Man*, Unwin Books, London, p. 88.

5. Tagore, Rabindranath, *Ibid.,* p. 91.

6. *Ibid.*

7. *India International Centre Quarterly, Winter 2001*, p. 203.

8. *Ibid .* p. 200.

Epigraphic Evidence for the Commoners' Use of Gold Coins

Samaresh Bandyopadhyay

On the occasion of the 87th Annual Conference of the Numismatic Society of India hosted by the Asiatic Society (Kolkata), the Society organized in December, 2002, a seminar on 'Coins of Bengal and North-East India'. In my 'Presidential Address' delivered at the said seminar, I have tried to show. drawing attention to as many as twelve epigraphs, all belonging to the Gupta period, that the view that gold coins used to be issued in ancient India for making gifts and not for commercial transactions seems to require modification. The procedings of the seminar has recently been published (December, 2006) by the Asiatic Society under the title *Mudrānuśīlana,* edited by my humble self.[1] However, if the gold coins were issued also for commercial purposes, the question that naturally arises is who could use those coins. Was their use restricted only to the rich commercial class? Or, was there also a share of the common man in using them? As we shall see below, a number of early Bengal epigraphs contain exceedingly interesting evidence of carrying on land-transactions using gold coins, known by the name *dīnāra,* by the commoners.

The artisan Bhīma, the scribes Prabhucandra, Rudradāsa, Devadatta, Lakṣmaṇa, Kāntideva, Śambhudatta and Kṛṣṇadāsa, and the record-keepers Simhanandin and Yaśodāman are stated to purchase nine *kulyavāpas* of land at the usual market-price of two *dīnāras* per *kulyavāpu* in the Kalaikuri-Sultanpur (Rajshahi District of present Bangladesh) copper-plate,[2] dated in the Gupta Era 120 (339 AD). The land was donated for the religious merit of their parents to the Brāhmaṇas, named Devadatta, Amaradatta and Mahāsenadatta.

A Brāhmaṇa, named Karppaṭika, is stated in the Damodarpur (Dinajpur District of present Bangladesh) copper-plate[3] of the Gupta Era 124 (444 AD) to have bought one *kulyavāpu* of land at the rate of three *dīnāras* per *kulyavāpu* for the maintenance of his Agnihotra rites, and, in the Dāmodarpur copper-plate[4] of the Gupta Era 128, it is recorded that a person, whose name has not been properly read, purchased five *droṇas* of waste-land paying two *dīnāras* at the usual market-rate of three *dīnāras* per *kulyavāpu* for the maintenance of his five great sacrifices.

In the Baigram (Bogra District of present Bangladesh) copper-plate[5] of the same year 128 of the Gupta Era, two persons, named Bhoyila and Bhāskara, are described as purchasing, at the usual market-price of two *dīnāras* per *kulyavāpu,* three *kulyavāpas* of revenue-free fallow-field and two *droṇas* of *sthala-vāstu* (homestead) land in two localities, Trivṛta and Śrīgohālī, belonging to the state, and donating to meet the expenses of flowers, perfumes etc. required for daily worship and occasional repairs to the temple of Govindasvāmin which was established by their father Śivanandin.

Epigraphic Evidence for the Commoners' Use of Gold Coins

The Jagadishpur (Rajshahi District of present Bangladesh) copper-plate[6] of the Gupta Era 128 (447 A.D.) records the purchase of one *kulyavāpa* of land at the usual market-price of two *dīnāras* per *kulyavāpa* of land at the usual market-price of two *dīnāras* per *kulyavāpa* and its donation in perpetuity by Kṣemāka, Bhoyila and Mahīdāsa to (1) the *vihāra* (Buddhist monastery), built for the worshipful Arhats, at the *siddhāyātana* at Mecikāmra in the southern part of the *vīthi*, (2) The *vihārikā* (small monastery) built for worship at Gulmagandhika and (3) the temple built for the Lord Sahasraraśmi (the Sun-god) at Gulmagandhika, for making provision of *bali, caru and sattra* and of repairs at the establishment. Bhoyila, as has been suggested by us elsewhere,[7] of the two records seems to have been one and the same person and was devoted not only to the Sun-god and the Buddha, as has been rightly suggested on the basis of the Jagadishpur copper-plate,[8] but also to Govindasvāmin.

It is stated in the Paharpur (Rajshahi District of present Bangladesh) copper-plate[9] grant of the Gupta Era 159 (479 AD) that a Brāhmaṇa, named Nāthaśarman, and his wife of the name Rāmi purchased 1½ *kulyavāpa* of land distributed in four different villages by paying the usual market-price of two *dīnāras* per *kulyavāpa* and donated to the *vihāra* of the Jaina preceptor Guhanandin at Vaṭagohālī for the maintenance of the requisite for the worship of the Arhats, such as sandal, incense, flowers, lamps, etc. and for the construction of a rest-house there.

Nābhaka, a *grāmika* of Caṇḍagrāma, is stated in the Damodarpur copper-plate[10] inscription, dated in the Gupta Era 163 (482 AD), to have paid two (or three) *dīnāras* for the purchase of one *kulyavāpa* of waste-land and donated the land for providing residence to some Brāhmaṇas.

Similarly, another copper-plate[11] inscription of the time of Budhagupta (476-494 AD) from Damodarpur tells us that a *nagaraśreṣṭhin*, named Ribhupāla, bought some *kulyavāpas* of *vāstu*-land (dwelling site) on payment of price at the usual market-rate of three *dīnāras* per *kulyavāpa* for erecting thereon some temple along with two chambers for the two gods Kokāmukhasvāmin and Śvetavarāhasvāmin. The expression *nagara-śreṣṭhin* literally means 'city merchant' or 'banker',[12] but is generally taken in the sense of 'president or foreman of a guild'[13]. In the present case, he does not seem to have been a common man; rather he seems to have been quite rich as he is stated in the record to have already donated 11 *kulyavāpas* of land.

Further, a person named Amṛtadeva, born in a noble family (*kulaputra*) is stated in the Damodarpur copper-plate[14] inscription of the Gupta Era 224 (543 AD) to have purchased some uncultivated *khila* land at the usual rate of three *dīnāras* for each *kulyavāpa* of such land and donated the same land in perpetuity for the means of repair, etc. of the temple of the god Śvetavarāhasvāmin and to provide means for the continuance of the *bali, caru and sattra*, etc. and the materials for daily worship of the deity.

Besides the epigraphs, mentioned above, three copper-plate incriptions found from the Faridpur District of present Bangladesh also contain interesting information about the use of gold coins by the common man. The first grant,[15] dated in the third year of the reign of king Dharmāditya, states that Vātabhoga, a Sādhanika, purchased three *kulyavāpas* of land in the village Dhruvilāṭi by paying twelve *dīnāras* at the rate of four *dīnāras* per *kulyavāpa* and donated to a Bhāradvāja Brāhmaṇa Candrasvāmin. The purchase of some land at the same rate of 4 *dīnāras* for each *kulyavāpa* by one Vasudevasvāmin and donation of the same land to one Somasvamin, a Brāhmaṇa of Kānvaśākhā, Vājasaneyicaraṇa and Lauhityagotra, have been recorded in the second grant[16] of the time of Dharmāditya. Dated in the regnal year 18 of Gopacandra (c. 540-580 AD) the third grant[17] records the purchase of one *kulyavāpa* of land at the same rate of four *dīnāras* per *kulyavāpa* in the village Dhruvilāṭi by Vatsapālasvāmin and its donation to a Brāhmaṇa named Bhaṭṭa Gomidattasvāmin, who like Somasvāmin mentioned above, also belonged to the Kānvaśākhā, Vājasaneyicaraṇa and Lauhityagotra.

It is thus evident that several dated epigraphs of the Gupta period record the use of gold coins, called *dīnāra*, by the commoners.

Notes & References:

1. *Op. cit.,* pp 31-33.
2 *Epigraphia Indica (Ep. Ind.* hereafter), Vol.XXXI, pp. 57-66; cf. also D.C. Sircar, *Select Inscriptions Bearing on Indian History and Civilization (Select Ins.* hereafter), Vol. I, 2nd Edition, 1965, pp. 352-355
3. *Ep. Ind.,* Vol.XV, pp. 114 and 129-132.
4. *Ibid.,* p. 114 and 132-134.
5. *Ibid.,* Vol.XXI, pp. 78-83.
6. D. C. Sircar, *Epigraphic Discoveries in East Pakistan (EDEP* hereafter), Calcutta, 1973, pp. 8-14, pp. 61-63; *Ep.Ind.,* Vol.XXXV, pp. 247ff.
7. See Samaresh Bandyopadhyay, 'The Common Man in Epigraphs of Bengal', *Studies in Indian Epigraphy,* Vol.XXXII, Mysore, 2005, p.11.
8. *EDEP,* p. 12.
9. *Ep. Ind.,* Vol.XX, pp. 59-64.
10. *Ibid,* Vol.XV, pp. 114-115 and 135-137.
11. *Ibid.,* Vol.XV, p. 115 and pp. 137-141.
12. Cf. D. C. Sircar, *Indian Epigraphical Glossary,* Delhi, 1966, p. 317.
13. Cf. Monier Monier-Williams, *A Sanskrit-English Dictionary,* Reprint, 1989, p. 1102.
14 *Ep.,Ind.,* Vol.XV, pp. 115-116 and pp. 141-145.
15. *Indian Antiquary,* July 1910, pp. 193-198.
16. *Ibid.,* pp. 199-202
17. *Ibid.,* pp. 203-205.

Pāla Kings in the Badal Praśasti—A Stock-Taking

S.C. BHATTACHARYA

Introduction

The Badal Praśasti (also called the Garuḍa Pillar Inscription) of Guravamiśra, a contemporary of Nārāyaṇapāla (c. 874-930 AD), discovered in 1780 in the vicinity of the town of Badal in the Dinajpur District (now in Bangladesh), contains a eulogy of five generations of a family of learned Brāhmaṇas, viz. (1) Garga, (2) Darbhapāṇi, (3) Someśvara, (4) Kedāramiśra and (5) Guravamiśra—all or most of whom served as ministers or priests under the contemporary Pāla rulers. A translation of the inscription by Charles Wilkins who was also the discoverer of the inscribed pillar, was published in 1788 in vol. 1 of the Asiatic Researches (pages 131-144), with a drawing of the pillar and a specimen of the characters, and accompanied by some valuable remarks by Sir William Jones. But it was not until a century later that the inscription was properly edited by F. Kielhorn (*Epigraphia Indica*, vol. II, 1894, pp. 160-167 and pl.) and about twenty more years later, by Akshay Kumar Maitreya, in Bengali (*Gauḍalekhamālā*, 1319 of the Bengali Era, i.e. AD 1912, pp.70-85 and pl.). The writings of Kielhorn and Maitreya still remain the only standard published editions of the Badal Praśasti and have been extensively utilized by me in the following pages, but not blindly.[1]

It as long been maintained that the Badal Praśasti mentions the following (and until recently regarded as successive) four Pāla rulers, viz. (1) Dharmapāla, (2) Devapāla, (3) Śūrapāla I and (4) Nārāyaṇapāla as contemporaries / patrons of the Brāhmaṇa ministers / priests. In the meantime, however, the long-familiar picture of the Pāla rulers, for about half a century after Devapāla, has changed beyond recognition, thanks to the new data made available by some recently discovered Pāla copper plates.[2] Two new names—Mahendrapāla and Gopāla II—have been added to the list of the Pāla kings, whereas another, viz. Śūrapāla I, has been correctly situated in the Pāla genealogy for the first time. With the hindsight now available, the present article examines afresh the text of the Badal Praśasti for corroboration of the new-found data relating to the Pāla kings as well as their implications.

In the following discussion we will proceed with the reigns of the individual Pāla kings on the basis of their contemporaneity with the successive Brāhmaṇa ministers/priests for this is the way this inscription unfolds its contents to us.

Garga: Dharmapāla, Verse 2

The first Pāla king whose name is mentioned in the Badal Praśasti is Dharmapāla (c.765-800 AD) during whose reign the power and influence of the Pālas spread far and wide. Credit is claimed for Garga for making this possible while holding the same position to

Dharmapāla as Bṛihaspati did to Indra. But he looked after the interest of his client more successfully than Bṛihaspati. As the inscription says:

"Śakra (=Indra) ruled over no other than the eastern quarter and even there he (though served by Bṛihaspati as minister) was shortly defeated by the Demon (Daitya) chiefs, whereas Dharma(pāla), the regent of the east, has been made by me sovereign over all the regions, thus he (i.e. Garga) laughed Bṛihaspati to scorn".

Śakraḥ purodiśi patir=na digantareṣu

tatr=āpi Daityapatibhir=jita-eva [sadyaḥ] |*

Dharmaḥ kṛitas=tad=adhipas=tv=akhilāsu dikṣu

svāmi may=eti vijahāsa Bṛihaspatiṁ yaḥ || V.2

Darbhapāṇi: Devapāla, Verses 5, 6

Darbhapāṇi, the son of Garga by his wife Icchā, was minister of Devapāla (c.800-840 AD), son of Dharmapāla. Regarding him, verse 5 of the Badal Praśasti states this: "By his (i.e. Darbhapāṇi's) policy, the illustrious king Devapāla made tributary the earth as far as the Revā's parent (i.e. the Vindhya mountains), whose pile of rocks are moist with the rutting secretion of the elephants, as far as Gaurī's father (i.e. the Himālaya), the mountain which is whitened by the rays of Iśvara's (i.e. Śiva's) moon, and as far as the two oceans whose waters are red with the rising and setting of the sun."

Ā-Revā-janakān=mataṅgaja-madas=timyac=chilā saṁhater

=ā-Gaurī-pitur=Īśvar=endu-kiraṇaiḥ puṣyat sitimno gireḥ |

mārtaṇḍ=āstamay=oday=āruṇa-jalād=ā-vāri-rāśi-dvayāt

nītyā yasya bhuvaṁ cakāra karudāṁ śrī Devapālo nṛipaḥ || V.5

Verse 6 records the great esteem in which the king Devapāla held his minister Darbhapāṇi: "At his (i.e. Darbhapāṇi's) gate stood, awaiting his leisure, the illustrious king Devapāla, scarcely visible among the vast armies attending on princes who had come from all quarters (in such numbers) that the visibility of the regions was hidden by thick clouds of dust rising from the earth, (though) swept by the constant and abundant streams of rutting secretion, flowing down from lustful elephants of various breeds."

Mādyan=nānā-gajendra-sravad=anavarat=oddāma-dāna-pravāh=

onmṛiṣṭa-kṣoṇī-visarpi-prabala-ghana-rajaḥ saṁvṛit=āśā-vikāśaṁ |³

dik-cakr=āyāta-bhūbhṛit-parikara-visarad=vāhinī durvvilokas=

tasthau śrī-Devapālo nṛipatir=avasar=āpekṣayā dvāri yasya || V.6

Maitreya opines that this verse suggests the proximity of the ministerial quarters to the royal palace. As the Garuḍa pillar still occupies the original place of its foundation, it would be reasonable to hold that the royal palace was also in the vicinity.

Darbhapāṇi: Narapatiḥ Surarāja-kalpaḥ, Verse 7
Who is this 'Narapatiḥ Surarāja-kalpaḥ'?

Verse 7 of the Badal praśasti states: "Though the king, who is comparable to the king of the gods, and the dust of whose feet was marked with the diadems of sundry kings, first offered to him (Darbhapāṇi) a chair of state with a seat bright as the moon, he ascended his own throne with trembling".

Datv=āpy=analpam=uḍupa-cchavi-pīṭham=agre

yasy=āsanaṁ narapatiḥ Surarāja-kalpaḥ |

nānā-narendra-mukuṭ=āṅkita-pāda-pāṁsuḥ

siṁhāsanaṁ sacakitaḥ svayum=āsasāda || V.7

In the above verse the king who was comparable to the king of the gods was taken by scholars to be none other than Devapāla. There was nothing prima facie wrong with this supposition so long as there was nothing to show that any other king intervened between Devapāla and Śūrapāla (mentioned in verse 15 of the Badal Praśastı and previously supposed to be identical with Vigrahapāla I).

Meanwhile, however, our knowledge about the genealogy of the early Pāla kings has undergone a sea change as a result of the discovery of fresh materials from some recently discovered copper-plate inscriptions to which reference will be made in due course. What is particularly relevant in the present context is the testimony of the Jagjibanpur copper plate[4] to the effect that Devapāla's successor to the Pāla throne was his son Mahendrapāla, a hitherto-unknown Pāla king. In the backdrop of this revealation, the expression 'narapatiḥ Surarāja-kalpaḥ' assumes special significance because 'Surarāja' is but a synonym of Mahendra, both indicating Indra, the king of the gods. In view of this, considered together with the perfect time-sequence (of Mahendrapāla having been Devapāla's immediate successor), there is strong reason to believe that this 'nararpati Surarāja-kalpa' is in fact Mahendrapāla himself. Accordingly it would follow that Mahendrapāla had already assumed charge as king after Devapāla. The phrase 'nararpati Surarāja-kalpa' in the present context may be taken to imply that although Mahendrapāla was 'the king of the men' (narapati), by virtue of his deeds he was comparable (kalpa) to the 'king of the gods' (Surarāja), whose name he bore.[5] The non-mention of the actual name 'Mahendrapāla' is no doubt intriguing, but may be explained by personal poetic diction of the composer and need not be regarded as exceptionable in a private praśasti like the present one as would have been in an official document like a copper-plate grant.

The verse under reference also shows that Darbhapāṇi continued to hold important position of state and was held in as much awe and reverence by the son (Mahendrapāla) as by the father (Devapāla).

Someśvara = Parameśvara-vallabha,Verse 8

Who is this Parameśvara?

Someśvara, the son of Darbhapāṇi by his wife Śarkarādevī, is described as 'Parameśvara-vallabha', i.e. favourite of the 'king'. Who this king was, has not been specified. But in view of our identification of 'narapati Surarāja-kalpa' with Mahendrapāla', it would follow that Mahendrapāla, as the reigning king at the time, has been referred to as 'Parameśvara' in verse 8 of the Badal Praśasti and that Someśvara enjoyed his favour. It is possible that Someśvara became a minister of the Pāla king after the demise of his father Darbhapāṇi.

Kedāramiśra: Gaudeśvara, Verse 13

Someśvara's son by his wife Ralladevī was Kedāramiśra. With regard to him verse 13 of the Badal praśasti states : 'Attending to his, (i.e. Kedāramiśra's) wise counsel the lord of Gauda long ruled the sea-girt earth, having eradicated the race of the Utkalas, humbled the pride of the Hūṇas, and scattered the conceit of the rulers of Dravida and Gurjara'.

Utkīlit=Otkala-kulaṁ hṛita-Hūṇa-garvvam

kharvvīkṛita-Dravida=Gurjara-nātha-darpaṁ |

Bhū-pīṭham=abdhi-raśan=ābharaṇam=bubhoja

Gaudeśvaraś=ciram=upāsya dhiyaṁ yadīyāṁ || V.13

The name of the lord of Gauda, undoubtedly a Pāla king who implemented the wise counsel of Kedāramiśra and obtained so spectacular results, has not been specified, but has been taken by scholars to be Devapāla in the absence of any intervening ruler before Śūrapāla. But in view of what has been said above (cf. verses 7 and 8), the epithet 'Gaudeśvara' of verse 13 is also to be ascribd now to Mahendrapāla. The Jagjibanpur copper plate has revealed the true identity of Mahendrapāla as a Pāla king by the strength of which the numerous stone inscriptions[6] found from Bihar and north Bengal and bearing dates from 2 to 15 of the reign of Mahendrapāla can be ascribed to him. Previously Mahendrapāla was taken to be the Gurjara Pratīhāra king Mahendrapāla, son of Mihira Bhoja, and the occurrence of these inscriptions regarded as irrefutable proof of the virtual collapse of the authority of the Pālas before the onslaught of the Gurjara Pratīhāras.[7] The emergence of Mahendrapāla as a Pāla king has now demolished the perception of a temporary collapse of the Pāla power after Devapāla—necessitating due correction in the history books. The Pāla power under Mahendrapāla was not only in undisputed possession of Bihar and north Bengal, but was also credited with making new conquests including those against the Utkalas, the Hūṇas and the lords of Dravida and Gurjara. It may be mentiond in this connection that though the Jagjibanpur copper plate makes no mention of any specific conquest by Mahendrapāla, and a verse (verse 16) seems to suggest that he was not inclined to pursue a vigorous aggressive policy towards his adversaries,[8] there

are nonetheless vague claims about his army setting out on conquests of the quarters (yasy=āśā-vijaya-prayāṇe, verse 13), the spread of his prowess in different directions also across the seas (verse 15), and even to a sort of pan-Indian overlordship (verse 14) in the style of such claims made for Devapāla in his Munger[9] and Nalanda[10] copper plates (verse 15).

While too much importance need not be attached to distinctly hyperbolical claims to pan-Indian suzerainty of the conventional cakravarti-kṣetra type as characterised by D.C. Sircar,[11] the more specific claims of success against the Utkalas (Orissa) and the Hūṇas might have had a substratum of truth behind them while the rhetoric of humbling the pride of the Dravida and Gurjara lords may convey the lingering of the embers of the tripartite conflict during Mahendrapāla's reign about which, however, specific information is lacking.

Mahendrapāla ruled for no less than 15 years, cf. his Mahisantosh inscription,[12] so that the use of the term 'ciram' to denote the long tenure of his reign is not appropriate. As things stand, king Mahendrapāla's reign witnessed the services of three of Guravamiśra's ancestors, viz., Darbhapāṇi, Someśvara and Kedāramiśra, in succession.

Kedāramiśra: Śūrapāla, Verse 15

Kedāramiśra continued to receive royal patronage during the rule of the next king Śūrapāla (I) about whom verse 15 of the Badal praśasti has this to say: 'At the sacrifices of him (i.e. Kedāramiśra), the image of Brihaspati, the illustrious king Śūrapāla, having destroyed the forces of his enemies, often attended of his own accord, like Indra himself, the destroyer of the demon Bala, and ever desirous of the welfare of the earth, girt by the several oceans, he, there with bent head, received the sacred water (literally, the water of peace), his heart being bathed in the water of devotion.''[13]

Yasy=ejyāsu Brihaspati-pratikriteḥ śrī-Śūrapālo nripaḥ

sākṣād=Indra-iva kṣat=āpriya-b(/B)alo gatv=aiva bhūyaḥ svayaṁ |

nān=āmbhonidhi-mekhalasya jagataḥ kalyāṇa-sanśī (śaṁsī) ciraṁ

śraddh=āmbhuḥ-pluta-mānaso nata-śirā jagrāha pūtam=payaḥ || V.15

Prior to the discovery of the Mirzapur (Lucknow Museum) copper plate,[14] there was a lot of confusion among scholars about the position of Śūrapāla in the Pāla genealogy. He has been mentioned after Devapāla and before Nārāyaṇapāla in the Badal praśasti (from which his name was known for the first time). In the copper plates of the Pāla kings from the time of Nārāyaṇapāla onwards, the name of Śūrapāla is absent, while the name of Vigrahapāla (I), a cousin of Devapāla (and son of Jayapāla of the collateral branch) figures as the king next to Devapāla. The discovery of a number of image inscriptions,[15] dated in various regnal years of Śūrapāla in subsequent years confirmed the existence of a king named Śūrapāla (who would be much earlier than and different from his namesake, the elder brother of Rāmapāla) but as these contained no data bearing on his position in the

genealogy of the dynasty, the problem was no nearer to solution. As a way out, Hoernle's suggestion that this Śūrapāla was perhaps another name of Vigrahapāla (I) was eagerly accepted by most scholars[16] until the Mirzapur (Lucknow Museum) copper plate proved this identification to be wrong. From the Mirzapur copper plate (which came to light before the Jagjibanpur copper plate) we know that Śūrapāla was in fact a son of Devapāla by queen Māhaṭa, daughter of king Durlabharāja (verse 14)., and that he ruled after Devapāla. From the Jagjibanpur copper plate we know that Śūrapāla was a younger brother of king Mahendrapāla and was made dūtaka (emissary) of the grant recorded therein, like Saumitri by Rāma (verse 21). Mahendrapāla, like Śūrapāla, was Devapāla's son by queen Māhaṭā whose father Durlabhavarāja was of Cāhamāna lineage (verse 11).Thus rather than being the immediate successor of Devapāla (the impression created by the Mirzapur copper plate which omits the name of his predecessor, Mahendrapāla), Śūrapāla was not the immediate successor of Devapāla, but was preceded by Mahendrapāla. Śūrapāla ruled for at least 12 years.[17] In the Mirzapur copper plate the status of the overlordship of the whole land from the Vindhyas to the Kailāsa and between the two, i.e. the eastern and western mountains has been claimed for him (verse 24). This is, however, a conventional claim and need not be taken in the literal sense. So far as verse 15 of the Badal praśasti is concerned, it shows that though a Buddhist, Śūrapāla participated in Brahmanical rituals reverentially with the belief that it would bring good to himself as well as to his subjects and the kingdom. Maitreya has correctly pointed out that occurrence of the term 'bhūyaḥ' (repeatedly) militates against the sacrifices which Śūrapāla attended being related to his consecration.

Guravamiśra='Gopāla-priyakāraka', Verse 17
Who is this 'Gopāla'?

Kedāramiśra's son by his wife Cabbā (read as Vavvā by other scholars)[18] was Guravamiśra who has been described as 'Gopāla-priyakāraka' in the Badal praśasti (verse 17). The term has been taken by scholars in the dual meanings of (1) 'who delighted the cowherds' (go-pāla, i.e. Kṛiṣṇa); and (2) 'who caused pleasure to the protector of the earth' (go-pāla), i.e. the king. The second of the two meanings has more relevance to the context. The term 'king' was taken in the generic sense by scholars who had no clue as to whether the king to whom Guravamiśra caused pleasure was still Śūrapāla (then identified with Vigrahapāla I) or he was Nārāyaṇapā, who was then perceived as the next king. For those were the only two alternatives available until the discovery of the copper plates-numbering three so far[19] -of Śūrapāla I's son Gopāla (who has to be called Gopāla-II in view of there being now four Gopālas in the dynasty), a king unheard of so far. There can be no doubt that it is the name of this Gopāla II which is embedded in the expression 'Gopāla-priyakāraka' in verse 17 of the Badal praśasti and Guravamiśra apparently caused pleasure to him by being in his services as a minister/priest.

No mention of Vigrahapāla

For reasons unknown to us the Badal praśasti skips the name of Vigrahapāla I and passes on to the latter's son Nārāyaṇapāla after Gopāla (II). Vigrahapāla had apparently a very short reign which seems to be supported by the fact that he has no inscription to his credit. He seems besides to have abdicated the throne in favour of his son Nārāyaṇapāla, cf. Bhagalpur copper plate, verse 17.[20]

Guravamiśra: Nārāyaṇapāla,Verses 19 and 20

Guravamiśra, who caused pleasure to Gopāla II continued to be favourite of the next king during whose reign he set up the Badal pillar with the figure of Tārkṣya (i.e.Garuda) on its top and with the inscription under discussion. It has been claimed that Nārāyaṇapāla was a connoisseur of his qualities and admired him for his manifold virtues, cf. Verse 19 of the Badal Praśasti which states: 'Since the illustrious king Nārāyaṇapāla, desirous of victory, skillful in discerning excellent qualities, held him (i.e. Guravamiśra) in high esteem, what need is there of further eulogy?''

Kuśalo guṇān[21] vivektuṁ vijigīṣur=yan=nṛipaś=ca bahumene |

Śrī-Nārāyaṇapāluḥ praśastir=aparās=tu kā tasya || V. 19

Neither was the said king reticent in voicing his appreciation for the versatility of Guravamiśra's genius, as seems to be conveyed by the expression *'yasy= ānalpamater= ameya-yaśaso dharm=āvatāro= 'vadat'* in verse 20. Kielhorn's translation of the term 'dharmāvatāra' as 'the spread of holiness' does not suit the context and hence is not acceptable. Maitreya's suggestion that it refers to the king is no doubt correct and accordingly it may be translated as 'the justice incarnate' and referred to Nārāyaṇapāla. Confirmation of the admiration of Nārāyaṇapāla for Guravamiśra comes from the Bhagalpur copper plate inscription of the said king. Of bhaṭṭa Gurava (apparently identical with Guravamiśra of the Badal Praśasti), verse 18, states: 'The messenger of this (grant was) the illustrious bhaṭṭa (i.e. Brāhmaṇa scholar) Gurava of hallowed deeds.[22] He knew the meaning of the idea of Brahman, which it is very difficult to understand even with the help of the Vedānta (books); he was extremely well-versed in all the Śrutis together with the Aṅgas; and he was the author of sacrifices in which great fees were paid.''

Vedāntair=apy=asugamatamaṁ veditā Brahmatu(ā)rthaṁ

yaḥ sarvvāsu Śrutiṣu paramaḥ sārddham=Aṅgair=adhītī |

Yo yajñānāṁ samudita-mahādakṣiṇānāṁ praṇetā

Bhaṭṭh śrīmān Guravo dūtakaḥ puṇyakīrttiḥ || V. 12, Bhagalpur Copper Plate

The above verses from the Badal praśasti and the Bhagalpur copper plate show the mutual admiration Guravamiśra and Nārāyaṇapāla had for each other. The Bhagalpur copper plate is the only corroborative evidence about any member of this Brāhmaṇa family

of the Badal Praśasti which makes it rather difficult for us to pronounce judgement on the veracity of the claims made for the others here.

Summary of the main findings and observations

Before we conclude it would be useful to summarize our main findings and observations about the Pāla kings from a study of the Badal praśasti in the light of the data provided by the recently discovered copper plates.

(1) and (2)· The most important of our findings are the mentions of Mahendrapāla (as 'narapatiḥ Surarāja-kalpaḥ', verse 7) and Gopāla (II, in 'Gopāla-priyakāraka', verse 17) the precise implications of which remained undetected during all these years.

(3) Śūrapāla (I), whose mention in the Badal Praśasti led to all sorts of speculations, has now been satisfactorily situated in the Pāla genealogy.

(4) All the kings from Dharmapāla to Nārāyaṇapāla (with the lone exception of Vigrahapāla I whose name does not figure here), including Mahendrapāla (mentioned in a round-about way), Śūrapāla (I) and Gopāla (II), have been mentioned in this inscription in the correct order of their succession. In this respect the Badal praśasti scores over the copper plates which being official records are selective preferring to record names of kings who were in the direct line of succession (of the issuer).

(5) The introduction of Mahendrapāla has shrunk the space that was formerly allotted to Devapāla. In particular, Mahendrapāla is now to be identified with the 'Gauḍeśvara' (lord of Gauḍa), who. attending to the wise counsel of Kedāramiśra, is credited to have long ruled the sea-girt earth, having eradicated the race of the Utkalas, humbled the pride of the Hūṇas and scattered the conceit of the rulers of Draviḍa and Gurjara (verse 13), a credit previously attributed by scholars to Devapāla. This factor calls for some rewriting of this phase of the history of ancient Bengal.

(6) The induction of Mahendrapāla and Gopāla II has also led to regrouping of some of the (incumbent) Brāhmaṇa-king co-relations.

In conclusion, in the light of the above discussion it may be pertinently claimed that our stock-taking of the Badal Praśasti has produced results which have important bearings on the history of ancient Bengal, particularly of the early Pāla period.

Notes and References:

1. It has occurred to us that some of the readings/interpretations/translations by F. Kielhorn and A.K.Maitreya call for revision. We refrain from undertaking this exercise as it would be out of place here though some modifications are introduced.

2. See notes 4, 14 and 19 below.

3. The expression has been read as '*samvrit=āś=āvakāśam*' by Kielhorn and Maitreya; but

the sign for medial 'i' is clearly noticeable in 'vi'. Our reading as '*samvṛit=āśā-vikāśaṁ*' has called for some modification in the translation.

4. Edited by K.V. Ramesh and S. Subramoniya Iyer in *E.I.*, XLII, pp. 6-29 and plates; by S.C. Mukherji in *Pratnasamīkshā*, Vol. 6-8 (1997-99), Kolkata, 2001, pp. 58-70; by Kamala Kanta Gupta in *Itihās* (Bengali), 33rd year, 1396, pp. 1-16, etc. The published editions, however, suffer from numerous errors. A thoroughly revised edition prepared by the present author has been awaiting publication in the *Journal of Ancient Indian History* of the Department of A.I.H.C., Calcutta University.

5. It is interesting to note that the Siyan Stone Inscription of Nayapāla also Mahendrapāla has been compared to Mahendra (*Mahendra-sadriś=odayaḥ*, verse 40). D.C. Sircar, who edited this inscription had no inkling that he could be a Pāla king and identified him with his Gurjara Pratihāra namesake (S.T.P, page 118).

6. There is some confusion about the number of such inscriptions in the British Museum and the dates they bear. For an updated list of the stone image inscriptions of Mahendrapāla (all supposedly of the Pāla king of this name), see Gouriswar Bhattacharya, 'Newly Discovered Copper-Plate Grants of the Pāla Dynasty', *Studies in Bengal Art*, Series No. 1, p. 443.

7. R. C. Majumdar (ed.) *History of Bengal*, Vol. I, Dacca University, 1943, p. 129; D.C.Sircar, *Pāl-Sen Yuger Vaṁśānucarit* (in Bengali), Calcutta, 1982, p 74, etc.

8. Key to such supposition is the word '*vyājaghnire*' (v. 16) which has been wrongly read as '*vyājṛimbhire*' by some scholars.

9. F Kielhorn, *Indian Antiquary*, 1892 pp. 253-58.; L.D.Barnett, *E.I.,XVIII*, pp. 204ff. and plates; A.K. Maitreya, *loc.cit.*, pp. 33-44.

10. Hirananda Shastri, *E.I, XVII*, pp. 310-27 and plates; N.G. Majumdar, *Monograph of the Varendra Research Society (No.1)*, Rajshahi, 1926, pp. 1-31; D.C. Sircar, *Select Inscriptions*, Vol. II, pp. 71ff.

11. Vide D. C. Sircar, *Indian Epigraphy*, reprint, 1996, p. 28, p. 351; *Pāl-Sen Yuger Vaṁśānucarit*, 1982, p. 63, p. 68, etc.

12. D C. Sircar, *E.I., XXXVII*, pp. 204ff.

13. It has been considered necessary to modify Kielhorn's translation of the last quartet. Maitreya also is not happy with Kielhorn's rendering of this part.

14. D. C. Sircar, Lucknow Museum Copper Plate of Śūrapāla I, Regnal Year 3, *E.I, XL*, pp. 4-16 and plates. The copper plate was found from the Mirzapur District of U.P.

15. Vide D. C. Sircar, *Pāl-Sen Yuger Vaṁśānucarit*, p. 12, Inscription Nos. 2-6; Susan L. Huntington, *The Pāla-Sena Schools of Sculpture*: Studies in South Asian Culture, Leiden, 1984, Appendix of Inscribed Dated Sculptures, Nos. 13-16/16a.

16. Cf., F. Kielhorn, *E.I.*, II, p. 161 and foot note 4; R. C. Majumdar (ed.), *History of Bengal*, Vol. I, p. 127 and foot note 1; D. C. Sircar, *Pāl-Sen Yuger Vaṁśānucarit*, p. 73, etc.

17. The date occurs in a brass image of Viṣṇu, vide D. C. Sircar, *Pāl-Sen Yuger Vaṁśānucarit*, pp. 174-75 and plates 2-5; Huntington, *loc. cit.*, p. 211, Appendix of Inscribed Sculptures, No. 16a.

18   The first of the two letters of the name, showing angularity at the left end, is 'ca' and not "va", which would have had this portion rounded.

19   Two of these copper plates—both dated in the year 4 and may be said to be cognates, having so much in common between them in form and content—are of unknown provenance but believed to have been found (perhaps together) from some place in the northern parts of West Bengal or Bangladesh and later to have made their way to a private collection of an American gentleman. For preliminary information about the copper plates and their contents, see Gowiswar Bhattacharya, 'Discovery of a New Pāla Ruler', *Journal of the Asiatic Society of Bangladesh*, Hum., Vol 41, No. 1, June, 1996, pp 193-95; and 'The New Pāla Ruler, Gopāla(II), Son of Śūrapāla(I)'', *Facets of Indian Culture, Gustav Roth Felicitation Volume*, Kameswar Prasad.. et al(ed.), Bihar Puravid Parishad, Patna, 1998, pp. 177-80 Edited by S. C Mukherji, 'Two New Copper-Plate Inscriptions (Nos 1&2) of King Gopāla II, Pāla Dynasty of Bengal and Bihar, regnal year 4 (Circa 878 A.D.)', *Pratna Samīkshā*, Vol. 6-8, pp. 71-80 and plates. Unfortunately, Mukherji's transcripts abound in mistakes and he provides no translation. A dependable edition of these two copper plates is still awaited. The Present author has undertaken the task and has already prepared the transcripts and the translations; he expects to edit the inscriptions in a befitting manner soon. Another copper plate of Gopāla II, dated in the year 3, found from Mahipur in the Bogra District and now in the custody of the Department of Archaeology, Bangladesh, remains unpublished. A promising Japanese Indologist, Mr. Ryosuke Furui (then awaiting his Ph.D. degree of the Jawaharlal Nehru University, Delhi) took a photograph of this inscription while in Dhaka, and gave an illustrated talk on it on 1.11.2006 at Centre for Archaeological Studies and Training, Eastern India, Kolkata, in which the present author was also present. It has been learnt that Furui has meanwhile edited this inscription in an article titled 'A New Copper-Plate Inscription of Gopāla II from Mahipur, Bogra District of Bangladesh, which is expected to be published in the forthcoming volume of South Asian Studies.

20.   E. Hultzsch, *Indian Antiquary, XV*, 1886, pp.304ff. and plates; A. K. Maitreya, *loc. cit.,* pp. 55ff.; D. C Sircar, *Select Inscriptions*, Vol. II, pp. 80ff.

21.   The word is wrongly given as '*gunavān*' in the *Gaudalekhamālā*.

22   As has been correctly pointed out by Maitreya, (*loc.cit*, p 55, foot note II), the translation by Hultzsch of the fourth pāda (quarter) of verse 18 as, 'The messenger for this (grant was) the illustrious *Bhaṭṭa, Gurava Puṇyakīrtti*' is not quite correct Maitreya, however, has not provided any translation himself His own translation ends with the genealogical portion, i.e., verse 17.

The Inscribed Stone Image of Caṇḍī from Rampal and the Iconographic Problems Connected with it

GOURISWAR BHATTACHARYA

As early as 1911 an inscribed stone image of a four-armed goddess (**Fig. 34**) was discovered and subsequently published in the *Journal & Proceedings of the Asiatic Society of Bengal*, N.S. vol. IX, No. 7, 1913, pp. 289-290, pls. XXIII and XXIV by R.D. Banerji. Besides its unique iconographic features, the image is of importance, because it is dated in the third regnal year of the Sena king of Bengal, Lakṣmaṇasena (c. 1179-1206 AD).[1] Banerji (1913: 289) writes, "In April 1911 an inscription of the time of Lakṣmaṇasena-deva was discovered on the base of an image of the goddess Caṇḍī at Dālbazar in the town of Dāccā. There is an old *ghāt* on the banks of the river Buri, which is built entirely of blocks of stone, both carved and plain, brought from the ruins of Gaur. The entrance of this *ghāt* is built of fragments of carved mihr-abs of masjids. To the left of this entrance is a small modern brickbuilt shrine containing a *liṅga* and two images of stone, one of Caṇḍī and the other of Viṣnu [sic]. It was ascertained from the present owners of the *ghāt* and the temple that the images were brought from the ruins of Rāmapāla in the Dāccā District by a certain Babu Baikuṇtha Nātha Sen,[2] Deputy Inspector of Schools (now deceased) about thirtyfive or forty years ago." Banerji (pp. 289-290) describes the image (pl. XXIII) in the following way: 'The image represents a goddess with four hands standing on a fully-expanded lotus. She holds a *lotus*[3] and a *water-pot*[4] in her right hands,[5] a *battle-axe*[6] in her upper left and her lower left hand is in the posture of blessing.[7] A female attendant stands on each side of her holding a fly-whisk. The main figure stands under a sort of porch or niche probably intended to represent a temple. On the pedestal is the inscription in two lines on a plain band in front and a recessed corner of each side. Below this is a lion couchant in front with three devotees kneeling on three recessed corners on each side.[8] *On the top of the niche* or shrine are two elephants, one on each side with vases in their upraised trunks as if they are *pouring water over the head of the goddess*.[9]" We come to the inscription afterwards.

The same inscribed stone Caṇḍī image was published by R.D. Banerji in his standard and wellknown volume, *Eastern Indian School of Mediaeval Sculpture* published in 1933; see p. 121 and pl. VI(d) with the caption, "Chandi, the year 3 of Lakshmanasena (from Patharghat, Dacca city)." Banerji describes here (p. 121), "A *peculiar*[10] image of Chandī was discovered by my friend, Babu Khagendranath Chatterji, in 1911 in the town of Dacca. *It would have been very* difficult to recognise it as an image of Chandī had it not been for the inscription on the *pedestal*.[11] The inscription records that the image was dedicated in the 3rd year of the reign of Lakshmaṇasena by an officer (*adhikṛita*) named Dāmodara.

The image is quite different from the known forms as described in the *Mārkaṇḍēya-Chuṇḍī* or the *Chaturvarga-chintāmaṇi, Vratu Khaṇḍu* of Hemūdri. It has four hands and holds a battle-axe (*paruśu*) in her upper right hand, while the lower is in the *varada-mudrā*. The left hands hold a lotus with a stalk and a vase(?). There is a lion couchant on the pedestal."[12]

The next scholar who published this *unique* image was the renowned Dhaka scholar, N.K. Bhattasali. Bhattasali described the image in 1923-24 without any illustration, his main object was to publish the pedestal inscription. Bhattasali writes (p. 359), "The inscription is on the pedestal of an image of Chaṇḍī, discovered about four decades ago in the ruins of Rāmpāl, the site of Śrī Vikramapura, the capital of the Sēnas referred to in their land grants, in the *purguṇa* that still goes by the same name, included at present in the Dacca and Faridpur districts. It is at present worshipped in a small temple situated in the Dālbāzār quarter of Dacca on the Farāshganj Road, a little to the east of the Northbrook Hall.[13] The late Babu Baikuṇṭhanāth Sēn, Deputy-Inspector of Schools, of Sonārang, District Dacca, was an enthusiastic collector of images, quite a crop of which used to turn up every year in the course of casual excavations in and around Rāmpāl. These, on discovery, were usually put under a tree by a roadside to receive the chance worship of the passers-by. Sometimes they were put to altogether unholy uses and sometimes consigned again to neglect and oblivion. It does great credit to Baikuntha Babu that he alone, amidst the general callousness of his countrymen, was alive to the artistic and archaeological merit of these relics of the past, and not a few of them owe their safe preservation to his labour. Many pieces of his collection are, it is gratifying to note, now in the Dacca Museum. This inscribed image of Chaṇḍī was of Baikuntha Babu's finds, and he must have presented it to the founder of the temple in which it at present lies." And (p. 360), "The inscription, however, seems to have aroused little interest at the time of the discovery, and its existence was unknown to the gentry of Dacca. In April 1911 Mr. R. D. Banerji, M.A., of the Archaeological Survey, and some friends discovered it, and from that time it has been known to the public."

Bhattasali describes the image here as follows (p. 360), "The image is about 30" high and is a rather fine example of Bengal sculpture of the time of the Sēnas. The goddess has four arms and she stands in a graceful *tribhanga* pose[14] on a full-blown lotus over a couchant lion. Her upper left hand holds a bunch consisting of a half-blown lotus with some buds and leaves.[15] The lower left hand holds an ornamental basket-like thing, either a flower basket or a waterpot.[16] The upper right hand holds an elephant-goad[17] and the lower one is in the *Varuda-mudrā*. Two attendant female figures stand on the two sides of the goddess, and two elephants are pouring water over her from two pitchers. *She seems to be u curious mixture of Gaja-Lakshmī and Chaṇḍī and may represent the Śakti of the god Harihara.*"[18] Instead of the wrong and popular term, Gaja-Lakṣmī, the serious scholars

should use the term, Lakṣmī-abhiṣeka-mūrti. In the case of the Rampal image, one should use the term Caṇḍī-abhiṣeka-mūrti.

Bhattasali illustrates the image in his well-known iconographic volume (see Bhattasali 1929: pl. LXIX) and describes (pp. 202-203), "The goddess has a springing lion as her vehicle and on her either side is a female attendant with fly whisks. Two elephants, with water from up-turned pitchers held by their trunks, are bathing the goddess from above. Her attributes are, —clockwise, 1. Boon; 2. Elephant-goad; 3. Lotus; 4. Vase. [...] The inscription calls the goddess simply *Chaṇḍīdevī*. I have not been able to lay hands on her exact *Dhyāna*. In the *Sāradātilaka Tantra*, ch. 8, there are several invocations of the goddess Bhuvaneśvarī, a form of the *Śakti* of Śiva. In one invocation, she has Boon, Protection, Red lotus and Vase full of riches as attributes, while another gives her attributes as Boon, Elephant-goad, Lasso, and Protection. The present image seems to have compounded the attributes of these two invocations, and taken out, Boon, Elephant goad, Red lotus and Vase of fortune from them. The image may, therefore, be tentatively identified as that of Bhuvaneśvarī." This is a problem with the art-historians, instead of being objective they are subjective, instead of supporting, in this case, the name of the goddess given in the inscription, Bhattasali wasted his time to invent a fanciful description from a Sanskrit text. The intention of the donor which is more relevant and important was totally ignored by Bhattasali.

The next scholar who described this image was Jitendra Nath Banerjea; see Banerjea 1943: 451. Banerjea describes, "The unique Dacca stone image of Chaṇḍī (Pl. LXXVII, 180), with an inscription dated in the year 3 of the reign of Lakshmanasena (v. *supra* p. 218), has couchant lion for her vehicle, and holds *vara*, *aṅkuśa*, *padma* and *kamaṇḍulu* in the four hands.[19] Like Gaja-Lakshmī the goddess is being bathed as it were by two elephants, with their trunks holding upturned pitchers, carved on the top part of the pointed stela. No iconographic text is known which describes such an image, denominated Chaṇḍī in the inscription. Bhattasali tentatively identifies it as Bhuvaneśvarī on the basis of certain texts in the *Sāradātilaka-tantra* (Ch. 8)."

We now refer to Susan L. Huntington who also published this important image (see Huntington 1984: fig. 82),[20] with the caption, "Caṇḍī. Rāmpāl, Vikramapura, Dacca Dt., Bengal. 3rd year of reign of Lakṣmaṇasena or 3rd year of Lakṣmaṇasena *Saṁvat*? Ca. 1181-82; or ca. 1111 or 1122-23."[21] Huntington informs us that the image is in a Private Collection in U.S.A. (p. XVIII, no. 82). Huntington gives the three versions of reading of the inscription engraved on the pedestal of the image by three different scholars (pp. 245-246), which we will discuss below.

Finally we refer to the description of the image given by Enamul Haque in his large volume, *Bengal Sculptures: Hindu Iconography upto c. 1250 AD*, published in 1992 from the Bangladesh National Museum, Dhaka.[22] Haque has a long description of the image

(pp. 211-212) of which we quote the first paragraph, the second paragraph being quite fanciful and not acceptable. Haque writes under the caption Type- 6, "The unique inscribed stone image of the Devī at Farashganj (Dhaka City),[23] is dated in the 3rd regnal year of king Lakṣmaṇasenadeva, i.e., c. 1174 AD. The goddess is four-armed, three-eyed and stands in *tribhaṅga*[24] on a *viśvapadma* above a *navaratha* pedestal. Her hands show the *varada, aṅkuśa, utpala*[25] and a special basket.[26] She is richly adorned and a long garland, like Viṣṇu's *vanamālā* hangs upto the level of her knees. The goddess is attended, on either side, by a female with a *cāmara* in her right hand and her left hand akimbo. In the top part of the pointed stele, above the trefoil arch, one elephant on each side is holding an inverted pitcher with its trunk as is usually found in the images of Gaja-Lakṣmī. In the inscription on the pedestal, the goddess is named as Caṇḍīdevī. So far no iconographic text is known which describes such an image."

Unfortunately Haque has not noticed that it is not only Lakṣmī, but other gods and goddesses also are shown with elephants on top pouring water on the deity, and this is also such a case. We may refer to a beautiful stone image of Pārvatī seated with a child from Jaynagar/Hasanpur (near Lakhisarai), North Bihar, ca. late 11th century, now in the Asian Art Museum of San Francisco (B67 S2), published by Huntington/Huntington 1990: 158-159, no. 32.[27] See (**Fig. 35**). The authors describe, "Pārvatī, the consort of the Hindu god Śiva, is identified by her lion vehicle seated beneath her and by the presence of her two children· Kārttikeya, who sits on her lap, and Gaṇeśa, the elephant-headed god who sits beside her pendant foot. [...] An unusual feature of this composition is the presence of the two elephants on lotuses appearing at the top, with their trunks wrapped around what appear to be water vessels. Typically, a pair of elephants in this position appears above images of the goddess of fortune, Lakṣmī (Śrī), and are shown lustrating her with water. Such images, known as Gāja[!]-Lakṣmī, are found among the earliest sculptural remains from the historic period in India and express the theme of well-being and good fortune. It is unusual to find an image of Pārvatī that incorporates this particular convention."[28]

As mentioned above, Banerji (1913: 290, pl. XXIV) read and translated the pedestal inscription of the Caṇḍī image see (**Fig. 36**), written in three segments, in the following way:

"A (1) Srī-mal=Lakṣmaṇa-

    (2) sena-devasya saṁ 3

B (1) Maladei suta adhikṛta Damodre

    (2) -na Srī-Caṇḍīdevi samāravdhā tabhrādakana

C (1) Srī-Nārāyaṇena

    (2) Pratiṣṭhit=etiḥ[29]

"[In] the year 3 of [the reign of] the illustrious Lakṣmaṇasenadeva [this image of]

the goddess Caṇḍī was begun by the Judge[30] Damodra (Damodara) [sic] ... [and] was dedicated by the illustrious Nārāyaṇa."

The next scholar who published the inscription was Nalini Kanta Bhattasali (1923-24: 360-362, pl. V). Bhattasali (p. 360) remarks, "In August 11 Mr. Banerji published a reading of this inscription in the Bhādra, 1318 (B.S.), number of the *Pratibhā*, the Journal of the Dacca Sāhitya Parishat in an article on king Lakshmaṇa-sēna[31] of Bengal. Four months later, in the Pausha number of the same journal, in a long article on the Sēna kings of Bengal, I gave my reading of the inscription. In June 1912 I published the inscription, with a half-tone reproduction of both the inscription and the image, in the *Dacca Review*, in an article on the era of king Lakshmaṇasēna. In *J. A. S. B.*, July 1913 Mr. Banerji re-published it in his article on king Lakshmaṇa-sēna: The inscription has thus been published four times; yet it cannot be said that up to this time it has been properly edited. Mr. Banerji's reading in the *J. A. S. B.*, as well as his description of the image is not free from mistakes."

About the inscription Bhattasali writes (p. 360), "The inscription refers itself to the **third year of the era of king Lakshmaṇa-sēna** of the Sēna Dynasty of Bengal. As the era has been proved to have begun in 1119 A.D., the inscription must have been incised in the year 1121 A.D.[32] It records that *Adhikṛita* **Dāmōdara**, son of **Māladatta**, began the image of Chaṇḍī in the third year of the era of Lakshmaṇa-sēna and that his relative (younger brother?) **Nārāyaṇa** installed the image in the fourth year.[33] The inscription is in two lines on three sections. I edit it from the original stone. The language is incorrect **Sanskrit**. *Suta* and *adhikṛita*, which should have been in the 3rd case according to grammatical rules, are both used in the 1st case."

"**Text.** [originally printed in Nāgarī script]

1. *śrīmullakṣmaṇa- mālade(da)ttasuta udhikṛita śrīdāmodare- śrīnārāyuṇena*

2. *senadevasya sam 3- ṇa śrīchaṇḍīdevī samāraddhā tadbhrādakanā-pratishṭhiteti 4 //*"[34]

Bhattasali gives the following translation of the inscription (p. 362), "The **year 3 of the era** of the illustrious **Lakshmaṇa-sēna-dēva**. The (image of the) goddess **Chaṇḍī** was *begun*[35] by the Superintendent (*Adhikṛita*) **Dāmādara**, son of **Māladatta** and was installed by his younger brother **Nārāyaṇa** (in the year) 4." Bhattasali comments (p. 361 below), "Mr. Banerji read a *visarga* after *iti*, which is inadmissible; it should be read as 4, resembling the modern Bengali symbol of 4. It is not usual to put the two ciphers of a *visarga* in touch with one another as has been done in the present case." But Bhattasali was absolutely wrong, he has not noticed other inscriptions from eastern India where *visarga* has been used with the double *daṇḍas* as a punctuation mark. He should have wondered when *sam* has been used before the date of the inscription, viz. 3, why it is left out in the case of 4? Is it also not usual that an image is installed after one year of its creation?

Bhattasali read the expression *māladei-suta* as *māladetta-sutu* and corrected it as *māludattasutu*, and comments (p. 361), "'The fourth letter in what I have read as *Māladettu* is very curious. It bears little resemblance to any letter or compound used in the inscriptions of the time. Mr. Banerji has read it as *Māladei*; but certainly *ttu* it is not like any *i* hitherto met with in the inscriptions of the period." Bhattasali's reading of the expression and the translation of it is absolutely wrong. For the correct reading we should see below.[36]

The third scholar who deciphered and published this inscription was the brilliant archaeologist, Nani Gopal Majumdar (1929: 116-117). Majumdar writes (p. 116), "This inscription, which is incised on the pedestal of an image of Chaṇḍī, was discovered in 1911 at Dal-bazar in the town of **Dacca** by Mr. R.D. Banerji. An account of the image as well as the inscription has already been published by him in the *Journal of the Asiatic Society of Bengal*, N.S., Vol. IX (1913), pp. 289-290, and plates. In 1917 Mr. Banerji kindly presented me a set of inked estampages of the inscription and from these the present edition of the text was prepared some years ago. [...] The inscription, which is a small one, consisting of three parts (marked A,B,C) is not very carefully engraved. The **characters** are the precursors of modern Bengali as current in the twelfth century A.D. Attention should be drawn only to the letter which Mr. Banerji reads as *i*, but which I am inclined to read as *ī*, in *Māladeī*. The **language** is Sanskrit prose, presenting many inaccuracies. The form *deī* for *devī* betrays perhaps vernacular influence. It records the installation of an image of Chaṇḍī by Nārāyaṇa, brother of an officer named Dāmodara, son of Māladeī, in the **year 3** of the reign of **Lakshmaṇasena**."

(p. 116) "TEXT. [originally printed in Nāgarī script]

A 1 *śrīmallakshmaṇa-*

     2 *senadevasya saṃ 3*

(p. 117)

B 1 *mālu*(1)*deīsutaadhikritaśrīdāmodra-*

     2 *ṇa*(2)*śrīchaṇḍīdevī samārabdhā*[37] *tadbhrādakaṇā*(3)

C 1 *śrīnārāyaṇena*

     2 *pratishṭhitetiḥ //*(4)

TRANSLATION

A— **In the year 3 of the illustrious Lakshmaṇasena**[38]

B-C— (The image of) Chaṇḍīdevī, begun by the officer(5) Dāmodara, son of Māladeī (Malladevī), is installed by his (younger)(6) brother Nārāyaṇa."

In the notes Majumdar remarks (p. 117):

"1. The letter *la* is peculiar. Is it *lla*?

2. Read *Dāmodareṇa*.

3. Perhaps *tad-bhrātṛikena* was intended.

4. Read - *eti.*

5. The word *adhikṛita* is translated as 'judge' by Mr. Banerji. [...] Cf. such titles of officers as *mudrādhikṛita,* 'officer in charge of the Royal-Seal', used in inscriptions.

6. The addition of the suffix *ka* probably indicates that Nārāyaṇa was a younger brother of Dāmodara. This portion is not translated by Mr. Banerji.''

Of the three epigraphists, N.G. Majumdar was the most efficient, and hence we should take his translation as authentic. Susan L. Huntington, however, has given the readings and translations of the three epigraphists; see Huntington 1984: 245-246. On the iconography of the unique image of Caṇḍī or rather Caṇḍī-abhiṣeka-mūrti we should refer to the fact that in Bengal the well-known text, *Devī-māhātmya* or *Durgā-saptaśatī* is commonly known in a shorter form as Caṇḍī (like the goddess) and its recitation as Caṇḍī-pāṭha. The goddess had also a variant, popularly called Maṅgala-Caṇḍī. It is also well-known that in the fifteenth-sixteenth centuries a vast poetical literature grew up in Bengal known as the *Caṇḍī-maṅgala-kāvya* in praise of the goddess Caṇḍī or Caṇḍīkā. Perhaps the worship of goddess Caṇḍī, a form of Durgā, started already during the Sena period, at least in the twelfth century.

Notes & References:

1. See Sircar 1982: 28 and 181. In his list of the inscriptions ascribed to Lakṣmaṇasena, Sircar wrongly (p. 28, no. 4) calls the Rampal image inscription as a copper-plate, and no. 5 as an image inscription, but both dated in the 3rd regnal year of Lakṣmaṇasena. Because of the discovery of the most important copper-plate inscription of the Pāla ruler Mahendrapāla, son of Devapāla, and other new copper-plate inscriptions of Gopāla (II), son of Surapāla (I), we need a careful revision of Sircar's volume, perhaps in English. For the new geneology of the Pāla rulers, see Bhattacharya 1998: 123.

2. The spelling and the pronunciation of the Bengali names are quite odd to the non-Bengali readers, especially the Sanskrit-knowing western scholars.

3. Italics ours.

4. Italics ours.

5. She holds them in her left hands.

6. Italics ours.

7. These attributes are in her right hands. It is quite unthinkable that a scholar like R.D. Banerji was so careless in describing correctly right and left hands. Perhaps he worked from a mirror-reversed photo-print.

8. Description not correct. The devotees appear to be seven in number, four at the proper right and three at the proper left.

9. Italics ours.

10. Italics ours.

11. Italics ours.

12. Banerji has corrected the position of hands in this description.

13. It is now in a Private Collection of America. See below.

14. It should be called *ābhaṅga* pose. For a discussion on the terms *tribhaṅga* and *ābhaṅga*, see Varma 1983. But Varma did not know that in Bengal Kṛṣṇa is called '*tribhaṅga murārī*', and in the *Bhāgavata-purāṇa, māhātmya-adhyāya* 4, v. 3a, muralī-dhaṟa (i.e. Kṛṣṇa) has been described as, *tribhaṅga-lalitaś cāru-kaustubhena virājitaḥ*; see *Śrīmad-Bhāgavatam* 1950.

15 This is not a half-blown lotus, but a blue water-lily or *nīlotpala*.

16. It is a flower basket, not a water-pot. See our note below.

17. Bhattasali is right, it is *aṅkuśa*, and not battle-axe or *paraśu*, as Banerji wrongly described it.

18. Italics ours. Bhattasali was a brilliant iconographist, but here in this description he committed serious mistakes. Of course, Bhattasali did not know that the term Gaja-Lakṣmī does not occur in any Sanskrit iconographic text. The term was coined for convenience by the Indian scholars. We do not know who the pioneer was, but till to-day the scholars, both Indian and western, use it, mostly in connection with the image of Śrī or Lakṣmī. We are thankful to Pratapaditya Pal, who, instead of using the wrong term, used a very appropriate English espression, 'Lustration of Lakṣmī', in his catalogues. See, for example, Pal 1986: 138, S 17. Pal writes, 'The Lustration of *Sri-Lakshmi*', and describes below, "Two elephants are perched on two more lotuses at the height of her shoulders. The animals are bathing or lustrating the goddess with water poured from waterpots held by their raised trunks." It is quite surprising that as early as 1914 Allan, while describing the coins of Śaśānka, remarks (p. cv), "The reverse type is similar to the traditional seated Lakṣmī of the Guptas· the hands of the goddess, however, are empty, and on her r. and l. are elephants sprinkling her (*abhiṣeka*)," and uses the term (p. civ), "the *abhiṣeka* of Lakṣmī", and also describes (p. 147), "Goddess (Lakṣmī), nimbate, seated facing on lotus, holding lotus in l. hand which rests on knee, and with outstretched r. hand empty; above, on either side, elephant sprinkling water over her (*abhiṣeka*)", (p. 148), "Lakṣmī holds lotus in r. hand also; without *abhiṣeka*", and (p. 150), "Goddess (Lakṣmī), nimbate, seated facing on lotus, holding lotus in l and fillet in outstretched r hand; above, on l , an elephant sprinkling her."

19. Banerjea's *kamaṇḍalu* is wrong

20. Huntington published a clear image of the deity with the tenon which proves that either she or John C. Huntington or the dealer or the present owner or his photographer has taken the photo from the original image lying at present with the American collector.

21. Banerji 1913. 290 and Majumdar 1929: 116, however, identify the date as the 3rd regnal year of Lakṣmaṇasena.

22 Mukhlesur Rahman has also described this image in his unpublished PhD Thesis, *The Early*

History of the Cult of Mother Goddess in Northern India, University of London, 1965, p. 490.

23. In the attached note 51, Haque remarks, ''Unfortunately, the sculpture is no more traceable.'' May be that is why Haque has not been able to illustrate the image in his book.

24 See our note above.

25 Haque is the first scholar to identify the flower correctly.

26. This is the correct identification of the object. Haque rightly comments in the attached note 54, ''It is certainly not a *kamaṇḍalu* as has been thought by all the authors so far. It looks like a woven basket of plaited twigs. Exactly similar baskets are held by some of the extant Lakṣmī images (see f. n. 59 below).'' We may refer to the fact here that even today in South-east Bangladesh the young brides carry this basket with flowers, etc., at the time of their marriage, and in Bengali it is called *sāji* or *phuler sāji*, basket or flower-basket.

27. In addition to the publications listed in Huntington/Huntington 1990: 159, the image was published several times by C. Bautze-Picron; 1991/92: 257-258, 279, fig. 22, where she calls it Durgā; 1992. 57, no. 72, fig. 27, where she calls it Puṇḍeśvarī; 1995: 54, fig. 21, where she calls it again Durgā.

28. The term 'Gaja-Lakṣmī' does not appear in any of the Sanskrit texts, hence it is a misnomer as has been pointed out by us above. Besides it is not only Lakṣmī or Śrī, or Pārvatī in this case, but also other Hindu deities, such as Viṣṇu, Kārtikeya, and the Jaina Tīrthaṅkaras, are shown lustrated by elephants with water holding jars in their trunks Similar is the case with the Caṇḍī image from Rampal, the main image of our discussion.

29. Banerji omits two *daṇḍa*s after h.

30. Sircar explains the term as 'an officer'; see Sircar 1966: 7.

31. Note that 'ṣ' has been expressed by 'sh', and 'e' has been given a long sign above it. This was a wrong philological decision introduced by the Archaeological Survey of India, and unfortunately this is being followed blindly by the scholars even to this day.

32. But Sircar gives the date of Lakṣmaṇasena c. 1179-1206 A.D.; see Sircar 1982: 28. Also compare Majumdar 1943, Appendix I: The Chronology of the Sena Kings, p. 231.

33. See our remarks below.

34. The photograph of the impression given by Bhattasali himself, in between pp. 356 and 357, No. V, shows the inscription in three sections clearly, but Bhattasali's transcript in two lines is quite confusing.

35. Italics ours.

36. It is quite amusing to read the comment of the editor of the volume, H. Krishna Sastri (p. 361), ''Perhaps we should read *Māla-khadga*.'' Bhattasali was an excellent iconographist, but not a serious epigraphist.

37. The writer has no doubt written *samāravdhā*, because in Bengal at this period *ba* was written invariably as *va*.

38. Rather Lakshmasasena-deva.

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An Introspection on the Studies in East Indian Art

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Eastern Indian art as an area of study seems to be fortunate. For it has received attention of the archaeologists and other enthusiasts in antiquities from almost the beginning of modern art studies in India. Now it is about one hundred and fifty years that the art objects are being discovered and studied by generations of scholars. As is the case of other areas of Indological studies, initiative came from the European scholars who, centering the Asiatic Society were vigorously engaged in the discovery of Indian past. The results of their efforts are recorded in the *Journals* and *Proceedings* of the Society, and their collection of sculptures now occupies a considerable part of the Indian Museum's rich depository. Their example and endeavour, say from Lt. Kitto to Civilian Stapleton, are to be always remembered.

The study of art and architecture in Eastern India was possibly formalized for the first time when Rejendralal Mitra, inspired by James Fergusson's work, published his monumental volumes on the *Antiquities of Orissa* (1875 and 1880) and *Buddha Gaya* (1878) in the seventies of the nineteenth century. In these works we find how a scientific mind studied his objects—monuments and images—illustrating and describing them meticulously. His studies were made to record Indian achievements in temple building and carving image and appreciate them in terms of well formulated European principles. His article on Sultanganj sculptures however dealt with the eastern expression of the Indian classical art.

When the twentieth century dawned a new situation developed. Some dedicated Bengali scholars, inspired by the nationalism resulted from Lord Curzon's Bengal partition, devoted their energy to search for their own past and write their own history. In the course of their journey they came across numerous stone images of the Brahmanical and Buddhist deities. The collection and study of the images began centering Varendra Research Society at Rajshahi and Bangiya Sahitya Parishat at Kolkata. Akshay Kumar Maitra, famous for his new interpretation of the life of last two Nawabs of Bengal, Sirajuddaulah and Mir Kasim, took the lead in north Bengal with liberal supports from Sarat Kumar Ray of Dighapatia house. Akshay Kumar and a batch of young scholars, motivated by him, advanced the study of Bengal art of the Pāla-Sena period. Bangiya Sahitya Parishat also began to collect images from ancient and early medieval sites of Bihar and Bengal. When Rakhaldas Banerji, a young scholar, published the first catalogue of the museum collection in 1911, the academic world became aware of the special merit of Bengal sculpture. Collection and identification of images continued, and in the twenties the study of eastern Indian art took a definite shape. In the decade came out Monmohan Ganguly's *Handbook*

to the Sculptures in the Museum of Bangiya Sahitya Parishat (1922), J. C. French's *The Art of the Pala Empire of Bengal (1928),* Stella Kramrisch's *'Pala and Sena Sculpture' (Rupam, 1929)* and N.K. Bhattasali's *Iconography of Buddhist and Brahmanical Sculptures in the Dacca Museum* (1929). These publications laid the foundation of the two consistent approaches in which studies in Eastern Indian art progressed. The approaches were iconographical and stylistic, which were formalized by N.K. Bhattasali and Stella Kramrisch, respectively. When R.D. Banerji's *magnum opus, Eastern Indian School of Medieval Sculpture* (1933) was published in the beginning of the thirties the subject was further enriched. The work of Rakhaldas is not only more comprehensive by including more examples, especially from the sites of Bihar, but also historically significant for its emphasis on dated images in defining style. He studied the subject by combining two disciplines, iconographical and stylistic. It may be added here that he penned a number of articles in Bengali to discuss stylistic features of Gaudīya art.

Twenties onward studies in Eastern Indian art, more specifically art of Bengal, flourished in diverse way. A new direction came from Stella Kramrisch, who taught art history in the Department of Ancient Indian History and Culture for twenty-seven years of her life (1923-1950), and groomed a batch of young scholars who made major contributions to the field. One of her leading students was Niharranjan Ray who candidly admitted that 'It was she who taught me how to look at and what to look for in an object of art and made me fall in love of it'. Kramrisch was trained at the Vienna University, and she brought with her the latest Western trend of art study to Bengal. Niharranjan's contemporary and junior contemporaries Debaprasad Ghosh, Sarasikumar Saraswati and Kalyan Kumar Ganguly also carried forward and expanded the ideas of art study as propounded by Kramrisch. Kramrisch not only wrote on classical Indian art, but also moved in different areas including terracotta and *Kāṇthā.* She also made a significant venture in translating *Chitra-sūtra* section of the *Vishnudharmottara-purāṇa.* His students steadily progressed in the thirties and by the end of the decade made themselves known as promising scholars in the field. Niharranjan and Sarasikumar grew in time to become authoritative historians of Indian art and architecture, respectively. But they never failed to contribute regularly to the study of east Indian arts. Sarasikumar established his early reputation by publishing two monographs, namely *Kurkihar, Gaya and Bodhgaya* (with K.C. Sarkar) (1936) and *Early Sculptures of Bengal* (1937). Later he added comprehensive publications on the Pāla-Manuscript painting, architecture and terracotta to cover major aspects of Bengal's art heritage. He and Niharranjan travelled also to medieval and modern periods. Their contributions to the *History of Bengal,* Vol. 1, edited by R.C. Majumdar, and published by the Dacca University, are still treated as standard texts on the art and architecture of ancient Bengal. In his final years Niharranjan published a commendable work on *Eastern Indian Bronzes* (1986).

Debaprasad Ghosh's best contribution to the cause of East Indian art is possibly the organizing of the Asutosh Museum of Indian Art, University of Calcutta, as its founder-curator. He was also a brilliant art connoisseur and wrote many monographs and articles throwing new lights on various aspects of Indian and South-East Asian arts. His major contributions in the field include *Medieval Indian Painting: Eastern School* (13th century to modern times including folk painting) (1982), *Designs from Orissan Temples* (1950) and *Tribal Metal Work of Eastern Region* (1975). Kalyan Kumar Ganguli's two Bengali monographs, *Bānglār Bhāskarya* (1947) and *Bānglār Lokośilpu* (1969), and the *Designs in Traditional Arts of Bengal* (1963) treat in a lucid style Bengal's early medieval sculpture and folk art in visual terms. Debaprasad and Kalyan Kumar inspired many dedicated students and individuals to collect art objects from different corners of eastern India for the Asutosh Museum. The museum is a real store-house of eastern Indian art. Following the same tradition Paresh Chandra Dasgupta organized the State Archaeological Museum, now at Behala, with a personal zeal rarely found among the museum men.

The generations that preceded us had to labour hard, not only as researchers but also as collectors of materials. We were in a better position to carry on the study following the trend set by Stella Kramrisch along with her front-ranking students. We took our lessons chiefly from the students of Kramrisch and our best endeavours were to disseminate their ideas by broadening the subject in terms of time and space. After the seminal contributions of Sarasikumar, Niharranjan and Debaprasad numerous new materials emerged in Bihar, West Bengal and Bangladesh. The new findings help studying the subject more comprehensively, and interpret it from modified angles. Micro researches of our generation have succeeded in identifying regional and folk idioms in Bengal art, and trace the influences of neighbour states. The study has grown in bulk, covering bronze, stone and wood sculptures and terracottas of different phases of our period of study. The marked emphasis is now however on Iconographical aspects. The model of J. N. Banerjea's work *The Development of Hindu Iconography* (1960), is generally followed. Some eminent Indologists, Indian and European, including Gouriswar Bhattacharya, are encouraging young scholars to investigate in the line.

The other notable feature of present researches in Eastern Indian art is that the subject is no longer a monopoly of the Indian, especially the Bengali scholars. During the last two decades major contributions have been made by such Western scholars as Frederick M. Asher and Susan L. Huntington. Their publications, *The Art of Eastern India (300-800)* and *The 'Pāla-Sena' Schools of Sculpture* (1984), respectively, have updated the art studies on the Pre-Pāla and the Pāla-Sena periods. A follow-up publication by Huntington and Huntington, *Leaves from the Bodhi Tree: The Art of Pāla India (8th-12th centuries) and its International Legacy* (1990), seems to be extremely significant, for it studies the impact of Pāla art outside India. During the last decade important contributions have been

Water Related Issues in Ancient India: A Few Case Studies from Texts and Archaeological Evidences

Sayan Bhattacharya, Punarbasu Chaudhury and Aniruddha Mukhopadhyay

Introduction:

Some mythical substances transcend their physical and chemical materiality and manifest themselves in our minds as symbols. Water is a natural compound whose material constitution becomes secondary to its symbolic value. The first human settlements came up about 6000 years ago, and struggle for existence began. From then, people had to get rid of floods, and also ensure safe water supply for domestic use and irrigation. As a consequence, hydro-technical installations were among the earliest technological achievements of mankind.

The early Brahmanical texts, written around circa 800-600 BC, reveal hydrological knowledge. In the *Vedas*, water is referred to as *apa*. The *Ṛg Veda* identifies *upah* as the first residence or *ayana* of man. It is said that Puruṣa, the primordial cosmic man was born of the waters. Similarly, later Vedic texts like the *Śatapathu Brāhmaṇa* identify water as female. The Vedic hymns, particularly those in the *Ṛg Veda*, contain many notes on irrigated agriculture, river courses, dykes, water reservoirs, wells and water lifting structures. The *Chhāndogya*, one of the principal *Upaniṣads*, points out:

> The rivers all discharge theirs waters into the sea. They lead from sea to sea,
> the clouds raise them to the sky as vapour and release them in the form of
> rain.

This is probably the oldest reference to the hydrological cycle.[1] The great civilizations that grew up along the Nile, the Tigris-Euphrates, the Ganges, the Indus and other rivers grew on the basis of water availability. Here we propose to review the multidimensional aspects of water resource management and irrigation in ancient India.

Water Issues in Ancient Indian Texts:

Many of the early Indian texts refer to water-related problems and their possible remedies. Here we briefly discuss four important texts of ancient India to illustrate the point.

Manusmṛti: From *Manusmṛti*, written in the post-Vedic age, we can realize that religion plays a diversified role in saving the integrity of the natural environment. *Manusmṛti* is the world's first ethical compendium on human jurisprudence, presented by Maharsi Manu. In the dicta for prevention of pollution we can get a glimpse of environmental awareness in ancient India. Fifty substances like urine, faeces, saliva, cloth defiled by impure substances, blood, poisonous things, and any other substance considered to be impure should not be thrown into a water body. If anyone breaks the rule, he/she shall subsist

for a month on food obtained by begging, and shall mutter the seven verses addressed to gods like Indra. The water of rivers, ponds, lakes, springs and natural water bodies is recommended as ideal for bathing.[2] Overall the principles lead to a healthy, sustainable livelihood explained by Manu as a sage scientist, environmentalist and geneticist.[3]

Arthaśāstra: Kauṭilya, also known as Chāṇakya, is the author of *Arthaśāstra*. He was a minister of the emperor, Chandragupta Maurya (circa 321-297 BC). *Arthaśāstra* is basically a treatise on government and economics in ancient India. But there is enough evidence in the book to indicate that the people of the time knew about rainfall regimes, soil types, and appropriate irrigation techniques in specific micro-ecological contexts. The *Arthaśāstra* divides the country between the Himalayas and the oceans into various kinds of regions: forests (*araṇya*), village areas (*grāmya*), mountains (*parvata*), wet or humid areas (*auduka*), arid lands (*bhauma*), plains (*sama*) and uneven lands (*viṣama*). The average annual rainfall in some places like Asmaka (upper Godavari plains) and Avanti (Malwa) was 13.5 and 23 droṇas respectively (1 droṇa = 1.5 to 2 inches). Asmaka, Avanti and Aparanta (Konkan) together formed a continuous territory. Unlimited average rainfall is seen in the Gangetic plains through which the Himalayan snow-fed rivers flowed. For a good crop, proper distribution of rainfall is as important as the sufficiency of rain: 'One third of the (annual) rainfall in the first and the last months, and two-thirds of the intervening months were the ideal distribution.'[4] Cultivable areas not dependent on rainfall for water, called *adevāmātrika* were valued more than areas dependent on rain. Rain-fed agricultural areas that received 16 droṇas of annual rainfall were called *jāṅgala* (dry) and those that received 24 droṇas of rainfall were called ampa (wet). Cultivable lands were also classified on the basis of their suitability to different crops, and their humidity and water content: dry lands (*sthala*), marshy lands (*kedara*), vegetable garden (*saṇḍa*), and flower gardens and fruit orchards (*vāṭa*). *Sthala* was suitable for crops that needed a small amount of rainfall for ripening, and if the proper crop was sown, it yielded a large harvest. *Kedaras* probably got sufficient water through irrigation.[5] Land provided with irrigation facilities was, therefore, prized more than rain-fed land. The state initiated and encouraged irrigation projects. The construction of embankments to collect rainwater was a popular irrigation device. Both natural resources like rivers, springs and lakes, and man-made tanks, reservoirs and wells were tapped for irrigation. Irrigation works were done in both waterless regions (*anudaka*) and regions with good water supply (*sahodaka*).[6] Government superintendents were asked to construct wells and waterworks in the waterless regions. Kauṭilya also mentions that the most practical means of getting water supply is to dig wells with underground springs as their feeders. References to canal irrigation are found in a passage, which refers to water set in motion by digging from a river dam. Channels for diverting water from a reservoir or river were also dug, and were perhaps known as *ādhāra parivaha* or *udakamārga*. There were both state and private irrigation works. The

state rendered help for the construction of irrigation works initiated and managed by the inhabitants of a newly settled village. Water tax was levied on irrigation facilities. Private owners used to give water to farmers from their tanks and wells against payment of a part of the produce. *Arthaśāstra* states that those who cultivate land irrigated by manual labour shall pay one-fifth of the produce as water tax; by water carried on the shoulder, one-fourth of the produce; by water lifts, one-third; and by water raised from rivers, lakes, tanks and wells, one-third or one-fourth. In case of damage to ploughing or seeds in another's field by the use of a reservoir, channels or a field under water, compensation shall be paid in accordance with the damage. References to two types of *setu* for embankments or dams for storing water are found—the *sahoduka*, where there is a natural spring or flow of water, and the *āharyoduka*, which is a storage tank with water brought into it through channels.[7]

Kriṣi Parāśara: *Kriṣi Parāśara* deals with meteorological aspects and general agriculture in India between the 6th and 11th century AD. The book highlights the close and intimate relationship between agriculture and rainfall. The sage Parāśara predicted the availability of rainwater during the different stages of crop growth. Thus he enables us to study his concepts of clouds and rainfall. The sage lists four types of clouds: the *āvartta*, *sambarta*, *puṣkara* and *droṇa*. They differ from each other by the nature of rain shed by them. Farmers are advised to observe the monthly rainfall beginning with pauṣa. Parāśara stresses that to know the quantum of monthly rainfall the observer of the weather has to work everyday and keep track of the direction of winds by fixing a rod with a flag attached to it. According to him, wind from the north or from the west brings rain and that from the east or the south indicates absence of rain. References to water retention, draining of water and water harvesting reflects the antiquity of sustainable agriculture.[8]

Bṛhat-Saṁhitā: Purification of ground water in the dug-wells is mentioned in *Bṛhat-Saṁhitā*, written and compiled by Varāhamihira. He suggests that an infusion be made from a mixture of powdered herbs namely, *añjan*, *bhadramusṭha*, *khus* (vetiver), *āmlā* (Emblica officinalis) and *nirmali* (bhui āmlā/kataka) in water and then be added in measured quantities to the water in the wells for purification.

Suśruta, the famous Indian physician in his treatise on medicine also gives detailed practical guidance for water purification. Suśruta says that muddy water can be purified with herbs and natural substances like *nirmali* seeds, roots of *kamal* (lotus/water lily), rhizomes of algae, and three stones: *gomeda* (garnet), *moti* (pearl) and *sphaṭika* (quartz crystal). He recommends the disinfection of contaminated water by exposing it to the sun or immersing red-hot iron or hot sand in it.

Hydraulic Structures and Water Management in Ancient India:

Water management policy is a very old concept in India. In the past, people generally migrated to safer and productive localities in response to local aridity. But sometimes,

instead of migrating, they modified their dwelling environments by adopting strategies for the optimum utilization of available water by harvesting rain.

Rainwater-harvesting structures originated in the Thar desert of Rajasthan in circa 4500 BC in response to the weakening of the southwest monsoon after its peak intensification. There is evidence of human presence in Thar desert in circa 2894—2643 BC, i.e. even before the Indus Valley Civilization.[9]

Indus Valley Civilization started in circa 2500 BC. The city planning and social structures reflect their environmental awareness. The sanitation system comprised 25 cm wide drains covered by bricks. The drainage systems were constructed - meter below the surface. Dirty water released from every house was drained through these channels and stored in some dug-wells in the city. To maintain the continuous flow of water, the slope of the drainage systems were maintained 2 cm per meter. Cesspits were constructed at regular distances to maintain the flow in the drainage system. There was a disposal ground (depth 4 meter) where solid wastes were disposed because the drainage system did not carry any kind of solid waste. If by chance it did then it was separated by the cesspit situated at regular intervals. Some water-absorbing systems were also constructed to remove rainwater and sewage from the road. In Mohenjodaro, there were two separate places— the city and the fort, separated by a 150 hectare area containing forests or water bodies. In the bathing-ponds of the fort, the slope was very scientifically maintained to drain the water. In the rainy season there was flood every year in the Indus Valley, but in winter the water level dropped. They used to store water for cultivation in winter. The area of cultivation was changed every year, depending on the amount of rainfall and the direction of the river flow. The people often used the ground water because of insufficient rainfall. They used bulls in irrigation to overcome the water stress. In winter, water was often stored in the lowlands. Urban Harappan civilization developed the earliest wells of their kind in South Asia. A sound agricultural base thrived because of rainwater harvesting and collection systems.[10]

The 'dock-yard' (or water-reservoir according to some) was found in the excavations at another well-known Harappan site, namely, Lothal. Irrespective of the controversy about whether the structure was a dockyard or merely a reservoir, this remarkable lined structure, with evidence of channels for inlet and outlet of water, is a pointer to the hydraulic knowledge present in proto-historic India.[11] The presence of marine organisms in this complex strengthens the argument for its having been a dock. The structure, a roughly trapezoidal one (western wall: 218.23 m; eastern wall: 215.03 m; southern wall: 35.66 m, and northern wall: 37.49 m), is enclosed by a 1.2 m thick lining made up of a four-course wall of kiln-baked bricks within broader mud-brick embankment walls. There are two inlets to this enclosure, one each in the northern and southern most portions of the eastern side. The water harvesting systems at Dholavira in the Harappan civilization is also worth

mentioning. The gradient between the higher east and the lower west of the site is 13 meters, which is ideal for reservoirs. There are a series of reservoirs that almost entirely surround the city. Dholavira lies in an area that presently receives less than 160 cm of annual rainfall, and has a history of prolonged droughts. Its climate and precipitation levels during the period that the Harappan city of Dholavira flourished is believed to have been not very significantly different.[12] Several rock-cut reservoirs or cisterns, about 7 m deep is noted around the inner side of the outer wall of the settlement. To *fill* these, the rainwater in the catchment areas of the site's two local seasonal rivulets—the Mandsar (which lay to the north-west of the walled area of Dholavira) and the Manhar (flowing through the south-eastern part of the walled area), was collected and brought to the reservoirs.[13]

Tanks have traditionally been the most important source of irrigation in India. Some tanks may be dated as far back as the *Ṛg Vedic* period, i.e. around 1500 BC.[14] The *Ṛg Veda* refers to lotus ponds (5.78.7)[15], ponds that give life to frogs (7.103.2) and ponds of varying depths for bathing (10.71.7).[16]

From 1500-1000 BC, due to the weakening of the southwest monsoon, water management systems became well established. People migrated from the north to Rajasthan, Ganges plain and the Ganges-Yamuna doab. Harvesting structures like *khādins* were intensified for farming in dry areas of Rajasthan between circa 1000 and 600 BC. Between 900 and 800 BC, early farms were designed for in situ moisture conservation by erecting small earthen embankments.

During the Mauryan period (324-185 BC), development in water harvesting systems led to rapid agricultural development. In ancient Vidisa, close to Ranchi, sophisticated irrigation system of tanks and canals were built in 300 BC. A rock-cut tank located near the largest surviving Buddhist *stūpa* could be one of the oldest surviving tanks.

Numerous inscriptions of different periods have been found in almost every part of the country with a wide range of information about tanks, dams and embankments, their maintenance and management. Two inscriptions engraved on a rock in Junagadh (Gujarat) provide information about the repair of an embankment that was destroyed during a flood. The first inscription (śaka year 72 or circa 150-151 AD) of the Śaka ruler Rudradāman records the restoration of lake Sudarśana by him.[17] The lake was constructed by Puṣyagupta (the viceroy of Chandragupta Maurya, circa 320-298 BC) and later improved under the reign of Aśoka (circa 273-232 BC). The lake was created by storing the stream water of Suvarnasikata and Palasini running from the Urjayata (modern Girnar) hill. The water of the lake was used for irrigation through canals, which had been excavated by the Yavana king Tuṣāspha. Pahlava carried the restoration work four centuries later. Another inscription at Junagadh of the time of king Skandagupta (circa 455-467 AD) records the repairs done to the embankments of the Sudarśana lake by Chakrapālita.[18]

An extraordinary example of early Indian hydraulic engineering (circa 1st century BC) was found near Allahabad. The tank excavated is 250 meter long. It was fed by the water of the Ganges while other contemporary tanks just collected rainwater. The earliest and subsequent settlements at Sringaverapura hugged the riverbank, but when their population began to grow houses were constructed about 1 km away from the riverbank. During the monsoon season the Ganges water level rose up to 7-8 meters and spilled into a nearby *nullah*. Like the Indus Valley Civilization, a canal, nearly 11 m wide and 5 m deep, was dug to take the excess water. Silting chambers were used to remove the dirt from the water, and the clean water was stored in brick tanks. The successive tanks display an extraordinary example of water treatment; the final exit channel returned the excess water to the river. In the dry months, a series of wells in the bed of the tanks were constructed to access groundwater.[19] Probably, king Dhanadeva of Ayodhya constructed the whole system.

At the Buddhist site of Sanchi (Madhya Pradesh), dating back to the 3rd century BC, there are three ancient tanks to store rainwater from the hill slopes. Hydrological and archaeological analyses of the Sanchi dams reveal that they were built to provide irrigation, possibly for rice, as a response to the increased population levels suggested by the distribution of settlements at the Buddhist sites.[20]

Most of the old temples in south India, built centuries ago, have large tanks in their premises. These tanks are either fed by harvested rainwater or by tapping underground springs. In Tamil Nadu alone there are 39 temple tanks with areas varying from 0.25 to 3 hectares. These are all fed by rainwater. Though these tanks were used mainly for bathing and religious purposes, they also recharged the drinking water wells.

In the second and third century AD, plough-cultivation spread in India aided by decentralized farms and associated earthworks that helped seasonal collection of rainwater within farms. Subsistence farmers themselves made irrigation earthworks and streamside wells that supplied water to farms. Some large community wells were fitted with water wheel and pitchers too. Both the sacred and secular texts of the period document management of water. Contemporary literatures of Tamil Nadu also refer to paddy cultivation watered by river and tank irrigation. The Sātavāhanas (1st century BC-2nd century AD) introduced brick and ring wells in the region.

In the *Mahābhārata* we find that while advising Yudhisthira on administration principles, sage Nārada emphasizes on the need of excavating large and swelling lakes so that cultivation can remain independent of rainwater.

The Kuntagani plates state that the Kadamba king Ravivarman ordered a tank-bund to be constructed in the village of Variyaka. The Kadambas ruled an area northwest of Mysore city between 4th and 6th century AD.

A Nagarjunakonda inscription bears reference to tank excavation at Setagiri and Mudera. A Gunda inscription records the digging of a tank by an Abhira general Rudrabhuti

at the village of Rasopodra. In Nagarjunakonda traces of a canal with an average width of 50 ft and depth of 16 ft situated at the southeast corner of the valley have been found. Lofty hilly ranges on all sides enclose it. The embankments were constructed with hard lime gravel mixed with *kānkar* (stone chips) and stones that provide immense strength.

Water bodies such as Dasmati Sagar of Titilagarh, Darpana Sagar, Bhanu Sagar, Rama Sagar, Bhoja Sagar and Hira Sagar of Patna, and Krisna Sagar of Mayurbhanj were constructed in the fourth to eighth century AD. Varāhamihira in his *Brhat-Saṁhitā* (AD 550) also mentions the construction of ponds and tanks.

Kalhana's *Rājaturanginī* (12th century AD) describes a well-maintained irrigation system around the Dal and Anchar lakes and the Nandi canal in Kashmir. Water management systems also evolved in Gujarat and Rajasthan. The fort of Chittor had 84 artificial water bodies including, tālābs, kunds, baories and wells. Baories, older than large water bodies but younger than kundas in rural areas, were built in Jodhpur. Step-well era covers the period 8th to 14th century AD. In western India, step-wells and stepped-ponds were built with underground buildings. An estimated 3000 of them were built between 7th and 19th centuries AD. Because of steps constructed up to the bottom, water could be reached during the dry season when water level was low.

In the ninth century AD, the Gond people in central India developed earthworks such as katas, mundas and bāndhas for irrigational purposes. The Chola and Pallava kingdoms also left a marked impression in rainwater harvesting systems and irrigation management.

The Bhopal lake, created in the 11th century was one of the largest artificial lakes of the time, covering over 65,000 hectares and fed by 365 streams. Viranam tank, the largest in the south Arcot district of Tamil Nadu, is believed to have been built by the Chola ruler, Rajendra Chola I. The tank was fed by the Vadavar channel from the lower anicut on the Kollidam river.

In 1052 AD, Qila Rai Pithora, the forest capital city of the Sultanate, thrived because of rainwater harvest, as there was no other alternative source of water.

From the thirteenth century, the Deccan capitals of the medieval period developed extensive urban water supply systems. Monsoon being the only source of water in the Deccan, some of the most notable networks of earthworks were built here. The Bahamani rulers (circa 1388-1422 AD) introduced canal irrigation for the first time in the eastern provinces of the Deccan.

There was also a well-developed water management system in the period of Qutb-ud-Din Aibak (circa 1206-1211 AD), Alaud-Din Khilji (circa 1296-1316 AD) and Muhammad-bin-Tughlaq (circa 1325-1351 AD). Feroze Shah Tughlaq (circa 1351-1388 AD) built the western Yamuna canal in 1355 to extend irrigation facilities to the dry land tracts of present day Haryana and Rajasthan.

In ancient India, digging a pond or a well was considered a pious religious act. Causing

damage to irrigation works was considered as crime, comparable to the destruction of a child in the embryo. Buckets, water lifts, pecottah (device for lifting water) and palm-leaf buckets were widely used for irrigating fields with water from canals, tanks and wells. The use of mechanized devices was very popular in the Deccan. Many people worked as hydraulic engineers. In the *Gāthāśaptusatī* (an anthology consisting of 700 *gāthās* or verses in Mahārāṣṭrī Prākṛit) there is reference to a water-lifting machine called *araghaṭṭa*. According to Himanshu Prabha Roy, the *araghaṭṭa* was a current-driven water lift.[21]

Caste-based social hierarchy was determined in ancient times through notions of purity and pollution and centered round inequitable access to, control over and distribution of water and water use right. Water was the most common medium of purification. It was considered to have an intrinsic purity and capacity to absorb pollution and carry it away.

In Bengal, the system of overflow irrigation was very popular which made full use of the abundant water of the Ganges and Damodar floods, and the monsoon rainfall. The canals were broad and shallow, carrying the crest water of the river floods. Canal beds contained fine clay and free coarse sand. The canals were long, continuous and fairly parallel to each other. Irrigation was done by cuts in the banks of the canals, which was closed when the flood was over. This controlled system enriched the soil and ensured a supply of water to every individual field and also checked malaria. William Willcocks suggested restoration of this ancient system to tackle modern problems of agriculture and recommended their revival from the public health point of view.[22]

By 2000 BC, filtration through charcoal was known in India and water was stored in copper vessels. Alum was used for water purification.[23] Researchers have now proved that the ancient Indian custom of storing drinking water in brass vessels for hygiene was scientific. Microbiologists affirm that water stored in brass containers can help combat many water-borne diseases and should be used in developing countries in place of their cheaper counterparts, i.e. plastic containers. The scientific principle involved in this is that any metal or alloy tends to disrupt biological systems. The element acts by interfering with the membranes and enzymes of cells; for bacteria, this can mean death. Water pots made of brass (an alloy of copper and zinc) shed copper particles into the water they contain. The miniscule amount of copper that circulates into the water destroys the bacteria in it without causing any harm to human beings.

Conclusion:

Ancient Indian history shows the ingenuity and wisdom of our forefathers who made harvesting of water and its management an integral part of native culture and community life. This water-wisdom at all levels of society ensured adequate availability of water for all, which in turn, formed the basis for all round development and prosperity. We should learn and comprehend this ancient indigenous knowledge and apply it to modern society to solve water related problems.

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Temples under the Koch Raj: Studies of Three Recently Discovered Inscriptions of Cooch Behar

BEDASRUTI BHATTACHARYYA

The present paper proposes to study three recently discovered inscriptions from different sacred sites in Cooch Behar.[1] The Koch rulers were mostly followers of the Neo-Vaishnavism school of Śaṅkaradeva. They used to build temples at the different corners of their kingdom in deference to the wish of their subjects. However, the temple of Madanamohana occupies a special place among the sacred sites in Cooch Behar: both the kings and the people revered it. The stone inscription, which so long remained covered with mortar and lime, came to light at the time of the recent renovation of the temple. The inscription is written in two lines on a piece of white marble slab.

Description of the inscription:

Measurement of the slab: 77.05 cm x 14 cm

Script: Bengali

Language: Sanskrit

Metre: Āryā

Text I:

Vidhu vidhu samhita gajavidhu sammita śākamithunagatamitre

Narapanarendrötmajaninrpendrāhvayanrpatiḥ śaranetre |

Dina iha daivata grhabhūsthāpita makarodātmakareṇa

Vāstukṛtochita rūpyavinirmita śastraviśeṣadhareṇa ||

(In 1811 śaka [1889 AD] the 25tn of Āṣāda [May-June] King Nṛpendranārāyaṇa, son of Narendranārāyaṇa, himself founded the basement of the temple with a silver-made śastra.)

This discovery has practically put an end to the speculations about the real founder of the temple.[2] Though scholars are not unanimous, there is little doubt that Maharaja Naranarayana in the 16th century AD under the influence of **Eka śaraṇa** Neo-Vaishnavism of Śaṅkaradeva founded the image of Vishṇu, also known as Lakshmīnārāyaṇa. Madanamohana-Lakshmīnārāyaṇa is without his female counterpart Rādhā or Lakshmī, and accordingly, it is believed that his son was also named Lakshminarayana.[3]

It is known from *Tārikhe Āsām* and *Ālamgīrnāmā* that Mirzumla destroyed the image of Lakshmīnārāyaṇa as well as his temple during the rule of Prananarayana. Though there is no mention of this incident in the *Rājopākhyāna* of Jayanath Munshi, there is clear

mention about the proper arrangement of the worship of Sri Sri Madanamohana by Maharaja Rupanarayana. In the *Viśvakoṣa* it is mentioned that Maharaja Rupanarayana consecrated both the images of Madanamohana and Pātadeharā. Harendranarayan Chowdhury also expressed similar opinion.[4] Some believed that after the destruction of Lakshmīnārāyaṇa, Prananarayana founded the image of Madanamohana at the behest of his preceptor. Both the *Viśvakoṣa* and Harendranarayan Chowdhury share the statement of *Rājopākhyāna*.[5]

The present temple, however, as established on the bank of Vairagidighi, is built in accordance with the traditional *chārchālā* of Bengal, constructed on the pillars placed on the semi-circular terraces. Some scholars, however, have noticed the influence of the courtyard-temple structure on the basis of the existence of four adjacent rooms.

The influence of the cult of Madanamohana was not merely confined to the capital of Cooch Behar; its popularity and worship spread in different parts of the kingdom. Thus the temples of Madanamohana grew up in far-off towns like Dinhata, Mathabhanga, Haldibari and Mekliganj. From an inscription on a temple of Madanamohana [Balarāma?] it is known that the temple was constructed in BS 1324 by Dhairyanath Sarkar and Baidyanath Sarkar to perpetuate the memory of their father.

The **second inscription** was recently found in an adjacent Dharmasala. The Dharmasala was in a dilapidated condition and the recent renovation work undertaken by the present administration of Cooch Behar city council resulted in the discovery of the inscription on a piece of white marble slab at the top of the Dharmasala.

Description of the inscription:

Measurement: 76 cm x 15cm

Language: Sanskrit

Script: Bengali

Metre: Āryā (in 33 /13 metre)

Text II:

Munirasatāpanamita vaṅguhāyana śrāvaṇaguṇayugameye harijanirasyā

Mṛtirapitasyāḥ śrutinavasūra śaradipauṣanavāhe |

Hayanavamāsai śaradichurādhe śriyuta nṛpati Nṛpendrasvasā

Ānandamayī ya Brahmaṇiyātā tatsmṛtirheturnnavadharmmaśālā ||

(The Dharamsala which has been under construction for the last six months was consecrated to the sacred memory of Anandamayi, the sister of Maharaja Nrpendranarayana on the 12th day of śrāvaṇa, BS 1297. Anandamayi, a devout Vaishnava, departed for her heavenly abode in the month of Pauṣa a few years ago. Princess Anandamayi was the

daughter of the Koch king Maharaja Narendranarayana, father of Maharaja Nripendranarayana, by the chief queen Nistarinidevi.)

After the death of Pāṅgārāja Kamalanarayana, Queen Lakshmipriya adopted Gajendranarayana. Gajendranarayana's adopted son Yogendranarayana married the Koch princess Anandamayi after becoming king of Pāṅgā. Anandamayi was the stepsister of Maharaja Nrpendranaryana. But the relationship between brother and sister (i.e. Nrpendranarayana and Anandamayi) was extremely cordial. Anandamayi became a widow at an early age. While returning from her pilgrimage to Varanasi she suddenly fell ill and died on the way (possibly 23rd December, 1897).[6] It is said that before her death she donated the zamindari of Pāṅgā to her beloved brother Nrpendranarayana by a will.[7]

Dharamasalas in Cooch Behar are very limited. It is said that Maharaja Sivendranarayana established another Dharamasala in 1841. The Dharamasala under discussion is known to have been used by pilgrims, saints and ascetics for short stay, and for this purpose proper arrangements were made.

The **third inscription** is engraved on the temple of goddess Dayāmayī (i.e. Kālavārinī, Kālikā). Though the temple was constructed earlier than those mentioned above, it remained unnoticed for a long time. Dr. Nripen Pal of Cooch Behar provided the author with the inscription engraved on a piece of square white marble.[8]

Description of the inscription:

Measurement: Not known

Language: Sanskrit

Script: Bengali

Text III:

Dayāmayīti vikhyātā kālikā kālavāriṇī |

Ya pratiṣṭh kṛtāśrila Gopōla Bruhmachāriṇa ||

Priyānarendra bhūpasyapatnī rājñī nareśvarī |

Prāsādaṁnirmame tasya vāsarthaṁ yatnatodhūnā ||

Tudrājṁyānumatiṁ lavdhā śākevasunavaśvakau |

Nirmmānaṁ kārayāmāsa Kālikamala Lāhiḍi ||

(Srila Gopala Brahmachārī installed the image of Kālikā Kālavāriṇī, well-known as Dayāmayī. For the above goddess, the chief queen of King Narendra (Narayana) built the palace (i.e. the temple) with great care. The construction of the temple was done by Kalikamala Lahidi with the consent of the chief queen in 1798 śaka)

The Tantrik ascetic Gopala Brahmachari (Mukhopadhyay) of Dhanbad, Bihar approached the then Maharaja for the installation of an image of the Dayāmayī Kālikā.

The Maharaja accordingly granted him a piece of land and rupees fifty per month for the worship of the deity. Even today the priest of the temple receives the same amount from the Cooch Behar Devottar Trust. The glory of the octo-alloy image of the goddess spread far and wide. The image is about 2 ft in height and placed on an altar made of wood and brass plate with an umbrella made of brass above. On one side of the image there is another small octo-alloy image of Dayāmayī on a small throne.

The temple also houses a number of octo-alloy images of Rādhā, a black stone image of Krishṇa and other octo-alloy images, and a Nārāyaṇa śilā. The residents donated all these images at a later period. The temple was renovated in 1988.

Though the inscription mentions the date of construction as 1876, the present priest believes that it was constructed in 1868, immediately after the death of Maharaja Narendranarayana, at the behest of his widow Nistarini Devi.

Of all the temples in Cooch Behar, the temple of Madanamohana is the most famous. The accumulated wealth offered to the deity is enormous. No systematic effort has been made so far to use the wealth for the benefit of the common people as is done in the temples of South India. Only a Devottar Trust Committee has been established to look after the problems connected with the temple administration.

Notes and References:

1. For the first two inscriptions, I am grateful to Professor P. K. Bhattachaarya's paper in *Śradhāñjali: Studies in Ancient Indian History*, ed. K. K. Dasgupta, P. K. Bhatacharya & R. D. Chowdhury, Delhi, 1988, pp. 144 ff. For the third inscription, I am grateful to Dr. Nripen Pal of Cooch Behar for his photocopy of the record and accompanying note.

2. Sri Sandhani in *Koch Bihar Samachar*, Cooch Behar, 1382 BS tells us that the Madanamohana temple was inaugurated in 1890 AD but he does not mention the source of his information.

3. Sri Sandhani, *op. cit.*, also expressed the same opinion. In the temple of Madanamohana there are two Madanamohana images of which one is smaller. The images are placed on a silver palanquin. The smaller image is not meant for public *darśan* and is believed to have been the image of Laksminarayana made by Naranarayana. The image which was installed by Maharaja Rupanarayana has been described by Durgadas Majumdar as follows in his *Rājavaṁśāvalī*:

    "*Lakshmīnārāyaṇa ara Madanamohana
    Kāyā chhāṇi punaḥ kāyā karila grahaṇa.*"

    (Both Laskshmīnārāyaṇa and Madanamohana assumed new bodies by relinquishing their earlier ones.)

    In other words the memory of the earlier deities was still fresh in the minds of the people.

4. Harendra Narayana Chowdhury, *The Cooch Behar State and Its Land Revenue*, Cooch Behar.

5. Shyamchand Mukhopadhyay. *Koch Behar Jelar Purākīrtti*, Purta Bibhag, Paschim Banga Sarkar, Kalikata, 1381 BS, p 40

6 Sri Sandhani, *op cit*

7 Khan Chowdhury Amanatullah Ahmed. *Koch Beharer Itihas*, Cooch Behar, 1936, p 236
It appears that the Pāngā queen Laksmipriyadevi appealed against the said will for proper justice Ultimately, the zamindary of the Pāngā estate was divided between both the parties

8 Dr Nripen Pal of Cooch Behar collected the plate of the inscription and information from the present priest and his family members
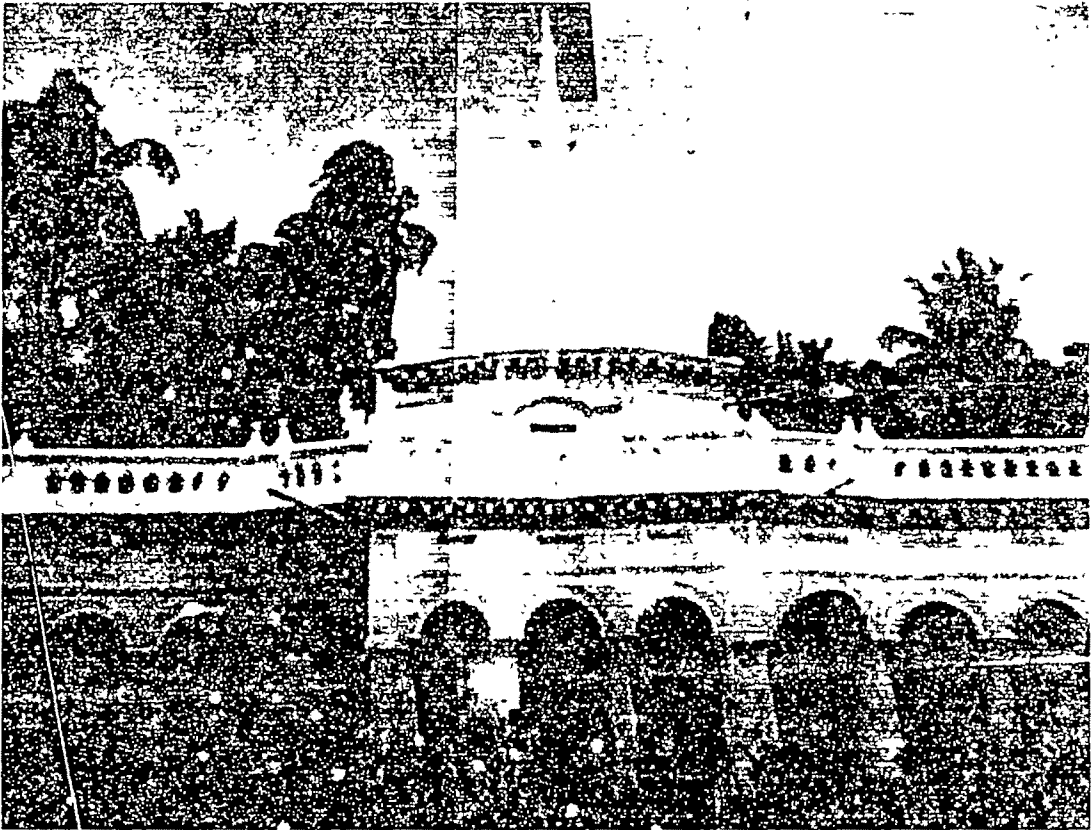
TEMPLE OF MADANAMOHAN, COOCH BEHAR CITY

TEXT NO. I

বিধূ বিধূ সংহিত গজবিধূসম্মিত শাকমিথুনগতমিত্রে
নরপনরেন্দ্রাত্মজনিনৃপেন্দ্রাহ্বয়নৃপতিঃ শরনেত্রে ।

দিন ইহ দৈবত গৃহভূস্থাপিত মকরোদাত্মকরেণ
বাস্তুক্রতোচিত রূপ্যবিনির্মিত শম্বুবিশেষধরেণ ।

TEXT NO. II

মুনিরসতাপনমিত বঙ্গহায়ন শ্রাবণগুণযুগমেয়ে হরিজনিরস্যা
মৃতিরপিতস্যাঃ শ্রতিনবসুর শরদিপৌষনবাহে ।

হয়নবমাসে শরদিচরাধে শ্রীযুত নৃপতি নৃপেন্দ্রস্বসা
আনন্দময়ীযা ব্রহ্মণিযাতা তৎস্মৃতিহেতুন্নবধর্ম্মশালা॥
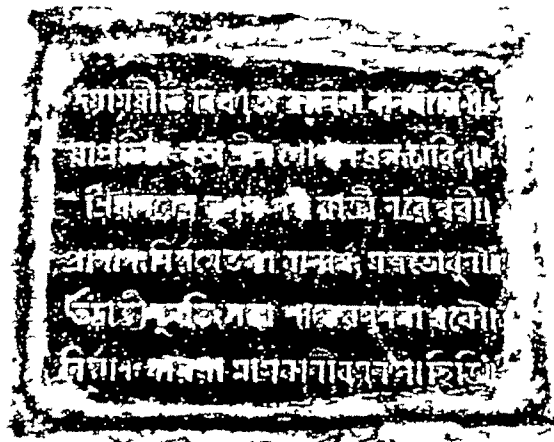
TEXT NO. III

Book Reviews:
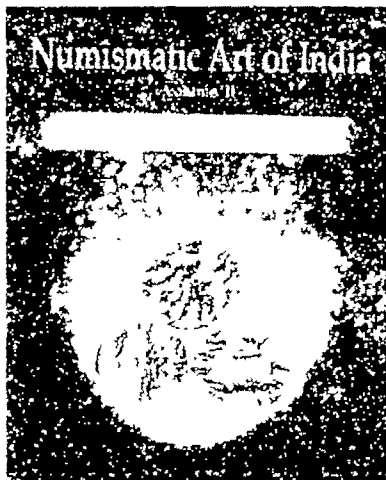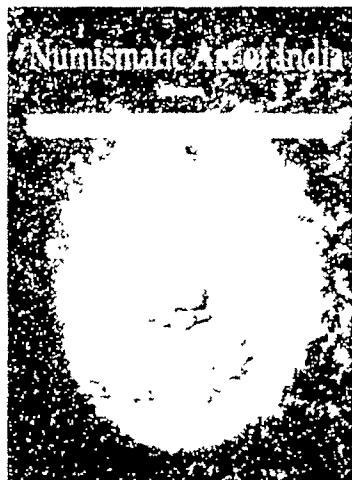
A Novel Approach to Numismatic Studies

Vol I, entitled *Historical and Aesthetic Perspectives* contains a comprehensive history of art in Indian coins from ancient to medieval times (the Mughals and their contemporaries) The volume has ten chapters, three appendices, a select bibliography and 18 plates with figures and line drawings Vol II, entitled *An Album of the Masterpieces of Indian Coins* is divided into three parts and reproduces in chronological sequence figures (black and-white and colour) of 322 select coins.

Coin as an antiquity conveys different kinds of knowledge of history and culture The transformation of a piece of metal into an object of art is one such aspect, facilitated by (a) the artistry of its obverse and reverse types, (b) the excel ence of the relevant die or mould, (c) the purity and suitability of the required metal, (d) the production of good blanks, and (e) the efficiency of the technique of minting The method of casting metal in mould was known in India from the proto-historic age Historically, Indian coinage emerged in c 500 BC or a little earlier Scholars believe that there might have been two different areas of its origin—the northwestern part of the Indian subcontinent and the mid-Gangetic valley Different territories and tribes of the late centuries BC and early centuries AD issued coins by casting, die striking, and even punch-ma king Their themes contained various auspicious symbols (eg *swastika*, *el atya* taurine etc.) and devices of artistic

patterns and forms, from 'a well-built bull', 'a pitcher with leaves sprouting out of it', 'shapely figures of human beings', etc. to a complete and cohesive picture and/or related legends on the blank space of the coins.

Among the prominent indigenous powers, the Sātavāhanas of the Deccan (c. 1st century BC to c. 225 AD) made significant contributions to numismatic art. This is evident from certain stylistic features like royal portraits (on silver coinage) with obvious personal traits and the art of foreshortening and sense of perspective (cf. the fleet of ships on the obverse of Yajñarī Śātakarṇi's coins). The early indigenous coins of the north and the south allude to an awareness of parallel developments in sculptural styles and iconic forms.

It is a well-known fact in history that the Kushāṇas (c. first to the middle of the third century AD) had built one of the largest empires of the East, and was inhabited by people of diverse ethnic origins and religions and social faiths and practices. They not only introduced the first imperial coinages (in gold, copper, etc.) but also executed full-length portraits, with their majestic frontality and linear treatment. The reverse devices display a bewildering variety of deities with greater plasticity, flexibility and roundness of forms. The contributions of the Kushāṇas towards developing numismatic art into a viable medium of creative activity can hardly be overestimated.

In some early Gupta coins certain qualitative weaknesses are apparent viz., the angularity of figures/forms and slavish imitations of the Kushāṇa devices (eg. 'Nanā on Lion' on Chandragupta I's coins, 'Enthroned Ardhoksho' in the standard type of Samudragupta, etc.). The Gupta coins steadily replaced foreign devices, attributes, dress and ornaments. Shortly, the creative talent asserted itself and the Gupta mints began to produce a good number of pieces of real beauty with high aesthetic import. Owing to well-intagliated dies, figures on Gupta gold coins display royal portraits, whereas figures of 'conventional bust' are seen on silver coins. Displaying 'royal bust' on silver coins was inherited from the Kshatrapa coins of western India. The 'altar' type on the silver and copper coins betray the die-cutters' knowledge of the early Sassanian features carrying the same device.

Some of the best available sculptors were commissioned as die-cutters in the Gupta period. A standard was maintained in the use of metal and the latest known technique of die-cutting was employed by the Gupta mint masters. Several stylistic features (viz., gliding linearism and a subtle sense of movement) characterized the well-executed figures and forms. A sense of three-dimension on the flat flans of the coin is clearly revealed. Human figures (both male and female) are shown either sitting or standing in different stances. The royal male figures with their muscular bodies exude strength, robustness and vitality. The slender female forms have soft, graceful and refined (often sensuous) contours. The coin types illustrating the valour, skill and achievements of the kings are accompanied by well-composed legends—a novel blending of literary compositions with visual art.

Divine figures (like *Durgā Simhavāhinī, Śrī or Lakshmī*), especially on gold pieces invariably radiate spiritual sublimity, echoing the contemporary Sarnath and Mathura idioms.

Animal figures display life-like appearances with facile contours defining the volume —eg. the 'Lion-slayer' type with its majesty, the 'Aśvamedha' type with its well-built muscular body and robust vitality, the 'Tiger-slayer' type with the ferocious gait of the animal, etc. The elephant and the rhinoceros with their strength and grandeur and the peacock with its grand and charming appearance are excellently stuck-off and executed in a good number of Gupta coinages. The creative talent of the artists found free and full expression in the Gupta mints up to the time of Skandagupta.

Though the Guptas were liberal in their attitude to different faiths, they were selective about the deities to be represented on their coins. Thus, figures of Buddha and Mahāvīra do not appear on Gupta coins; deities of the Vaishnava and śakti cults get preference over others. The creed of wealth and prosperity (represented by *Śrī or Lakshmī*) also gained tremendous popularity. The goddess of prosperity or *Śrī* was also looked upon as the goddess of the prosperity of the kingdom (*Rājyaśrī* or *Rājyalakshmī*). The Gupta die-cutters were familiar with syncretism too. Other motifs like *makara* (the mount of the goddess Gangā, the most important and beneficial river of the empire), the bull (the mount as well as the theriomorphic representation of Śiva), the trident (the weapon of Śiva), the peacock (the mount of Kārttikeya), etc. are abundantly found on Gupta coins.

Gupta silver coins had a significant impact on post-Gupta and proto-medieval coinages. Post-Gupta coinages produced a number of interesting coin-types. The Haihaya, Chandella and Gāhaḍavāla coins bear testimony to the innovation and imagination of the die-cutters. The coin-devices reflect contemporary trends in religious movements, particularly the tendency towards syncretism of different cults. Representations of the portrait of the king gradually became a rare feature in the post-Gupta coinage. This is because royal interest in striking coins waned in the post-Gupta age. From the qualitative point, the artistic merit of the coins is not of a very high order. The proliferation of ill organized mints and counterfeiters tended to corrupt and degrade the coin-devices. The minimal number of quality coins betrays an awareness of contemporary sculptural idiom. In this context, the author has drawn our attention to a very interesting point—the representation of contemporary architectural forms in the coins by the die-engravers. Skilled die-engravers employed by an organized authority did not work in isolation. Perhaps they captured the spirit of the time in engraving coin-devices and ultimately transformed them into objects of art. In proto-medieval times the number of quality coins were limited compared to the earlier periods, perhaps because of the indifferent attitude of the authorities and mint masters, imitations by ill-organized private moneyers and above all, defects in die-cutting and minting.

Two important chapters have been devoted to the numismatic art and aesthetics of the medieval period. The first deals with the coins of the Sultanates and Vijayanagara, and the second with the coins of the Mughals and their contemporaries. Historically, the second one has a wider scope and significance: it covers the late Mughals and their European contemporaries.

Coinages minted by Muslim rulers from the late twelfth to the fourteenth century AD show their susceptibility to using Indian devices, weight, standards, and languages and scripts. The earliest series were struck mainly in the western and northwestern part of the sub-continent—by the Amirs of Sind (870-1009 AD) and the Ghaznavids, including Sultan Mahmud (998-1030 AD). The issuance includes gold *dinaras* and silver and billion *dirhams*. Following Islamic principles, pictorial devices were discarded. Identical features are visible on the coins of the Sultans of Delhi, and subsequently on the coins issued by the provincial rulers of Bengal, Jaunpur, Malwa, Kashmir and the Deccan, with certain regional variations.

Numismatic art found a new space and perspective under the imperial Mughals. Though both Babur and Humayun (1530-1536 AD) had struck coins during their reigns, it was under Jalaluddin Akbar (1556-1605 AD) that Mughal coins were standardized in variety, quality and quantity. After the *Ain-i-Akbari*, Akbar issued at least twenty-six varieties of coins. The majority of them display pictorial devices with gliding outlines and prominent contours (eg. representations of *Rāma* and *Sītā* with legends, bird motifs (duck, hawk, etc.), flowers and foliages with lithe movements, etc.) Mughal coins maintained their rich tradition in the reigns of Jahangir, Nur Jahan, Shah Jahan and Aurangzib. A die-cutter in the imperial mint was an artist par excellence, an engraver and a master of calligraphy.

Portraits of rulers, like its parallel in paintings, also enrich Mughal numismatic art. Jahangir issued a number of coins bearing imperial portraits. Jahangir's own bust in profile, holding either a book, a cup, or a flower on one side of the coin appears in many pieces. The reverse of a number of these pieces displays a lion sitting in front of the sun. The rayed sun behind the animal points to its zodiacal connection with the constellation of Leo. The meticulous details on the coins reveal the mastery of the artists-cum-die-engravers. Shah Jahan minted round and square coins with artistically engraved legends. Forms of writing in the *nastaliq* style and flora and foliage motifs beautify the flans. The later Mughals, in general, followed the pattern set by Aurangzib. Mughal governors also minted some excellent pieces in the name of Shah Alam II. The inscriptions written in the *nastaliq* style, the beautiful geometric patterns and art motifs, and the well-proportionate figures with facile contours defining their volume place Mughal numismatic art on a high pedestal.

The Portuguese were the first among the Europeans to strike coins in India (1510 AD). The author has rightly pointed out that typologically they had no connection with the Indian

devices. The Europeans, including the English, were well established in India from the sixteenth through the eighteenth centuries AD. They were well conversant with minting technology—striking coins with the help of blanks, dies, anvil and hammer. By the eighteenth century, new technology was introduced at the English East India Company's mint at Calcutta. In 1790 machines were imported from England for manufacturing 'milled coins'. The uniform coinage became the legal money throughout the Company's territories in the subcontinent in 1835. Gradual technological improvements resulted in excellent production of coins in the post-1835 period. Magnificent gold and silver coins of Queen Victoria (1837-1901) are exquisite examples of the mechanized production of coins with intended shape, size, weight, design and quality. The author has rightly pointed out that chances of coins becoming objects of art become greater with an exacting minting authority intent on using the medium of exchange for propaganda.

For the last two centuries, numismatics, one of the major sources for the study and research of Indian history and culture, has justifiably attained its valued place and position. The present work is undoubtedly a significant advancement in this direction. About two decades ago, the author initiated this approach of study in his 'Art in Gupta and Post-Gupta Coinages of Northern India' (1985), albeit briefly. In the present volumes the core idea has been explored in a more comprehensive and a wider historical and chronological perspective with the help of all available data and their analyses, assessment and evaluation. The vast corpus of available Indian coinages, from the earliest times to the commencement of the British Raj, have been scanned, classified and short-listed. Needless to say, the task is monumental and demands tremendous research expertise. Indian coinages, perhaps, have not been approached and studied from the viewpoint of art and aesthetics before. We have no hesitation in saying that the work will become an important milestone in Indian numismatic studies. We warmly congratulate Professor B. N. Mukherjee, a renowned scholar in the field of Indological Studies for this excellent endeavour. The volumes embody a high standard of analytical and objective evaluation and appreciation of the subject.

The three appendices in the first volume, contributed by Dr Sabita Sharma, Dr S. Suresh and Dr Danish Moin add great value to the book. The bibliography is exhaustive and up to date. In this connection, Professor Mukherjee's team of competent and hard working research associates and assistants also deserve our warm appreciation. The second volume is equally enriching. The 322 select coins in the album clearly reveal the metallic differences, size, weight and standard of the coins.

The quality of printing, the line drawings and the plates (both black-and-white and colour) are of a very high standard. We eagerly look forward to the publication of the remaining volumes of the study.

Mihir Mohan Mukhopadhyay

India: The Ancient Past

A history of the Indian sub-continent from c. 7000 BC to AD 1200. Burjor Avari. London & New York, Routledge (Taylor and Francis group) 2007. xviii, 284 pp., 38 B/W plates and figures and 15 maps

India: The Ancient Past by Burjor Avari deftly explores the history of the Indian sub-continent from c. 7000 BC till AD 1200. Interestingly, it also contains a brief discussion on India, post AD 1200. This fascinating, methodical and comprehensive coverage of early India's political, socio-economic, spiritual and cultural history is an invaluable addition to studies on history of South Asia.

The book contains certain distinctive features. Before the introductory chapter the author highlights the major themes of the four eras of ancient Indian history demarcated by him—the pre-historic era until c. 2000 BC, Vedic and post-Vedic era (2000 BC-300 BC), the era of the Great Empires from c. 300 BC - c. AD 500; and the feudal era from c. AD 500 - c. AD 1200 (and beyond), the information being then disseminated into eleven chapters. At the end of each chapter the author provides some source extracts for review and reflection along with questions for discussion. It is hoped that this will not only help scholars and lay readers alike to comprehend the major historical issues, but the detailed mention of sources will highlight the major trends and shifts in historiography.

Other features of this interesting guide include glossaries of Indic terms and of selected Ancient Indic place-names; a classification of ancient Indian texts by subjects (including the chapters wherein mentioned); a range of maps to illustrate different time periods and geographical regions as well as plates and figures and an exhaustive bibliography.

In the introductory Chapter (I) the author himself admits that "the contents of this book are drawn from the writings of some of the eminent historians of ancient India. This means that the evidence presented here is secondary; but the writers themselves drew their evidence from primary sources". Though academics may regret the lack of reference to and from original texts and other primary sources, it is evident that the author has assiduously applied himself to the collection of relevant data from a wide variety of sources and has painstakingly compiled them into a well balanced and researched text for the period of Indian history it covers.

It is refreshing to see that like many other modern scholars, the author attempts to explore, within a limited space, the political, social, economic and religious processes at work to bring about progressive transformation in Indian society. He simply and lucidly explains the changing notions in historiography, regarding the politico-administrative, socio-economic and religious structure both in Northern and Southern India. Specially useful in this context are chapters on *Stability and change under the imperial Guptas* (Chapter VIII); *Regionalism and feudalism - Rajput, Pala and Rashtrakuta kingdoms* (Chapter X) and *Chola domination in the south and Turco-Afghan plunder in the north* (Chapter XI). This informative and skilful compilation will undoubtedly impress scholars and other interested readers.

Rita Chaudhuri
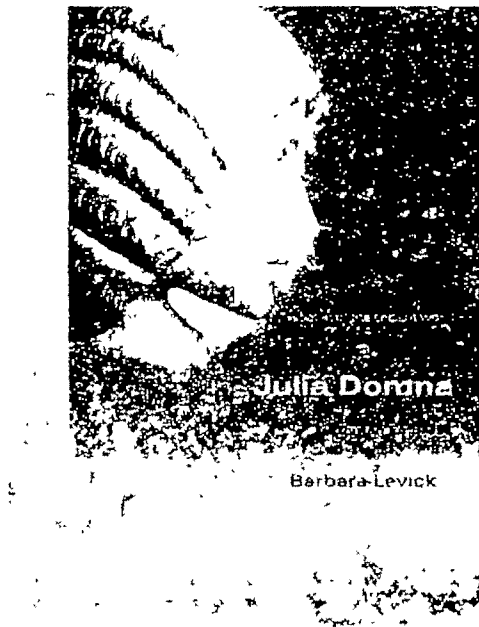
Julia Domna

Syrian Empress by Barbara Levick, Routledge, London and New York, 2007

Routledge is known for its commitment to publication of Classics. It has given us another book *Julia Domna Syrian Empress* in the series 'Women of the Ancient World' The author Barbara Levick has provided a comprehensive treatment of the life of the Roman empress, (wife of the emperor Septimius Severus), Julia Domna, (c 170-217A.D) unhesitatingly keeping in mind the specialists in other branches. the student, and the educated reader in general There is an abundance of historical literature on Julia Domna (in Greek and Roman) and epigraphic evidences. All have been aptly utilized by the author Levick has somehow maintained a fluidity in involving her subject with the main pulse of the series i.e. a combination of feminist theories and cultural studies. It may be recollected that Domna was the centre of a literary circle considered significant in the nineteenth-century. The book attempts at a re-assessment of Domna, her position as an upper class educated woman of the Roman society and her thoughts on integration of popular feelings and aspirations

Julia was a Syrian i.e. of Arab origin (Domna being her Syrian name) and was the daughter of the hereditary high priest Bassianus. priest of the sun god Heliogabalus at

Emesa (present-day Hims) in the Roman province of Syria. Empress and second wife of Roman Emperor Lucius Septimius Severus and mother of Emperors Geta and Caracalla, Julia Domna was among the most important women ever to have exercised power behind the throne. As a Syrian, she was the object of prejudice; as a woman with power, she was resented. The marriage proved to be a happy one and Severus valued his wife and her political opinions because she was well read and a keen student of philosophy. Julia Domna accompanied Severus in his campaigns in the East and among the several proofs of affection and favour are the minting of coins with her portrait and the title *mater custrorum* (mother of the camp). Many early Romans disliked the idea of her governing when Septimius Severus was at war. When Severus died, in 211 at York, Julia became the mediator between their two sons, Caracalla and Geta were to rule as joint emperors. Geta was murdered by Caracalla's soldiers and Caracalla became the emperor. Julia Domna accompanied Caracalla in his campaign against the Parthian empire in 217. During this trip, Caracalla was assassinated and succeeded (briefly) by Macrinus. On hearing about this, Julia Domna chose to commit suicide. She was later deified. Levick's delineation of her life provokes the readers' queries and at the same time allows scope for serious historical analysis. The book avoids anachronism. It dwells on an exhaustive examination of the primary sources although there is a definite lack of historical comparison. One may also peruse Dixon, Suzanne. *Reading Roman Women: Sources, Genres, and Real Life,* London: Duckworth, 2001, Wood, Susan E. *Imperial Women: A Study in Public Images, 40 BC-AD 68.* Leiden, Boston, Koln: Brill, [2000] and Nancy Sorkin Rabinowitz and Amy Richlin, eds. *In Feminist Theory and the Classics,* New York: Routledge, 1993. *Matrona Docta: Educated Women in the Roman Elite from Cornelia to Julia Domna* (Routledge Classical Monographs) presents an exemplary study of the education of upper-class women in Roman society in the central period of Roman history i.e. from the second century BC to AD 235. Hemelrijk's work is meticulously researched. This allows the reader to form his/her own conclusions.

Scholars of ancient Indian history and culture are well acquainted with Apollonius of Tyana, the Philosopher-Explorer and Social Reformer of the first century A.D., and his travels in India. He is said to have travelled to Taxila near modern Rawalpindi. Although much about him is lost, some of his correspondences remain, along with notes and diaries of his disciple, Damis of Nineveh. Julia Domna, an eager student of philosophy deserves much credit for preserving this material. It was she who had asked Flavius Philostratus, the Greek scholar and author, to restyle the correspondences preserved by Hadrian in Egypt into a single piece of literature along with the texts she had received from a descendant of the Damis family. Based on these resources and his travels in the footsteps of Apollonius, Philostratus wrote an influential biography about a hundred years after the sage's presumed death. Philostratus was one among the famous writers and thinkers who gathered round the philosopher-empress.

Julia, Septimius Severus and Caracalla were students of the occult, and the age was pre-eminently one in which the occult arts, good and bad, were a passion. Gibbon writes that it was at her request that Philostratus wrote the Life of Apollonius, and it was she who had supplied him with certain MSS, that were in her possession. Julia's father Bassianus, priest of the sun at Emesa, was an ardent collector of books from every part of the world, especially of the MSS of philosophers and of memoranda and biographical notes relating to the famous students of the inner nature of things.

According to Apollonius, "I saw Indian Brahmans living upon the Earth and yet not on it, and fortified without fortifications, and possessing nothing, yet having the riches of all men.. . . [Damis] said he saw them levitating themselves two cubits high from the ground, not for the sake of miraculous display, for they disdain any such ambition; but they regard any rites they perform, in thus quitting earth and walking with the Sun, as acts of homage acceptable to the God. Moreover, they neither burn upon an altar nor keep in stoves the fire which they extract from the sun's rays, although it is a material fire; but like the rays of sunlight when they are refracted in water, so this fire is seen raised aloft in the air and dancing in the ether." Philostratus, bk 3, pp. 257, 259.

Philostratus's description of Apollonius's India, (considered the "end of the world" in those times) was followed by other strange "travellers' tales". One has only to read the accounts of writers on ancient India like E A. Schwanbeck, *Megasthenis Indica* (Bonn, 1846), J W. M'Crindle, *Ancient India as Described by Megasthenes and Arrian* (Calcutta, Bombay, London 1877), *The Commerce and Navigation of the Erythran Sea* (1879), Ancient India as described by Ktesias (1882), *Ancient India as Described by Ptolemy* (London 1885) and *The Invasion of India by Alexander the Great* (London 1893, 1896.] The corpus corroborates with Philostratus's representation of India. Unfortunately, Levick's work does not provide information on the relationship between ancient Syria and India especially during the first two centuries of the Christian era.

Swati Ray

Departmental Activities: 2006–2007

1. Endowment Lecture: Swami Nirlepananda Lecture:

14 & 15 November 2006

* Speaker: Professor Pranab Kumar Bhattacharyya
  Formerly Jadunath Sarkar Professor of History
  North Bengal University

  Topic: **Bhakti Movements in Early India with Special Reference to Its Impact on the Growth and Development of Neo-Vaishnavism in Eastern India**

2. Monthly Lecture Programme:

17 November 2006:

* Speaker: Professor Suresh Chandra Bhattacharyya
  Formerly Department of Ancient Indian History and Culture
  University of Calcutta

  Topic: **Re-Reading Jagjivanpur Copper Plate Inscription**

20 November 2006:

* Speaker: Professor Ranabir Chakraborty
  Centre for Historical Studies
  Jawaharlal Nehru University, New Delhi

  Topic: **One Who is Present Sees What One Who is Not Present Cannot See:** The World of Jewish Merchants in the Maritime Trade with India (10th-13th century AD)

20 December 2006:

* Speaker: Dr. Rita Chaudhuri
  Reader, Department of Ancient Indian History and Culture
  University of Calcutta

  Topic: **Perspectives on Women in Early India: Some Glimpses**

Departmental Activities: 2007–2008

1. Monthly Lecture Programme:

17 January 2007:

* Speaker: Professor Shyamal Chakraborty
                Department of Chemistry
                University of Calcutta

  Topic: **Looking Towards History of Science**

14 February 2007:

* Speaker: Professor Claudine Bautze Picron
                University of Brussels & Director, CNRS, Paris

  Topic: **New Documents of Burmese Sculptures and Their Relation to Eastern India**

26 March 2007:

* Speaker: Dr. Krishnendu Ray
                Lecturer, Department of Ancient Indian History and Culture
                University of Calcutta

  Topic: **Interpreting the Word Buddhavada in the Rajibpur Copper Plates of Bengal**

18 April 2007:

* Speaker: Professor Ganapathy Subbiah
                Department of Ancient Indian History, Culture and Archaeology
                Visva-Bharati, Santiniketan

  Topic: **Looking at the South of India**

30 August 2007:

* Speaker: Professor Bhaskar Chakraborti
                Department of History
                University of Calcutta

  Topic: **The Rajputs: Making of an Identity**

11 October 2007:

* Speaker: Dr. Swapna Bhattacharyya
                Reader, Department of South and South-East Asian Studies
                University of Calcutta & presently Fellow, Maulana Abul Kalam Azad Institute of Asian Studies

Topic: **Placing the Experiences of Ancient Rakhine State (Arakan) and Myanmar in Their Historical Interaction with Ancient and Pre-Colonial India with Special Reference to Eastern India**

3. Occasional Lecture:

5 April 2007:

* Speaker: Dr. Gouriswar Bhattacharyya

Institute of Indian Philosophy and Art History

Free University, Berlin

Topic: **The Snake Goddess: The Way She Was Represented in Puṇḍravardhana**

4. Student Seminar:

15 May 2007:

* Speaker: Sanchari Bhattacharyya

Student of M.A. 2nd Year

Topic: **Lekha O Sāhityer Āloke Ādi Madhyayuger Vaṇik Sampradāy**

* Speaker: Madhuchchanda Chattopadhyaya

Student of M.A. 2nd Year

Topic: **Kāyasthader Utsa Sandhāne**

* Speaker: Debashis Das

Student of M.A. 2nd Year

Topic: **Kokamukhasvāmī O Śvetavarāhasvāmidvayer Utsa sandhāne**

5. National and International Seminar–cum–Workshop:

*   *March 2007:* **Coins and the Reconstruction of Early Indian History**

[A National Seminar-cum-Workshop on '**Coins and Reconstruction of Early Indian History**' was held in the Department on 22.01.07 as part of the Post-Centenary Golden Jubilee Celebrations of the University. Dr. K. K. Thaplyal, Former Professor, University of Lucknow and Dr. D. B. Pandey, Former Professor, Benaras Hindu University spoke at the seminar. Various types of minting techniques were demonstrated at the workshop.]

*   *December 2007:* **Revisiting Early India Through Epigraphy and Other Texts**

[An International Seminar was held at the Department on 7th & 8th December 2007 with the financial assistance of ICHR and the University of Calcutta. Professor Osmund Bopearachchi from CNRS, Paris; Dr. Daud Ali from SOAS, London; Dr. Gouriswar Bhattacharyya from Free University, Berlin; Professor Kunal Chakraborty and Professor Ranabir Chakraborty from Centre for Historical Studies, JNU; Jae-Eun Shin from

University of Delhi delivered lectures on different aspects of Ancient India. Many scholars from different Indian Universities and teachers of the Department also spoke at the Seminar.]

6. Visiting Professorship/Fellowship Lectures under the UPE scheme of the University of Calcutta delivered between December 2007 and March 2008.

* Speaker: Osmund Bopearachchi
              Director, CNRS, Paris
              Sorbonne University

  Topic: **1. Sigiriya Pleasure Gardens of 5th Century AD.**
              2. Chronology of Early Kushāṇas: New Numismatic Evidence

* Speaker: Dr. Daud Ali, SOAS, London
  Topic: **1. Gardens in Early India**

* Speaker: Professor Kunal Chakraborty
              Centre for Historical Studies
              Jawaharlal Nehru University, New Delhi

  Topic: **1. The Evolutionary Trajectory of Hinduism**
              2. Reading Religious Texts
              3. Natural Inequality: Conceptualizing 'Justice' in Brahmanical Discourses

* Speaker: Dr. Kumkum Roy
              Associate Professor
              Centre for Historical Studies
              Jawaharlal Nehru University, New Delhi

  Topic: **1. Political Formations as Represented in the Later Vedic Texts**
              2. Politics and Gender—The Case of the Kakatiyas and Kashmir
              3. Gender and Religious Traditions—Brahmanism, Buddhism and Jainism
              4. Gender and Early Urban Histories with a Focus on the Courtesanal Tradition and Alternative Sexualities

* Speaker: Professor Ranabir Chakraborty
              Centre for Historical Studies
              Jawaharlal Nehru University, New Delhi

  Topic: **1. Mauryan State and Society: Megasthenes' Seven-fold Division of the Indian Society**

2. **State Society in an Age of Expanding Commerce (c. 200 BC-AD 250)**

3. **India and the Indian Ocean Trade (AD 600-1300)**

* Speaker: Dr. Nupur Dasgupta
            Reader, Department of History
            Jadavpur University

  Topic: **1. Taxila**
            2. Scientific Heritage of Ancient India: Contribution of Nameless Multitudes

* Speaker: Professor Pranab Kumar Bhattacharyya
            Formerly Jadunath Sarkar Professor of History
            North Bengal University

  Topic: **1.Vaishṇavism: Early History**
            2.Vaishṇavism: Its Development in Gupta Period and South India

* Speaker: Professor Rita Chattopadhyay
            Department of Sanskrit
            Jadavpur University

  Topic: **1. Women, Crime and Retribution: An Ancient Indian Perspective**

7. Participation of Teachers & Students in Field-Study Trip:

1. Visited an archaeological site, Tilpi in **South 24 Parganas**, West Bengal.

2. Visited Ananda Niketan Kirttisala at Bagnan, **Howrah** and **State Archaeological Museum of West Bengal, Kolkata**.

3. Visited archaeological sites at Bhuvaneswar, Ratnagiri, Udaygiri, Lalitgiri, Konark, Puri, Hirapur, Sisupalgarh and four museums in **Orissa**.

4. Participated in a three-day course conducted by Indian Institute of Research in Numismatic Studies, Anjaneri, Nasik and visited archaeological sites at Pandulena, Ajanta and Ellora in **Maharashtra**.

5. Visited Moghalmari village in the district of **Paschim Medinipur, West Bengal** during excavation.

Obituary:

PROFESSOR BIJAN BIHARI DE

Born in 1940 Bijan Bihari De retired as Professor of Ancient Indian History and Culture in 2005. Before he joined the University of Calcutta as Reader in 1990 he had served the Gauhati University as Reader in the Department of History. In the 1960s he had served as a Tutor in the Archaeology Department of Calcutta University and in Burdwan University. He specialized in Indology with a wide range of coverage including art, epigraphy, ethnology, iconography and numismatics. He was well versed in ancient Sanskrit texts and used them extensively in his research. He had the advantage of specialization in archaeology. The combination of knowledge in ancient Indian history and archaeology enabled him to pursue his research in iconography. His writings on Buddhist and Jain iconography achieved the rare distinction of being awarded Premchand Roychand Studentship of Calcutta University on three occasions.

In 1966 Professor De was awarded the Mrinalini gold medal of the University of Calcutta for his work on 'Seals and Coins of Ancient Bengal', This was followed by a piece on 'Economic History of Ancient Bengal', the result of a project that Professor De completed under the supervision of the well known historian Professor Sashibhusan Chaudhuri in Burdwan University. Between 1967 and 1975 he was preoccupied with iconography and one of his works of this period, 'Jain Iconography in Bengal' was awarded the Griffith Memorial prize of Calcutta University in the year 1975. In Gauhati he began to take an interest in the history of ancient Assam. Besides a survey of the archaeological remains in Assam he contributed, as an associate of Professor Sarasi Kumar Saraswati, to *The Comprehensive History of Assam.* (Vols.I and II)

During the 1970s he was drawn increasingly to the study of inscriptions and numismatics in Eastern India. The subject of his PhD dissertation was 'Early Numismatics of Bengal'. He took up this project in 1988 under the supervision of Professor Kalyan Kumar Dasgupta, but unfortunately was unable to complete it for his cardiac problems and the sudden demise of Prof. Dasgupta. Subsequently he moved into the study of the Puranas. His interest in the Puranas went back to early 1980s when in 1983 under the guidance of Srijiva Nyayatirtha he wrote a critical edition of the Kalika Purana. He returned to the study of Puranic traditions of ancient Kamarupa towards the end of the decade ending up with a summary of the contents in the Puranas and the Upa Puranas. In addition to his work on the Puranas he also acquired an interest in the history of the state formation in early medieval Eastern and South Eastern Bengal.

Professor De had varied interest and possessed the unique ability to take up new areas for specialized studies. In an age of specialization the ability to undertake projects in

various fields demonstrates his commitment and versatility as a historian of ancient India. I had the privilege of attending his lectures on ancient Indian history in Calcutta University. He passed away at a fairly early age of sixth seven in February 2007 leaving behind a large number of admiring students and colleagues.

Madhuparna Roychowdhury (Kumar)

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Fig. 1 : Thandikudi and its surroundings

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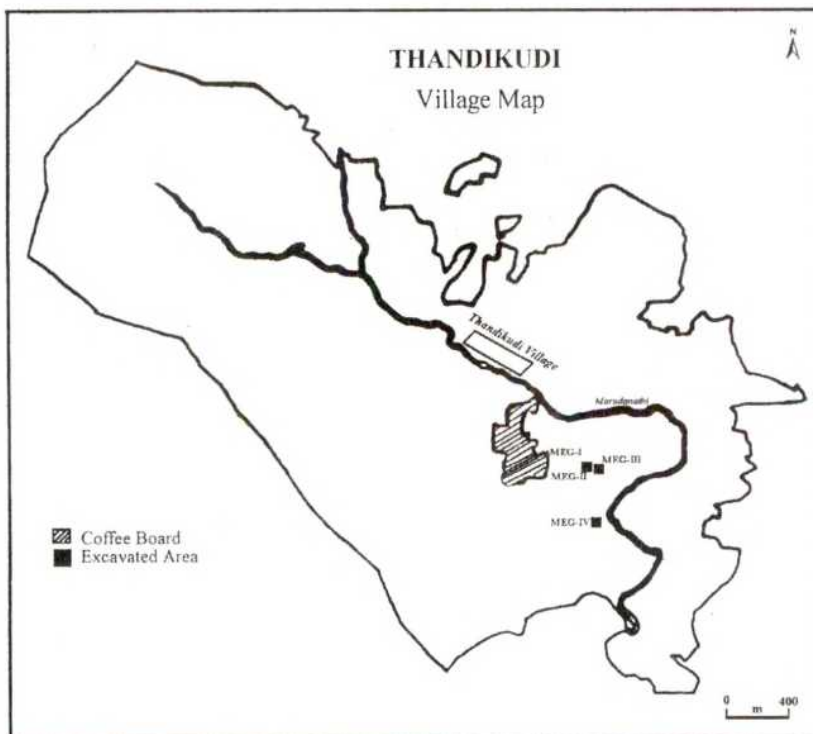
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MEG - II
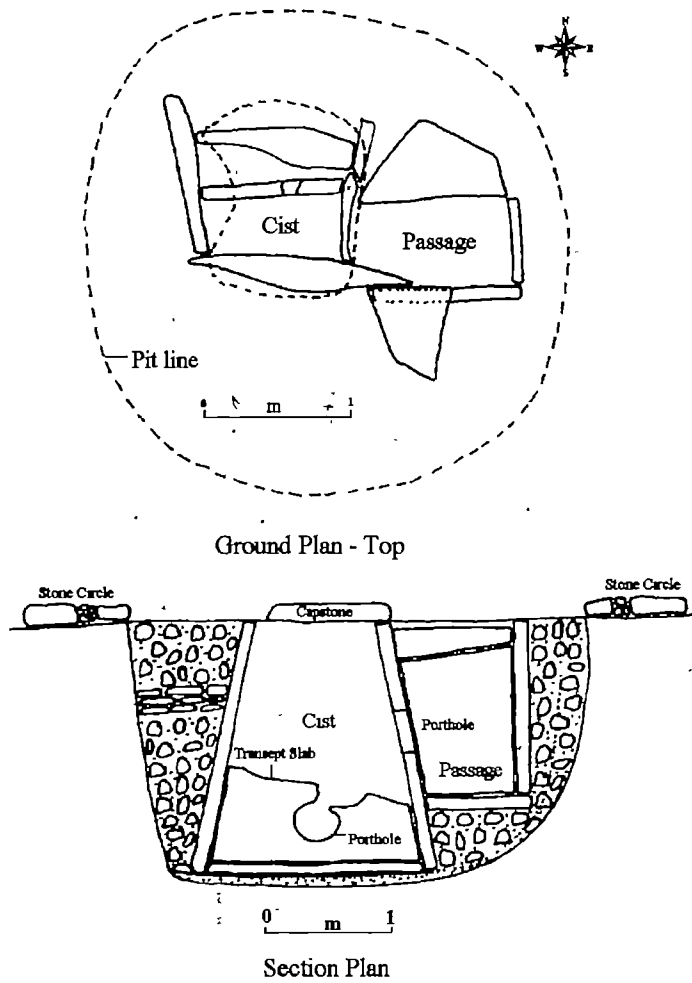
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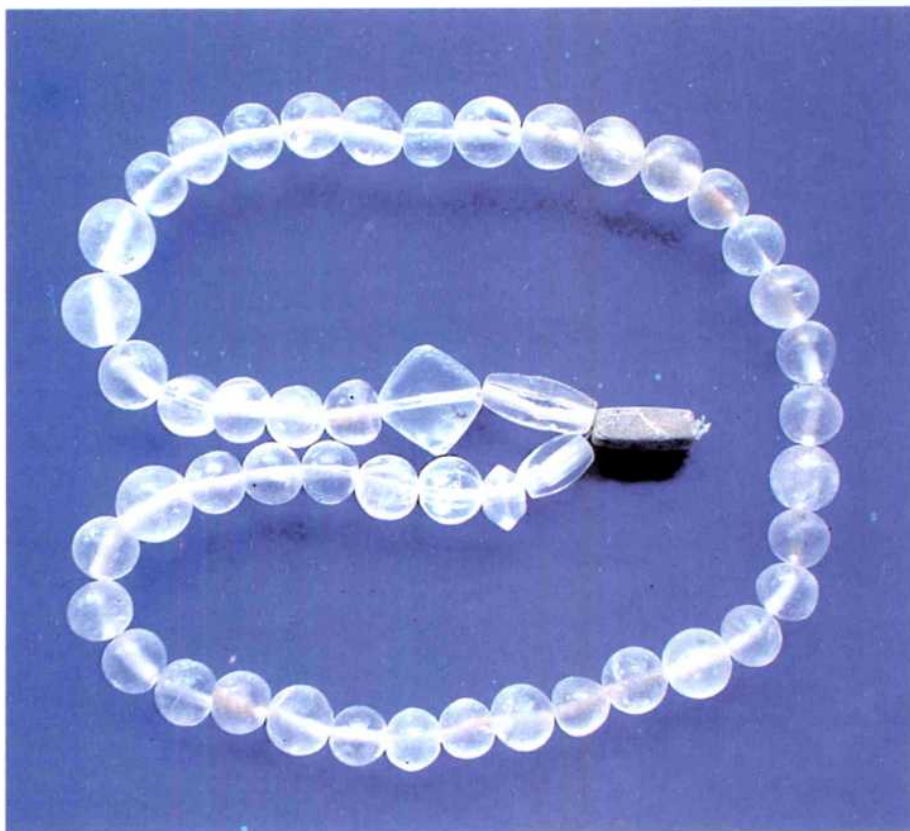Fig. 9 : Megalith IV – Etched carnelian beads

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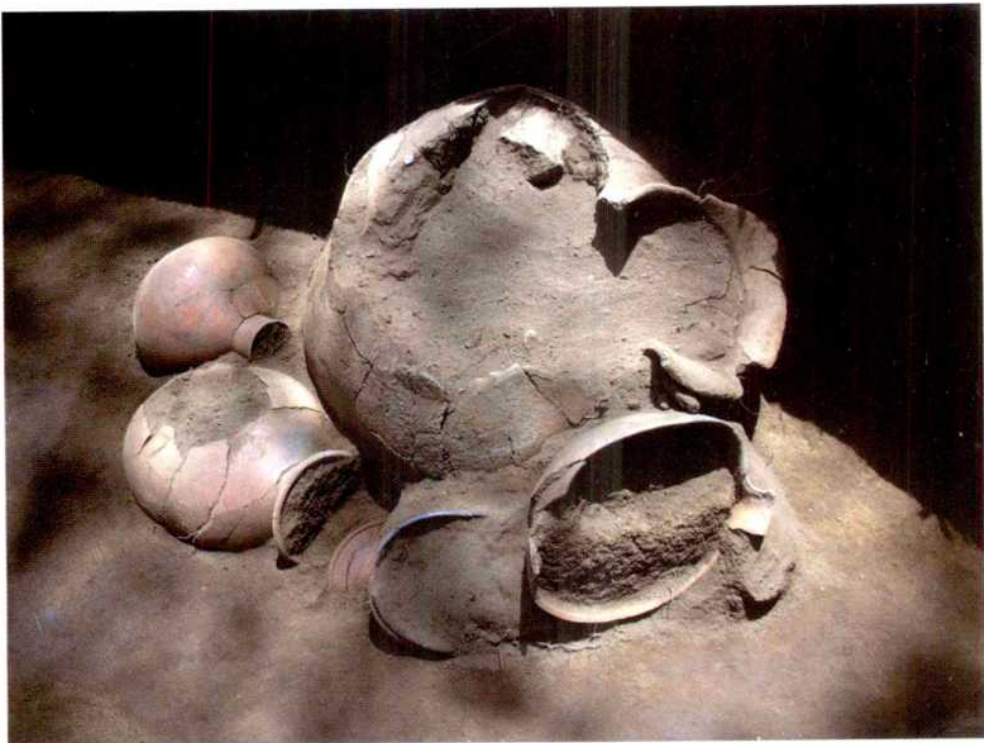

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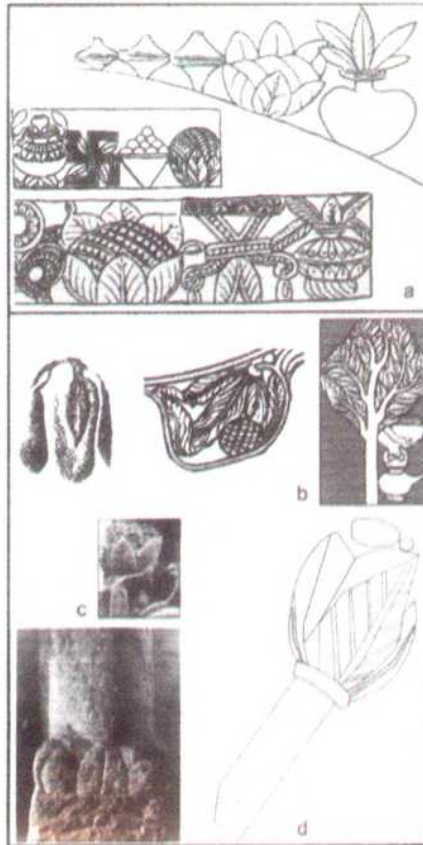

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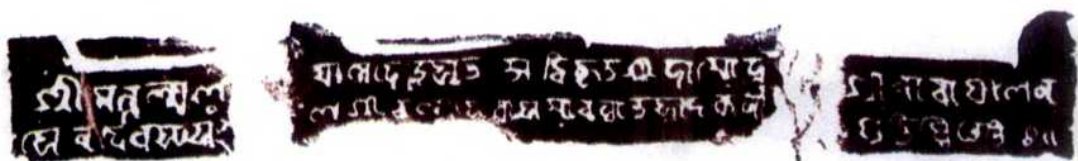

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Publications of the Department:

Some Important Publications of the Department of Ancient Indian History & Culture

Author	Title of the Books/Proceedings/Special Volumes	Year of Publication	Price (Rs.)
R. S. Sharma	Indian Feudalism, c. 300-1200	1965	15.00
D. C. Sircar (ed.)	Land System and Feudalism in Ancient India	1966	17.50
J. N. Banerjea	Paurānic and Tantric Religion	1966	12.50
D. C. Sircar (ed.)	The Śakti Cult and Tara	1967	10.00
B. B. Majumdar	Kṛṣṇa in History and Legend	1969	20.00
D. C. Sircar (ed.)	Bhārata War and Paurāṇic Genealogies	1969	10.00
D. C. Sircar (ed.)	*Prācyavidyātaraṅginī*	1969	60.00
D. C. Sircar (ed.)	The Bhakti Cult and Ancient Indian Geography	1970	12.50
D. C. Sircar (ed.)	Foreigners in Ancient India and Lakṣmī and Sarasvatī in Art and Literature	1970	12.00
D. C. Sircar (ed.)	Early Indian Indigenous Coins	1970	12.00
D. C. Sircar (ed.)	Social Life in Ancient India	1971	12.00
D. C. Sircar (ed.)	Religious Life in Ancient India	1972	12.00
D. C. Sircar (ed.)	Early Indian Trade and Industry	1972	12.00
D. C. Sircar (ed.)	Early Indian Political and Administrative Systems	1972	12.00
D. C. Sircar (ed.)	Religion and Culture of the Jains	1973	12.00
S. K. Mitra (ed.)	East Indian Bronzes	1979	140.00
K. K. Dasgupta (ed.)	Ānanda Coomaraswamy: A Centenary Volume	1981	60.00
Samaresh Bandyopadhyay (ed.)	*Ācārya-Vandanā* (D.R. Bhandarkar Birth Centenary Volume)	1984	145.00
K. K. Dasgupta (ed.)	Buddhism: Early and Late Phases	1985	40.00

Samaresh Bandyopadhyay (ed.)	Dinesa-Vandana (D. C. Sircar Commemoration Volume)	1986	40.00
D. R. Das	Temples of Ranipur Jharial	1990	145.00
Juthika Maitra (ed.)	Medical Science in Ancient India	1995	100.00
Samaresh Bandyopadhyay (ed.)	Prācyaśikṣasuhasini (Seventy-Fifth Anniversary Celebration Volume)	1999	400.00

Journal of Ancient Indian History

Editor	Volume	Year of Publication
D. C. Sircar	I (in memory of Dr. H. C. Raychaudhuri)	1968
D. C. Sircar	II (in memory of Sir Asutosh Mookherjee)	1969
D. C. Sircar	III	1970
D. C. Sircar	IV (in memory of Abanindranath Tagore)	1971
D. C. Sircar	V	1972
D. C. Sircar	VI	1973
D. C. Sircar	VII (in memory of D.R. Bhandarkar)	1975
D. C. Sircar	VIII	1976
Kalyan Kr. Ganguly	IX (D.R. Bhandarkar Centenary Number)	1976
Kalyan Kr. Ganguly	X	1977
Sisir Kumar Mitra	XI	1979
Sisir Kumar Mitra	XII	1980
Kalyan Kumar Dasgupta	XIII (in memory of Professor Benoychandra Sen)	1983
Kalyan Kumar Dasgupta	XIV (in memory of Dr. Niharranjan Ray	1984
Samaresh Bandyopadhyay	XV (Dineśa-Vandanā: D. C. Sircar Commemoration Volume)	1986
	XVI	

D. R. Das	XVII	1990
D. R. Das	XVIII	1991
A. K. Bhattacharyya	XIX	1994
Juthika Maitra	XX	1997
Subid Chattopadhyay	XXI (in memory of Professor Kalyan Kumar Dasgupta)	2003
Subid Chattopadhyay	XXII (in memory of Professor Amarendranath Lahiri	in press
Subid Chattopadhyay	XXIII (in memory of Professor D. C. Sircar)	in press
Sudipa Ray Bandyopadhyay	XXIV (in memory of Professor J. N. Banerjea)	2008
Sudipa Ray Bandyopadhyay	XXV	under process

(Copies are to be had of the Calcutta University Publication Sales Counter, 87/1, College Street, Kolkata-700 073)