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IN KARNATAKA

(1956 - 1972)

M. S. NAGARAJA RAO

DIRECTOR OF ARCHAEOLOGY & MUSEUMS IN KARNATAKA



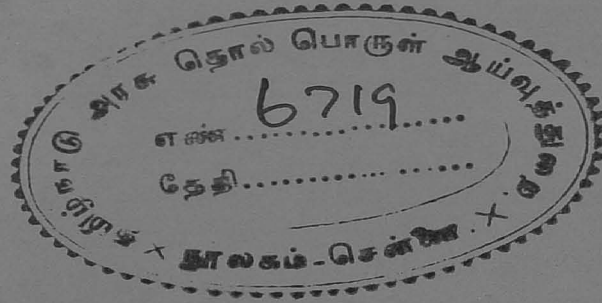
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## P R E F A C E

*The long cherished desire of the Kannada-speaking people was fulfilled when on 1st November 1956, the unified State of Karnataka came into being, bringing within its fold ten districts, which were under the administration of Bombay, Hyderabad and Madras States. The State Department of Archaeology, which was the oldest among State departments, was headed by an ex-officio Director. During 1972, a full time Director was appointed to this Directorate. The Directorate had published a combined volume of MAR for the years 1947-1956. It was, therefore, thought desirable to review the progress achieved in research and development of Archaeology and Museums in the State, between the two important terminal dates, viz., 1957-1972. The text of this book was ready as early January 1973. However, the printing of the book got delayed due to inexplicable reasons. We are glad that the work is now reaching the scholars and students. We are conscious of the fact that, since 1972, there have been great strides in research, and that many important discoveries have been made, to which passing references have been made. They will be treated in detail in our forthcoming volumes of ANNUAL REPORTS. In spite of these, we are confident that the present volume will be useful to the students and scholars in the field.*

*In the preparation of this work, various institutions and individuals have provided information. Individual acknowledgements have been recorded at appropriate places. We would particularly like to record our grateful thanks to Shri M. Hanumantha Rao, Assistant Director of Archaeology (Retd.), Shri S. R. Rao, Drs. G. S. Gai, K. Paddayya, S. Nagaraju and A. Sundara. Late Dr. P. B. Desai kindly lent photographs of copper plates from Kukkanur and published references. Shriyuts Kamaleshan and C. Kuppachari of the Directorate prepared the necessary illustrations. Shri C. S. Patil, Assistant Curator in the Directorate ably assisted in checking the text and going through the proofs. To all these, our grateful thanks are due.*

*Finally, we would like to thank Shri D. Narasimhiah, Joint Director, Government Text Book Press, Mysore, for the prompt and neat printing of the work.*

16-2-1978

Mysore

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M. S. NAGARAJA RAO  
Director of Archaeology & Museums  
in Karnataka

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## ABBREVIATIONS

AI	Ancient India	JBU	Journal of the Bombay University
APAS	Andhra Pradesh Archaeological Series.	JKU	Journal of the Karnatak University
ARADH	Annual Report of the Archaeological Department of H.E.H. the Nizam's Dominions, Hyderabad.	JNSI	Journal of the Numismatic Society of India
ARIE	Annual Report of Indian Epigraphy	JRAI	Journal of the Royal Anthropological Institute, London
BDCRI	Bulletin of the Deccan College Post-Graduate and Research Institute, Poona	JRAS	Journal of the Royal Asiatic Society, London
BIA	Bulletin of the Institute of Archaeology, London	JRASB	Journal of the Royal Asiatic Society of Bengal
EC	Epigraphia Carnatica	JRSA	Journal of the Royal Society of Antiquaries
EI	Epigraphia Indica	MAR	Mysore Archaeological Report
IA	Indian Antiquary	MASCA	News Letter of the Applied Science Centre for Archaeology (University Museum, University of Pennsylvania, Philadelphia, U.S.A.)
IAR	Indian Archaeology — A Review	PASB	Proceedings of the Asiatic Society of Bengal
IC	Indian Culture	QJMS	Quarterly Journal of the Mythic Society
IPPA	Indian Prehistoric and Protohistoric Antiquities	SII	South Indian Inscriptions
JASB	Journal of the Asiatic Society of Bombay.	TRIA	Transactions of the Royal Irish Academy, Antiquities
JBBRAS	Journal of the Bombay Branch of the Royal Asiatic Society		

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\* \* \* \* \*

Karnataka forms part of the Deccan which is one of the oldest landmasses of the earth. This has been the abode of man from prehistoric times, and has seen the journey of man from savagery to civilization. While speaking about the importance of the region of Bellary, Rao Bahadur Dikshit in his address to the historians, as early as 1943, made certain prophetic remarks, which are worth recording here. "Bellary district which has been the pivot of the lower Deccan, the seat of the Vijayanagar empire and the junction between the Kannada-Telugu linguistic areas, holds the key to the study and understanding of various epochs of Indian history from the Palaeolithic over 50,000 years old, to the dawn of the Mauryan period. No other area in India holds a promise of a better harvest to the investigator of Prehistoric Cultures. Palaeolithic man stayed here, as in other widely disputed area of the Peninsula in the river valleys where his implements are still found. Neolithic sites and factories have been distinctly recognised and the birth of the Iron Age in India was ushered in this tract. The exact stages by which metal supplanted the use of stone in the tools and implements of man can be studied.

"Antiquities of early Iron Age and pre-Mauryan cultures in the adjoining strip of Mysore territory included in the Chitaldurg district, in the Nizam's dominions give the hope that the intervening district of Bellary area is bound to reveal to the systematic investigator, similar finds of far reaching importance".<sup>1</sup> The work done in the past two decades and a little more have not only proved the correctness of Rao Bahadur's prophecy about Bellary area, but that his judgement about Bellary region holds good to the whole of Karnataka as the following pages show. In this endeavour, the contribution of the State Department of Archaeology and Museums is not less. Therefore, it may not be out of place here to briefly review the history of the Mysore Archaeological Department.

In 1884, the then Government of Mysore, appointed B.L. Rice, who had carried out some antiquarian research as a hobby, part-time

Director of Archaeology, in addition to his educational duties, and the Archaeological Office took its birth. In 1890, it was developed into a full-fledged department and Rice became full-time Director. He devoted himself primarily to epigraphical work and during his 22 years of service, he collected 9,000 inscriptions in 8 districts of the then Mysore State and Coorg, and published them in 12 Volumes of *Epigraphia Carnatica*.

R. Narasimhachar succeeded him. But in the early years, he had to work under the Director of Public Instruction with a reduced budget. However, after 6 years, the Department was restored to its original status. During his 16 years of service from 1906 to 1922, he collected nearly 4,000 inscriptions, not noticed before and also reported briefly large number of monuments, in his Annual Reports. He also published three small monographs on three Hoysala temples, and also completely revised and issued *Epigraphia Carnatica* Volume II.

On retirement of R. Narasimhachar, owing to the aftermath of the great war even the abolition of the department was contemplated. But it was taken under the wings of the Mysore University and continued only with a skeleton staff, with the Curator of the Oriental Library doing the duty as a part-time Director. In 1928, M. H. Krishna, who was the Professor of History, was put in-charge of the Department. With the same skeleton staff, Krishna did some very good service to the Department. His detailed notes of several hundreds of monuments, discoveries of new inscriptions, notes on coins and historical manuscripts appeared in his new series of Annual Reports, which became comprehensive and artistic. They are highly appreciated all over the world to this day.

In 1944, the Department was made independent of the University, and Krishna became its full-time Director. But the position of the staff remained the same. During his regime, till the close of 1947 when he suddenly expired, M. H. Krishna also brought out several guide books on places of Archaeological importance like Belur,

Halebid, Sravanabelgola, Srirangapatna, Talkad and Nandi, two supplementary volumes in the *Epigraphia Carnatica* series, Index to Annual Reports, and one volume of general Index to the *Epigraphia Carnatica* Volumes. He also conducted excavations on a small scale at Chandravalli and Brahmagiri. Conservation of Monuments also drew the attention of Krishna.

After M. H. Krishna, bad days fell on the Department. The post of full-time Director was not filled up for a long time. In 1955, it was again reduced to ex-officio directorship and the Professor of Indology of Mysore University was asked to hold charge. Prof. K. A. Nilakanta Sastri and then Dr. M. Seshadri held this position. But the position of staff continued to be the same. At the same time, the duties increased. From 9 districts of the old Mysore State, the jurisdiction of the Department was extended to 19 districts, as a result of the States' Re-organisation; pending establishment of Mysore State Archives, Survey of Historical Records was also entrusted to the Department. The control of the Museums was transferred to this Directorate from the Department of Industries and Commerce. The number of Museums in the State also increased. It was, therefore, evident that an ex-officio Director could not cope with the enlarged responsibilities. This accounts for the slow progress of the Department, in the quarter of a century that followed Dr. Krishna's demise, and continuance of its existence only on its past glory. Realising this, and also the importance of work of the Department, the State Government

have now appointed a full-time Director, and are eager to expand the Department on par with other sister departments in other States and the Centre.<sup>2</sup>

Although major contribution in archaeological studies in the state, is that of the State Department of Archaeology, sister institutions have also contributed their own share in this venture in the recent past. Mention must be made, in this context, of such organisations as, Archaeological Survey of India, Deccan College Post-graduate and Research Institute, Poona, Kannada Research Institute, Dharwar, Karnatak Historical Research Society, Dharwar, Andhra Pradesh Archaeological Department, Indological Research Society, Kallianpur, Department of Ancient Indian History and Archaeology and Institutes of Kannada Studies of Mysore University and Karnatak University, Dharwar.

In the following pages, we venture to report the progress of Archaeology in Karnataka since its formation in 1956, with due acknowledgements to all those individuals and institutions who have contributed towards this progress.

#### References :

1. Dikshit K. N., Presidential Address, *Proceedings of the Indian History Congress*, p. 16, VI Session (1943).
2. This historical sketch of the Department is compiled by Shri M. Hanumantha Rao, Assistant Director (Retd.), Department of Archaeology, Government of Mysore, and incorporated here with grateful thanks.

## EARLY STONE AGE

In the later part of the 19th Century itself, Karnataka had been recognised as one of the habitats of early man. It was due to that pioneer in Indian prehistoric studies, Robert Bruce Foote of the Geological Survey of India, who had discovered more than a dozen palaeolithic sites in different parts of Karnataka.<sup>1</sup> But, for another six decades that followed Foote's discoveries, there was practically no activity in the field of prehistoric research, except for the collection of some artifacts from Kibbanahalli (Tumkur district) and providing a little description of them by Sampat Iyengar and Rama Rao of the Mysore Geological Department.<sup>2</sup> By the beginning of the second half of this century, fresh impetus was given to the study of Karnatak prehistory by two workers, M. Seshadri of the Mysore University and R. V. Joshi of the Deccan College Post-graduate and Research Institute, Poona. Seshadri concentrated his attention to the study of artifacts from South Karnatak (old Mysore State),<sup>3</sup> whereas Joshi worked in the Malaprabha Valley in the Bombay Karnatak area.<sup>4</sup> While Seshadri's work was mostly a typo-technological analysis of the lithic implements, Joshi did some geo-chronological studies by examining the different sections on the banks of the river Malaprabha. During his exploration, he brought to light anew about a score of Early Stone Age sites. His main attention was to reconstruct the pleistocene events by observing the morphology of geological formations on the exposed sections on river-banks, and to provide a climatocalendarical background for the associated lithic industries. He also did some typo-technological study of the implements. Thus by this two pronged approach, for the first time in Karnataka, he introduced a new dimension to the study of pleistocene stone industries.

The formation of the new State of Karnataka (Mysore State) in 1956, coincided almost with the formation of a number of units by the Archaeological Survey of India for conducting village-to-village Survey of antiquities in different parts of India, by which Karnataka too got the benefit. This was also a time in the history of

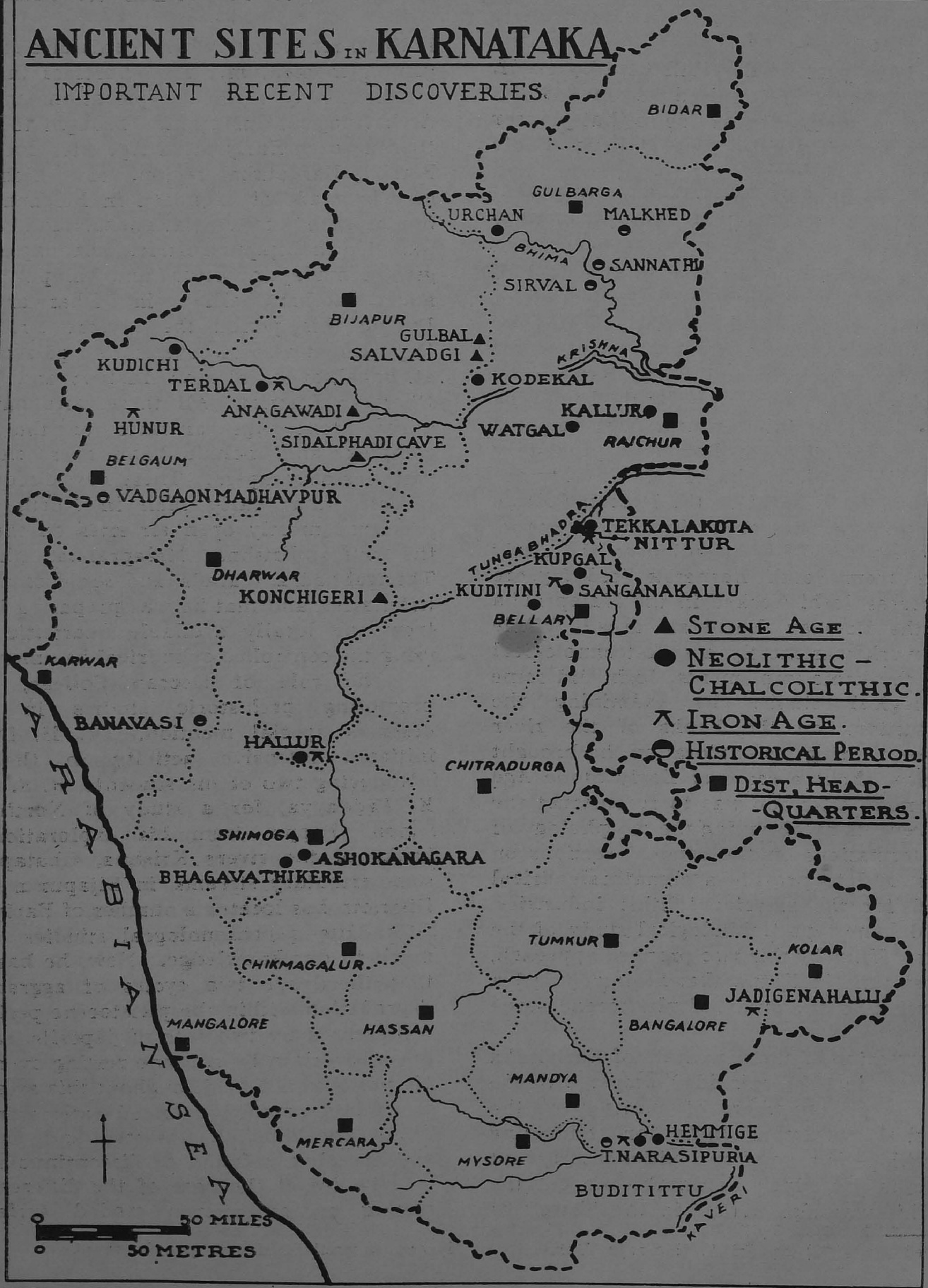
Indian Archaeology when prehistoric studies were gaining momentum. The efforts of the members of the newly formed exploration units of the Archaeological Survey have brought to light more than a dozen Early Stone Age sites, mostly in the Bombay-Karnataka region, of which mention may be made of Saundatti in Belgaum District,<sup>5</sup> Shidalphadi<sup>6</sup> cave, Pattadakal and Shivayogamandir<sup>7</sup> in Bijapur District, Channapur,<sup>8</sup> Konchigeri, Jirmadapur, Nittur<sup>9</sup> and Jallapur,<sup>10</sup> Nalwagal and Nadiharalhalli<sup>11</sup> in Dharwar District. During this period the Mysore Archaeological Department also discovered two palaeolithic sites at Bagalkot in Bijapur District and Vardi<sup>12</sup> in Dharwar District. All these sites have yielded Early Stone Age artifacts of the Acheulian complex, and include hand axes, cleavers and varieties of scrapers. These new discoveries have revealed that early man in North Karnataka preferred mostly open air sites on the banks of the rivers Krishna, Malaprabha, Ghataprabha, Thungabhadra, Varada and some of their minor tributaries, and that he was preparing implements from the locally available quartzitic stones by using the controlled cylindrical hammer technique.

The role of Deccan College, Poona, in promoting prehistoric studies in this area deserves special mention. Dr. H. D. Sankalia initiated intensive activity in the field by introducing two of his students, R. S. Pappu and K. Paddayya, for a study of North Karnatak region. Pappu, from his explorations on the banks of the rivers Krishna, Ghataprabha and some tributary streams, in Bijapur and Belgaum Districts, has located a number of Early Stone Age Sites. His geochronological studies have added much to our knowledge. Now, he has confirmed that there are two cycles of aggradation and degradation within the pleistocene period and are represented by two sets of deposits, each with a gravel overlain by silt, one resting over the other. He has shown that throughout this area the lower gravel bed is made of rounded water worn pebbles. These are bimodal, unsorted and unimbricated and are always found as discontinuous fragmentary bodies at the base of the different sections, resting on an uneven eroded surface of the

\* Compiled (in 1972) by Sri S. Nagaraju, University of Mysore, and published with grateful thanks.

# ANCIENT SITES IN KARNATAKA

IMPORTANT RECENT DISCOVERIES



country rock. These basal gravel beds are the horizons of Early Stone Age industry at many places. This is succeeded by a thick deposit of kankary reddish-brown silt, and then by an upper cycle of deposit with sandy pebbly gravel at its base. This gravel is the horizon yielding Middle Stone Age tools. This is further capped by another silt deposit.<sup>13</sup>

In one of his exploratory digs, at Anagawadi, 13 miles North-West of Bagalkot, he came across an interesting fact that the lower gravels yielding Early Stone Age tools rest on a bed of detrital laterite. His examination has shown that the gravel bed here varied in thickness from 0.45 to 0.62 metre, and had two layers, and the major concentration of artifacts was in the upper layer. All the tools were of the Acheulian variety.<sup>14</sup>

Paddayya has surveyed parts of Bhima and its tributaries in Bijapur and Gulbarga Districts. A major discovery by him is a site of Gulbal, in Gulbarga District on a feeder stream of the Hunsgi, a tributary of Bhima. Here the different sections on both banks of the river are exposed to a length of nearly half a mile, with a bouldary conglomerate resting on basal weathered shale. This conglomerate has yielded more than seventy artifacts, mostly made of lime stone. The tool assemblage from this site contained hand-axes, cleavers, unifacial and bifacial pebble tools, cores, flakes, and plain and prepared cores. The refined character of the tools displayed that these belong to the Acheulian facies.<sup>15</sup>

A significant discovery in recent years, however, is an Early Stone Age site at Nittur in Bellary District.<sup>16</sup> This site is situated on the right bank of the river Tungabhadra, about 3½ miles west of Tekkalakota and was brought to light by Dr. Z. D. Ansari of Deccan College, Poona. The different sections on the bank, about 4.5 metres high, revealed a layer of pebbly gravel covered by sub-recent dark brown silt. This gravel bed yielded Stone Age tools divisible into two 'Stages typologically and to some extent stratigraphically', even though the stratigraphical evidence is not very clear. The tools of the Early Stone Age here are remarkably of distinct chopper-chopping industry, comprising choppers—both unifacial and bifacial—and some flakes. Even though a few tools of the chopper-chopping varieties have been reported from other sites in

Karnataka like Pattadakal and Gulbal, where they occur along with the tools of the Acheulian facies, Nittur happens to be the only site where this industry appears as a separate entity unmixed with any of the Abbevilleo-Acheulian tradition. This demonstrates the potential of this area, craving intensive work in this region for a clear understanding of the matrix of Early Stone Age in Karnataka.

#### MIDDLE STONE AGE

The Middle Stone Age itself is a recent recognition in Indian prehistory. In 1954, by his work at Nevasa in Maharashtra, Dr. H. D. Sankalia established this firmly as a separate phase, by the discovery of a flake industry with scrapers, borers, points, etc., in a stratigraphical context between the Early and Late Stone Ages deposits. Initiated by Dr. Sankalia, K. D. Banerjee of Deccan College, Poona, noticed a site at Taminhal on the Malaprabha in Bijapur District, where the implements of this age were found in a geological deposit overlying the one yielding Early Stone Age artifacts.<sup>17</sup> Since then many sites have been discovered by various workers. A. Sundara of the Archaeological Survey has brought to light nearly a dozen more sites, mostly in Bijapur and Dharwar Districts—Salvadgi, Matkandevanhalli, Kuchovol,<sup>18</sup> Chanegaon,<sup>19</sup> Shidalphadi Cave,<sup>20</sup> to mention a few. He has picked up tools of this industry from Malkhed<sup>21</sup> and Udchan<sup>22</sup> also in Gulbarga District. S. Nagaraju of the Mysore University found another site at Jawali in the same district.<sup>23</sup>

The explorations of Pappu in Bijapur and Belgaum Districts, along the rivers Krishna and Ghataprabha resulted in the discovery of a dozen more sites, Asangi, Hippargi, Jainapur, Sitimani, Kadampur, Salgundi, etc.<sup>24</sup> Many of these have been found in sites yielding Early Stone Age tools also but in a different geological horizon establishing their relative position.<sup>25</sup> He has also conducted a small excavation<sup>26</sup> at Kovalli, in Bijapur District. Here he found a thin deposit of about 20 cms. thick lying above the natural outcrop of cherty material and capped by loose material on top. His excavation revealed Kovalli to be a factory site of the Middle Stone Age, and he has collected more than 2500 pieces, including finished and unfinished tools, plenty of waste products—all in mint condition.

K. Paddayya's work in the Gulbarga District (and partly in Bijapur District) has thrown open fresh data from an almost untapped area. He has noticed more than a score of sites on the banks of the river Bhima and its tributaries like Don. The sites located by him include Barnal, Chechnur, Devapur, Gulbal, Kaldevanhalli, Hunsgi, Marlbhavi, Wajol, Tumkur, Kollur,<sup>27</sup> Hagra Gundgi,<sup>28</sup> etc. At Hagra Gundgi, he noticed an implementiferous stratum of pebble gravel resting on bed rock and overlain by yellowish brown kankary silt, wherein the tools found were mostly made of chalcedony and included scrapers, borers, and points on plain and prepared flakes. There were also a few flake-blades and to a lesser extent blades. This gravel deposit has also yielded animal fossils, the identification of which is awaited. In 1967-68, a team of archaeologists from Deccan College, Poona, discovered three more stratified sites at Hunsgi, Hagra Gundgi and Hushatti in Gulbarga District,<sup>29</sup> where the tools purely of the Middle Stone Age series were obtained from a well-cemented sandy-pebbly gravel, lying at the base of a different section. A clear picture of the stratigraphical context was obtained at Devapur<sup>30</sup> in the same district, where artifacts of this group were obtained in a gravel deposit lying at a height of 13.7 metres above the bed of the river. This has disproved incidentally the earlier contention of some geologists that the high level gravels are of pre-pleistocene period.

The occurrence of tools clearly demonstrated now that these gravels too must be of the pleistocene age. Paddayya's further studies<sup>31</sup> have thrown more light on such deposits, and he contends on certain grounds that some of these may be of Pre-Middle Stone Age period.

An important contribution to the subject in recent years is by Dr. Seshadri,<sup>32</sup> who made an excellent study of the implements from Salvadgi. There, he attempted a systematic typo-technological analysis of the tools from that factory site and contended that the tool assemblage included items of three traditions *viz.*, (i) of Middle Stone Age, (ii) of Chalcolithic industry, and (iii) one more distinct blade making tradition.<sup>33</sup> Paddayya has made a significant heading now in establishing the existence of a 'Blade tool industry' distinct from those of the Middle and Late Stone Age, almost confirming the contention of Seshadri. At four

sites, examined by him Marlbhavi, Gulbal, Benhatti and Hunsgi, all lying within a radius of about 4 miles from the famous site at Salvadgi, the stratigraphical column revealed a succession of deposits over the bed rock, with Early Stone Age bearing bouldery gravel, pebbly-cobbly gravel yielding Middle Stone Age tools, and then a yellow brown silt, and black brown silt. The stratum consisting of black brown silt was found to possess within it, lenses of loose pebbly gravel which contained exclusively the tools of the 'Blade-tool Industry'. This industry is characterized by the use of chert implements, which are made from blades prepared by fluted core technique. The tool-kit includes a variety of blades—straight-edged, lateral edged, lateral-cum-transverse edged, notched, lateral-cum-notched, transverse-cum-notch edged—, beak nosed edge tools, burins, points, borers, notched blade-cum-points and straight-edge blade-cum-borer. The value of recognition of this industry is enhanced by a clear-cut demonstration of its stratigraphical context in these sites in a stratum lying above those yielding the tools of the Middle Stone Age Industry. Further, Paddayya has noticed in these places the occurrence of Middle Stone Age tools on the surface of the black-brown soil. Can it be said now that this discovery would be equally momentous as the discovery of series II by Sankalia about two decades ago? It is likely, if further examinations of sites in Karnataka and the adjoining regions are conducted (which are already on way to a certain extent) the prophetic suggestion made long back by Sankalia to prefer the use of the term 'Middle Palaeolithic' to the currently used 'Middle Stone Age', would be rightly upheld by recognizing this 'Blade-tool Industry' as of the upper-palaeolithic.

#### LATE STONE AGE

The Late Stone Age still remains an obscure entity in Karnataka prehistory. Till 1956, only ten sites were known from the whole of Karnataka. The only work on these is Seshadri's typo-technological analysis of tools done in 1956.<sup>34</sup> In recent years of a few more sites have been brought to light by the members of the Archaeological Survey of India of which mention may be made of Soodasandra and Siddapur (Bangalore District) discovered by B. K. Gururaja Rao,<sup>35</sup> about 25 sites

in Bijapur District, at Advi Hulbagal, Arsanal, Shivpur, Siddapur,<sup>36</sup> Banni, Deur, Hallur, Kop, Sirol,<sup>37</sup> etc., discovered by P. N. Babu, Hirebenkal in Raichur District by A. Sundara<sup>38</sup> and Nalwagal and Nadiharalhalli in Dharwar District by M. S. Nagaraja Rao.<sup>39</sup>

Unfortunately the Late Stone Age industry has not been tackled with such enthusiasm, as shown to the Early and Middle Stone Age ones to understand the stratigraphical context of its occurrence or to know the contemporary environmental conditions. An attempt done in this regard by R. S. Pappu at Kovalli<sup>40</sup> resulted only in the recognition of a factory site where Middle and Late Stone Age tools were found together. A lone excavation, at Sanganakallu, Bellary District, has revealed that the microliths there succeed the

phase of trap flakes.<sup>41</sup>

K. Paddayya and S. Nagaraju, however, have thrown some light by discovering a few sites and subjecting tools, found therein, to a systematic analysis. At Hunsiholi in Shorapur Taluk, Gulbarga District, Paddyya found Late Stone Age tools which include ordinary and fluted cores, core trimming flakes, parallel-sided flakes, blunted-back blades, lunates, borers and scrapers.<sup>42</sup> S. Nagaraju of Mysore University discovered Ikkalki, Gangapur, and Shakapur in the Aland Taluk, Gulbarga District. The Late Stone Age industry in these places is represented by points, varieties of scrapers—hollow, side, hollow-cum-side—a few blades and fluted cores and is conspicuous by the absence of microliths of the geometric series.<sup>43</sup>

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## II. PROTOHISTORIC KARNATAKA

Protohistoric period is a period between pre-historic and the historic periods. In the cultural history of Karnataka, this phase consists of the Neolithic-Chalcolithic period and the Iron Age and Megalithic cultures, at the end of which we see the dawn of historical period, with the first evidence of writing in the form of Asokan edicts, found at Maski, Koppal and Brahmagiri. We shall first review the Neolithic-Chalcolithic culture and then the Iron Age and Megaliths.

### A. Neolithic-Chalcolithic Culture :

In the first instance it is necessary to define the term "Neolithic-Chalcolithic". The term "Neolithic" is freely used in this monograph, to mean that economic stage when man lived a settled life, domesticating the animals, practicing agriculture and making pottery. Strictly speaking, there is no pure "Neolithic" stage found in any of the excavated sites in India. On the other hand, there is evidence of the use of the metal copper or bronze, in all the excavated sites in Karnataka. Therefore, this cultural stage should really be designated "Neolithic-Chalcolithic". However, since the term "Neolithic" is widely used and understood in the Indian context to mean the economic stage described above, it has been freely adopted here. With this brief explanation, we may review the Neolithic of Karnataka.

Until three decades ago, the Cultural history of Karnataka was considered to begin only with the Mauryan epoch, because of the existence of Asokan edicts at Brahmagiri, Siddapur, Jatinga Rameshvara in Chitradurga district, and Maski and Koppal in Raichur district, all in the northern part of Karnataka. But the discovery of and excavations at Brahmagiri in 1942, by Dr. M. H. Krishna of the Mysore Archaeological Department, brought to light elements of an earlier culture which has now been designated 'Neolithic-Chalcolithic'.<sup>1</sup> Krishna was trying to expose the town site of 'Isila' of the Asokan edict at the neighbouring village of Siddapur, when he struck an earlier culture, in the lower

deposits of the site, which was characterised by the occurrence of polished stone axes, stone blade tools, hand-made thick grey ware and highly burnished black pottery. In 1947, the site was re-excavated by the Archaeological Survey of India and the Mysore Archaeological Department, under the direction of Sir Mortimer Wheeler and established the sequence of cultures based on stratigraphic evidence.<sup>2</sup> The excavations at the habitation site revealed the existence of three distinct cultural periods, viz., (a) Stone Axe Culture, (b) Megalithic Culture and (c) Andhra Culture.

The Stone Axe culture was characterised by polished stone axes, blade tools of flint, agate and jasper, and hand-made grey ware. In the earlier layers a painted and an incised pottery were found.<sup>3</sup> There was also evidence of burial. Children were packed into two globular urns, placed mouth to mouth, and buried vertically in pits dug for the purpose. In one instance, an adult was interred in a narrow pit, in north-south orientation, and was provided with burial appendage consisting of a spouted pot placed near the skull and two grey ware bowls, near the upper end of the femurs.<sup>4</sup>

This culture was provisionally dated from first millennium B.C., to the beginning of the second century B.C.<sup>5</sup>

The excavations at Brahmagiri gave not only a clear sequence of cultures, but a starting point for further studies.

In 1948, Subbarao made a study of Stone Age Cultures of Bellary area, and excavated the site of Sanganakallu, 4 miles away from the city of Pellary.<sup>6</sup> The small scale excavation not only confirmed the Brahmagiri cultural sequence, but brought to light, according to Subbarao, an *a-ceramic* phase characterised by quartz and patinated trap flakes. Further, the upper levels of the site indicated an overlap of Neolithic or Polished Stone Axe culture and Megalithic culture. The other cultural components, however, were found similar to the evidence already known at Brahmagiri.<sup>7</sup>

Allchin excavated the site of Piklihal, near

Mudgal, in the Raichur district in 1952.<sup>8</sup> The results of his dig more or less confirmed the sequence at Brahmagiri and Sanganakallu. He distinguished two neolithic phases, *viz.*, lower neolithic and upper neolithic. While the lower neolithic was probably true neolithic, Allchin postulated an intrusion of the chalcolithic culture, possibly from the northern Deccan, on the evidence of a number of wheel-thrown painted pottery.<sup>9</sup> Three burials were exposed. They showed that the dead were buried in pits and were provided with grave goods, probably intended for use in the life after death. In the case of one male, a stone axe was placed near the feet, a small bowl near the loins and five parallel-sided blades by the side of the head. In the case of another burial of a female in a pit, a spouted pot was placed near the head and a deep bowl near the loins.<sup>10</sup>

The later cultural accumulations showed that the site was occupied during the Iron Age and Early historic periods.

Thapar excavated Maski in 1954.<sup>11</sup> The site had been excavated in 1936 by the State Department of Archaeology of the erst-while State of Hyderabad.<sup>12</sup> Although the finds from the excavations were varied and of great interest, the excavations were only briefly reported and the sequence of cultures could not be followed.<sup>13</sup> The same was the fate of Kallur in the same district of Raichur.<sup>14</sup> However, the latter site is worthy of note for the famous Copper Swords with antennae hilts reportedly said to have been found in a cavern while blasting the rocks.<sup>15</sup> These swords are almost similar to those found at Fatehgarh.<sup>16</sup> The finds from the excavations particularly the lump of Copper pyrite and the three swords mentioned above, at once associate the site of Kallur with the chalcolithic phase in the history of Karnataka.<sup>17</sup>

Be that as it may. Thapar's excavations at Maski in 1954 confirmed the neolithic-chalcolithic cultural sequence in North Karnataka area, already established by the three excavations narrated above. However, no overlap of chalcolithic and megalithic was noticed. Instead there was a hiatus between two cultures, probably indicating a temporary desertion of the site. Although the cultural components were similar to those noticed at the above-mentioned sites, the stone blade industry was characterised by

long blade tools of chert and chalcedony in large numbers. But surprisingly no polished stone axes were found in stratified deposits, although a number of them were collected from the surface of the site. Another feature to be noted is the total absence of burials.

It may not be out of place here to refer to the development taking place outside Karnataka area. Intensive explorations carried out in different parts of the country revealed the existence of a culture designated 'chalcolithic' and the distribution of sites of that culture. The chief centres of this culture are Nagda on the Chambal; Ahar on Ahar river; Navdatoli and Maheshwar on the Narmada; Prakash and Bahal in the Tapti-Girna valley; Nasik, Jorwe, Daimabad and Nevasa in the Godavari-Pravara valley; Chandoli on the Ghod and Songaon on the Nira; Maski, Piklihal, Sanganakallu and Brahmagiri in the Krishna-Tungabhadra Valley—'all comprised in the stretch of land between Nagda in the North and Brahmagiri in the South, roughly extending from the tropic of Cancer to 15° lat., a distance of about 600 miles'.<sup>18</sup> To this may be added Pandu Rajar Dhibi in the Ajay Valley, in West Bengal<sup>19</sup> and T. Narasipur on the Kaveri. The last mentioned sites have extended the limits of the chalcolithic culture complex to the east and further south respectively. Though all these sites exhibited regional differences, there has been broad similarity in the equipments of this culture, *viz.*, the use of painted pottery, copper though in a restricted degree, stone blade industry, and in the Deccan Polished Stone Axes. Carbon-14 dates available for a number of sites, such as Navdatoli, Ahar, Nevasa, Chandoli and Utnur, indicate a time bracket between B.C. 2300 and 1000. It was, therefore, essential to know the relationship between the Karnataka Neolithic-Chalcolithic cultural phase and the contemporary cultural groups in other parts, particularly of the northern Deccan (present day Maharashtra State). With this end in view, Sri M. N. Deshpande, the then Superintendent of Archaeology, Southwestern Circle, organised thorough explorations in the Districts of Dhulia, Ahmednagar, Bijapur and Dharwar, as a regular plan of the Survey of Antiquarian remains in India. In the South, the Southern Circle of Archaeological Survey of India carried out village to village survey of

antiquities in a number of districts in Southern Mysore and particularly in the Kaveri Valley. The advantageous result was that a large number of sites ascribable to Neolithic-Chalcolithic phase were discovered, and a number of them excavated, contributing substantially to the protohistory of Karnataka.

We may now review the work of explorations in the Karnataka area. As early as 1953, the Kannada Research Institute of Dharwar carried out preliminary explorations in the Belgaum district, and brought to light sites such as Saptasagar, which yielded typical grey wares and polished stone axes.<sup>20</sup>

The explorations of Dr. A. Sundara, in the Bhima-Krishna river Valleys, in the Bijapur-Belgaum districts brought to light a large number of sites ascribable to Neolithic-Chalcolithic phase of Karnataka prehistory.<sup>21</sup> The antiquities collected from surface explorations included polished stone axes, hand-made pottery, painted pottery, comparable to the wares found in Northern Deccan, ribbon flakes and fluted cores, showing the wide spread distribution of this lithic industry. The chance discovery of the mound at Udchan,<sup>22</sup> situated on the left bank of the river Bhima is worth mention in this context. Here the mound is strewn with antiquities, referred above, and as the mound is undisturbed, excavations would be highly rewarding. The painted black-on-red ware from this site is exactly similar to that of the Godavari-Pravara complex in shape and make. The excavations will also throw welcome light on the cultural relationship between chalcolithic folk of the Northern Deccan and those of Karnataka region.

Another important contribution of Dr. Sundara from his survey of Upper Krishna Valley is a new painted ware, which has been designated as the Savalda Ware.<sup>23</sup> So far only one site, that of Saptasagar was known in the Krishna Valley. Dr. Sundara's explorations brought to light more than 25 sites assignable to chalcolithic phase.<sup>24</sup> To name a few important sites, we may mention Kudichi, Terdal and Kallolli. The noteworthy features of these sites are : (a) the occurrence of painted black-on-red pottery in profusion, with varied painted designs, both geometric and naturalistic, (b) occurrence of the well known Savalda painted pottery, with painted motifs including fish, arrow, stylised plants, etc.,<sup>25</sup> and (c)

the existence of ash mounds, about which more will be said presently.

Dr. Paddayya explored the Shorapur Doab, and discovered a large number of sites, throwing a flood of light on the neolithic-chalcolithic culture of Karnataka.<sup>26</sup> His work brought to light at least nine sites with ash mounds, in the Shorapur and Shahpur Taluks. They are : Mallur, Thanmandi Thanda, Kodekal, Budihal, Thirth, Kakkera in Shorapur Taluk ; and Benkanhalli and Shakapur in Shahpur taluk, all in the Gulbarga District. These sites show further extension of the ash mounds. The small scale clearance excavation at Kodekal has given a new dimension, particularly to the problem of ash mounds in the region.

The Tungabhadra Valley was explored by Dr. Nagaraja Rao, and a large number of sites ascribable to neolithic-chalcolithic period were located.<sup>27</sup> The most important sites are Hallur, Nadiharlahalli, Hadargeri in Dharwar District ; Chikrampur, Nandihalu in Raichur District ; and Belagoduhalu and Tekkalakota in Bellary district. Many of these sites yielded typical hand-made pottery, grey ware, painted black-on-red ware, polished stone axes, blade flakes and fluted cores. All the sites exhibited undoubted characters of neolithic-chalcolithic culture, and also indicated possible inter-relationship with the chalcolithic of the northern Deccan which had to be confirmed by excavations.

Further West, in the Tungabhadra Valley, a neolithic site characterised by hand-made grey pottery and polished stone tools has been discovered at Guddemardi, a couple of miles from Shimoga town. This is said to suggest a west-ward movement of the neolithic settlers of the Tungabhadra Basin.<sup>28</sup> On the coast itself neolithic pottery and stone implements from Honnavara and Gokarna have been reported by Rao and Sundara. This also is said to extend the zone of neolithic influence to the west coast, across the Sahyadris.<sup>29</sup> Since the evidence is quite scanty, we should await confirmation only by scientific excavation.

Interesting evidence is available from the Tunga Valley. About 15 miles from Shimoga, at Asokanagar and Nagasamudra polished stone axes have been reported by Sri Tejasvi, in a popular Kannada article.<sup>30</sup> At both these sites as also near Bhagavatikere (about 8 miles from Asoka-

nagar), prehistoric remains have been located. The discovery is due to the adventurous Sri M. D. Sundaresh, Sri K.R. Shamanna and Sri A.S. Ramachandra Rao. Although the tools are surface finds and their stratigraphic context is not known, their discovery in Shimoga region is of significance, indicating the western most point of Tungabhadra neolithic phase.

Farther South, in the Kaveri Valley, Krishna Murthy of the Southern Circle of the Archaeological Survey of India, has explored the Mysore District, particularly the banks of the Kapila and Kaveri rivers.<sup>31</sup> A number of sites of neolithic character, with antiquities comparable to those from the well known site of T. Narasipur, have been located in the area. One of the sites, Buditittu has also been excavated,<sup>32</sup> to which we will return presently.

Krishna Murthy continued his explorations in Kolar district where he has located four neolithic sites, three in Bangarpet and one in Malur Taluks, so far.<sup>33</sup> The sites are Sulikunte, Hungunda and Budikote in Bangarpet Taluk and Banahalli in Malur Taluk. All the sites are characterised by typical pottery of neolithic period, and other antiquities. The site of Banahalli has been recently excavated.<sup>34</sup>

The surface explorations so far enumerated show the wide distribution of Neolithic-Chalcolithic sites in Karnataka. However, it is a happy coincidence that a large number of sites of this period of human development have also been excavated and the Neolithic culture of Karnataka is the best documented culture in the country. But before we describe the recent Neolithic excavations, a word on the problem of the ash mounds is necessary.

Ash mounds are a peculiar feature of the Bellary and Raichur districts of Karnataka,<sup>35</sup> and Mahabubnagar and Anantapur of neighbouring Andhra Pradesh. These are mounds formed of burnt ash, vitreous and scoracious in nature. They were variously explained as volcanic ash, cremation grounds and sites of industrial working, etc. However, the credit of identifying them as heaps of burnt cow dung goes to Foote.<sup>36</sup> This has been further confirmed by scientific analysis by Zeuner<sup>37</sup> and recently by Mujumdar and Rajguru.<sup>38</sup> Allchin excavated the ash mound at Utnur, in Andhra Pradesh, in 1957 and distinguished five periods of occupa-

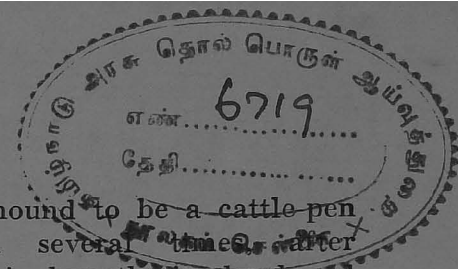
tion.<sup>39</sup> He found this mound to be a cattle pen occupied and levelled several times after periodical burnings. This hypothesis, he based on the evidence of beautifully preserved hoof impressions and post holes on the floors. He associated the mound with the Neolithic period as the excavations yielded Neolithic pottery, similar to those found at Piklihal, ground stone tools and tools of stone blade industry. Carbon dates for the site seemed to confirm this chronological horizon. For, the date for a sample from period IB level at the site is B.C. 2160  $\pm$  150 for that middle-Neolithic phase.<sup>40</sup>

As already referred, the distribution of these ash mounds were confined to Raichur-Bellary districts and further east in Andhra. But Sundara's explorations brought to light the existence of more than a dozen sites with ash mounds in the Upper Krishna Valley, further west. Among these, the important ones are those at Kudichi, Terdal and Kallolli in Belgaum district.<sup>41</sup> The importance of the discovery of these mounds lies in the fact, that, according to Dr. Sundara, these may indicate the diffusion of ash mound tradition from the Upper Krishna Valley in the west towards the Doab in the east. This may also be confirmed from the fact that no ash mounds are known, so far, in the Bhima valley in the north and Upper Tungabhadra Valley in the south.<sup>42</sup>

Be that as it may. We may now review the excavations in the recent past, both of the Neolithic sites and the ash mounds, before we hazard any conclusions.

We have already stated above that Neolithic culture of Karnataka is the best documented culture, and referred to the results of excavations at Brahmagiri, Sanganakallu, Piklihal and Maski. Since 1956, when the new State of Karnataka was formed, considerable work has been done and a number of excavations have been carried out, which have contributed a great deal to reconstruct the story of life in the Neolithic period in the region.

In the Krishna Valley Dr. Sundara excavated a small L-shaped trench, about 2 Kms. from the Terdal hills in a field, within the revenue jurisdiction of the village Terdal,<sup>43</sup> in Jamkhandi taluk of Bijapur district. The dig yielded un-mistakable evidence of Neolithic-chalcolithic cultural phase. Radio carbon determinations for the earliest layer



show that the site was occupied as early as B.C. 1770.

Tungabhadra Valley, however, has been subjected to a thorough investigation and three major, although small scale, excavations have yielded very important results.<sup>44</sup> The sites excavated are Tekkalakota and Sanganakallu in Bellary district, and Hallur in Dharwar district.

Tekkalakota, in the Siraguppa taluk of Bellary district, is situated 3 miles east of Tungabhadra river. In the initial exploration, the Neolithic settlements were located on the granite hills, locally called "Hudedgudda", situated to the south of the village. A total of 19 open spaces or "made grounds", at different heights, were found, which showed definite evidence of occupation during the Neolithic period. All these Neolithic sites were surrounded by castellated granite rocks. The surface explorations, as already mentioned, yielded antiquities of the Neolithic period.

Dr. Nagaraja Rao excavated the site as part of his field research. Of the nineteen localities, two sites, named TKT-1 and TKT-2 were taken up for a small scale excavation during the period November 1963 and March 1964.<sup>45</sup> In the latter site, TKT-2, a small trench revealed seven well plastered floor levels.

The excavations at TKT-1 revealed a cultural deposit of 1 metre deep, belonging to two cultural phases.

Phase I was characterised by use of ground stone axes, and stone blade tools made on chert and chalcedony. The ceramic industry comprised hand-made pale grey wares, burnished grey, both plain and ochre-painted wares. The common shapes included spouted and globular vessels with funnel-shaped rims, plain and with pinched lips, and goblets. Among other finds recovered from the corresponding strata of this phase, mention may be made of gold ornaments, bone tools, beads of steatite and semiprecious stones and a copper axe.

Available evidence of structures indicated that the small huts were circular on plan.

Phase II was distinguished by the paucity of the pale grey and ochre-painted pottery, while the burnished wares continued. The new element noticed in this phase was the dull red and the black-and-red ware, with white paintings and

exclusively used in burials. A wheel-made black-on-red ware also made its appearance. The common shapes included spouted vessels, urns, bowls of various dimensions, and with multiple-pinched-lips and the perforated vessels. Ground stone axes and stone blades continue as in the previous phase. A few copper objects like rings and wires continued to show the use of the metal.

The inhabitants made the best use of the granite boulders available in plenty in the site and used them to support the periphery of the circular huts, as is done even to this day in the village. The floors were found often plastered with lime.

Evidence of practice of burials was available from both the phases. Seven burials were encountered in the excavations of Dr. Nagaraja Rao.<sup>46</sup> In the large scale excavations, under progress, burials in all were exposed.<sup>47</sup> So far a total of 18 burials have been encountered. Of these 6 are child burials, while the other 12 are of adults. Further 6 burials belong to phase I and 12 are of adults. Further 6 burials belong to phase I and 12 are from phase II.

The earliest inhabitants, who settled on the basal red moorum, dug narrow pits and buried the skeletal remains in them. These burials were fractional in nature. Usually long bones and the skull were collected and buried in north-south orientation, in the pits dug for the purpose, over which stones seem to have been placed from the skull to the extremities. Two burials were found in the red moorum very close to each other, at a distance of 16 cms. One of these contained skeletal remains belonging to three individuals buried in one pit. Two of the individuals in this pit, are represented by long bones and the skull, whereas the third one with only the fragmentary skull. One of them appeared to be that of a female. This burial seemed to be a post-inhumation burial. Other burials showed that vessels, such as goblets and spouted bowls were placed in the burial, indicating that they were meant for use in the life after death.

All the child burials of Phase I were encountered in the locality designated Tr. 2A. This was a circular locality surrounded by boulders on all sides, to the east of TKT-1.

It was a circular house, and yielded full spouted pots and bowls. One of the child burials

was found within the house, under the floor of the house, buried in an embryonic position, while the other two were fractional in nature. One of these was a burial in an urn.

As already mentioned, there were a dozen burials from Phase II. Of these 9 were of adults and 3 of children. Except one, all the other adult burials were extended ones, and were invariably provided with vessels, consisting of black-and-red ware bowls, some of which were painted with white lines and brown-and-black and red slipped globular and spouted pots. In the case of one burial of an adult female, aged between 40 and 45 years, seven vessels were placed as burial appendage. These vessels consisted of three black-and-red ware bowls, one painted in white in the interior, and four globular vessels of red-slipped fabric, including one spouted pot.

The ninth adult burial was a burial in multiple pots (Pl. Vc). In this case, four huge storage jars were placed horizontally in north-south orientation and were joined together by breaking the bases of the middle pots. The skeleton which was placed in this urn-coffin, so to say, was interred in north-south orientation after exposure. The four pots were laid carefully in a pit dug for the purpose. Around this urn-coffin, as many as 9 vessels-bowls of black-and-red ware, globular pots of brown-and-black ware, a small vase and a small spouted pot of burnished ware were placed as funerary goods. It was interesting to find that the base of one of the jars had the impression of a twilled mat of date palm leaves. This mat impression, incidentally, indicated that such huge jars were probably made by the method of coiling or building.

The child burials, of this phase, were in urns. One was in an urn of brown-and-black ware covered with another pot and laid horizontally in the pit. In another burial copper bangles were found along with the skeletal remains of a child.<sup>48</sup>

There are two more items of interest from the excavations at Tekkalakota.<sup>49</sup> Both come from the locality TKT-2. One is a terracotta pottery lid (Pl. V a). This had the representation of a bull, an antelope, a serpent and two peacocks, one above the other, depicted by punctured decoration. This was probably to cover a pot meant for some ceremonial purposes.

The other was the finding of charred grains,<sup>50</sup> identified as *Dolichos Biflorus*, *Huruli* in Kannada, indicating domestication and cultivation of this plant, in so early an age as the Neolithic in Karnataka.

A number of carbon samples were processed by the Tata Institute of Fundamental Research, and five C-14 dates are available for the site.<sup>51</sup> The chronological range for the occupation of the site appears to be between B.C. 1700 and 1550.

The next important site excavated in 1965, was Sanganakallu. It has already been stated that Subbarao excavated this site in 1947.<sup>52</sup> The site was subjected to fresh investigations with a view to understanding the problem of the *a-ceramic* pre-Neolithic phase raised by Dr. Subbarao.<sup>53</sup> However, the excavation of the season of 1965, yielded more useful information regarding the Neolithic occupation of the site.<sup>54</sup>

In the lowest level, in the deposit of the basal red moorum, patinated trap flakes occurred along with large quantity of quartz flakes, including a few definite tools like lunates, associated with the Neolithic culture. Therefore, on the hill, it was not clear if the trap flakes were those of a distinct microlithic industry or not. However, a trench dug by Sankalia at the base of the hill amply proved that the microliths succeeded the industry in trap.<sup>55</sup>

The excavations, however, confirmed the Neolithic sequence of occupation of the site, as reflected by Subbarao's excavations in 1947. One important evidence of 1965 dig was the exposure of the remains of a complete circular structure (Pl. IV b). The structure, about 5 metres in diameter, was found built on the original rock bed. In order to level the uneven rock surface, chips of stone were laid, over which floor was plastered. The floor was found raised by alternate layers of black soil and red moorum, while the working top of the floor was plastered with lime. The walls of this hut were of clay plastered on bamboo-screen. The latter was obviously supported by wooden posts, the average diameter of which was 25 cms. In one corner of this circular hut stood a hearth while in the other were four flat stones, meant for resting a storage jar. Between these four stones were placed a few polished stone axes.

Other interesting finds were complete terra-

cotta figurines of bulls, pigeon, etc., bone tools and also copper tools such as chisel-cum-poker, fish hooks, etc.

A few carbon samples have been analysed by the TIFR, and the dates for the site indicate a bracket between B.C. 1700 and 1400.

Finally the last important site to be excavated in the Tungabhadra Valley is Hallur. Hallur is situated on the left bank of the river Tungabhadra, and is the last village in the southern tip of Dharwar District. It is known as Vijayapura or Vijayasamudra in the inscriptions<sup>56</sup> and was the war camp of Hoysala Viraballala II (1180—1220) during his military operations with the Chalukyas.<sup>57</sup>

The ancient mound is situated to the north of the village. It has been much disturbed by the construction of a medieval mud fort. The mound is cut into two parts by a moat. The northern part is intact, except that the top layers are disturbed by modern cultivation.

The trial digging at this site during February-March 1965, brought to light interesting evidence, for the first time, from a site located on the river bank, in the north Karnataka region.<sup>58</sup> The two trenches dug here confirmed the general sequence of cultures in the region. The seven-metre deep deposit showed that the site was occupied during the Neolithic period, followed by the arrival of iron-using folk.

As at Tekkalakota and Sanganakallu, the Neolithic phase at the site had two occupational phases. The earlier was characterised by a pale grey ware, together with the ochre painted variety. A striking feature of this phase was the absence of the typical lithic blade-industry found in the earlier levels of the other excavated sites, and also the paucity of polished stone tools. The few tools found showed that the people selected flat blocks of locally available schist and ground only the edges to manufacture cutting tools. There was no evidence of copper or any other metal. Could this phase represent a 'true Neolithic' stage? It is difficult to say, for the excavations are too limited in scale.

The second phase showed a change in pottery tradition. A striking feature is the profuse quantity of the stone blade industry, characteristic of the Chalcolithic period (and identified by the feature known as the 'crested guiding ridge'), the

occurrence in considerable quantity of polished stone tools, bone tools and finished copper implements such as miniature bifacial axes and fish hooks. The ceramic tradition showed the dominance of a coarse brown-and-black ware, although the burnished ware of the previous phase continued. The pale grey ware of the earlier phase was conspicuous by its absence.

The polished stone tools were made on doleritic basalt. The types of tools included axes, chisels, wedges, etc. The blade industry mainly included parallel-sided blades, lunates, serrated blades, etc.

Other minor antiquities included beads mostly of steatite and shell, and occasionally of bone, stone and terra-cotta.

Definite evidence of structures was found in this phase. Remains of two complete structures showed that the huts were circular on plan, a feature already noticed at Tekkalakota and Sanganakallu. One of these was 3 metres in diameter, with a well rammed floor and enclosed by a circular wall, as evidenced by the post-holes, dug at intervals, forming a circle. The holes contained remains of burnt bamboo indicating that bamboo poles were used at intervals to support the wall. The floor was found to have been successively raised several times by preparing a bedding of chips of schist stone and rammed earth. There were two post holes in the centre of the hut, probably meant for the posts which supported a conical roof. At the northern part of the hut was a circular hearth or fire place,<sup>59</sup> the like of which has been found at Chandoli, in Maharashtra.<sup>60</sup> The hearth contained plenty of ash and charcoal. On the floor of this hut, in the central part, was a polished stone axe. The most interesting find from the floor of the same hut is the charred grains, which have now been identified as *Eleusine Coracana*, i.e., *Ragi* (in Kannada)<sup>61</sup> found for the first time in so early an age as the Neolithic, in India.

Another object recovered from the floor of the same house, with interesting cultural implication was the fragment of pottery head-rest. We shall refer to this presently.

The evidence of burial custom was available only from Phase II at Hallur. Only two infant graves were encountered. One of them showed that the skeletal remains of a child were put in

two globular urns, placed mouth-to-mouth, and interred in a pit dug for the purpose, under the floor of the interior of the hut. Small bowls and cups were placed, within the pit itself (Pl. VI b). This was probably meant for use of the dead in the life-after. Two more child burials belonging to the same phase were encountered, but both of them were disturbed.

The site was continued to be occupied by the Neolithic people, when a new wave of people, with the knowledge and use of iron arrived at the site and continued to coexist along with the earlier occupants of the site. This overlap of the two cultural groups is very well evidenced by the continued occurrence of the cultural equipments of the Neolithic folk and those of the new people. The latter consisted of a typical black-and-red ware pottery, with a white painted variety, and iron objects consisting of arrow heads, spear heads and knife blades.

A number of carbon samples have been processed from the site which help us to date the various phases fairly accurately.<sup>62</sup> The radiocarbon dates show that the earliest occupation of the site took place somewhere around B.C. 1800. The arrival of the new wave of people with the knowledge of iron was somewhere near the beginning of the 1st millennium B.C., if not earlier. This dating for Hallur Neolithic appears to be correct even according to the comparative C-14 dates from other sites, like Sanganakallu and Tekkalakota from the same region.<sup>63</sup>

Further south, in the Kaveri Valley, Seshadri excavated the site of T. Narasipur, situated at the confluence of the rivers Kaveri and Kapila (Pl. VII a).<sup>64</sup> The site was known for the Neolithic antiquities, particularly, the pottery object known as the 'neck-rest' from the time Foote collected them there.<sup>65</sup> Seshadri's excavations revealed that the site was occupied during the Neolithic-Chalcolithic and the Megalithic periods.

The earliest phase, the Neolithic, was largely associated with animal bones and pottery. The pottery consisted predominantly of burnished wares. The upper layers yielded burnished black ware, the lips and rims of which were painted with red-ochre, a feature noticed in most of the sites in Karnataka. The polished stone axes are also reported from this phase.

This Neolithic phase is said to have been superimposed by a debris of an intrusive 'Chalcolithic' phase characterised by painted black-on-red pottery, comparable to those at Brahmagiri, Sanganakallu and other sites; and fluted cores of black jasper. The pottery fabrics of earlier phase, however, continue to occur.

The lower Neolithic phase yielded an extended burial, oriented east-west, and with the two hands placed over each other on the abdomen. Near the skull, were placed two vessels of hand-made and cream-coloured ware, and a shallow bowl, with a protruding channel spout. Near the right ear of the dead, a pottery 'neck-rest'—a hollow stand with a concave top was found (Pl. VII b). Though this site is replete with this object, its use was not known until its association with this burial. This evidence for the first time proved that the neck-rest was meant for sepulchral use.

A couple of radiocarbon dates are available for the site, which show that the site was occupied from about B.C. 1800 and continued to be inhabited till about B.C. 1500.<sup>66</sup>

The importance of the pottery 'head-rest', as an object indicating cultural contact with far off lands may briefly be summarised here.<sup>67</sup>

The geographical distribution of these head-rests is limited to the Neolithic sites in Karnataka area. We have already referred to the finding of these at Hallur and T. Narasipur. Hemmige a few miles down stream also yielded these.<sup>68</sup> Further, Allchin reported bruising on rock faces at Piklihal and opined that they could also be interpreted to represent head-rests.<sup>69</sup> Nowhere else in the Indian sub-continent, have we examples of these. The two examples from Chanhudaro said to be head-rests are doubtful.<sup>70</sup>

However, outside the sub-continent, in the far off Egypt, we have evidence of head-rests being used for sepulchral purposes. There, they are found in the royal burial chambers from predynastic times down to the Roman period. They are made of wood, stone and sometimes pottery.<sup>71</sup> In the tomb of Tut-Ankh-Amen, four head-rests were found in a table-shaped cabinet. They were of ivory, lapis lazuli, blue faience and turquoise blue.<sup>72</sup> The finest of these is of ivory, now in the Metropolitan Museum of Art, New York,<sup>73</sup> and resembles in shape the specimen from T. Narasi-

pur. The caryatidal figure of *Shu*, the god of atmosphere, represented on the stem, holds the concave part of the rest high. The myth it represents is that god *Shu* is supposed to hold the head of the king high which lies on the concave part of the rest so that he might rest in heaven for ever.

Wooden head-rests are still used by many tribes such as the Makabanga and Maszona tribes of Southern Rhodesia, and the Balubas of Congo.<sup>74</sup>

The similarity in shape and association of the head-rests with the burials, not only confirm the purpose of the head-rests, but also indicate possible contact with Egypt of 1400 B.C. The evidence of the earliest occurrence of *Ragi* at Hallur is also of particular interest in this context. It is said to be originally an African Millet, and that it was "transported to India in pre-Aryan times."<sup>75</sup> Therefore, with the present evidence, we may only suggest some kind of contact with the African continent in early times. However, we should await more tangible evidence from the West Coast of India and East Coast of Africa.

Two more sites excavated in the Kaveri Valley and worth mentioning are Hemmige, on the Kaveri and Buditittu on the Swarnamukhi.

The former site, Hemmige is situated on the right bank of the river Kaveri, about 11 kms. downstream from T. Narasipur and was excavated by Sri M. Hanumantha Rao and Sri Nagaraju of the Department of Archaeology in 1964.<sup>76</sup>

The excavations were carried out in two areas. Two trenches were dug by the side of the village and three on a small island, behind the ancient dam. The dig at the former site revealed two periods of occupation, with a gap in between. The earlier period was during the Neolithic and the later during the early historic period.

The Neolithic was represented by seven pottery groups, found resting on the natural soil. A few post holes and floors indicated the prevalence of mud structures. The entire pottery range was hand-made, some of which were burnished. The groups of vessels consisted of two or three globular vessels covered with lipped bowls. One of the groups had a neck-rest, while another had a small carinated, spouted vessel.

The area on the island appears to have been

occupied only during the chalcolithic period. The excavations here brought to light hand-made pottery and a few fragments of wheel thrown sherds were also in evidence. Globular vessels, lipped bowls and neck-rests were also recovered. The tools recovered consisted of ground stone axes, fluted cores and blades of black-chert. Fragment of a copper and terracotta beads are other objects worth mentioning.

No carbon dates are available for the site. But on the comparative evidence of T. Narasipur, we may not be wrong in assigning the Neolithic occupation to about B.C. 1700.

A small dig by the Southern Circle, Archaeological Survey of India, in an open field in the village Buditittu, located on the south bank of the river Swarnamukhi, yielded remains of occupation belonging to the Neolithic culture.<sup>77</sup> Thick burnished grey and brown pottery, along with a small quantity of Megalithic black-and-red ware found in the trial excavations indicated the occupation to be of the overlap phase of Neolithic and Megalithic cultures. The other important feature was the occurrence of pottery neck-rests or head-rests, already known from T. Narasipur and Hemmige. No polished stone tools were found, although quite a few were collected from the surface of the site.

The Southern Circle of the Archaeological Survey of India, also conducted a small scale excavation at the site of Banahalli, about 2 miles south-east of Tekal railway station, in Kolar district.<sup>78</sup> The site has yielded evidence of Neolithic and overlap phase of Neolithic and Megalithic cultures. The culture sequence is in general conformity with the one known in the region.

So far, we have reviewed the excavations at the habitation sites of the Neolithic-Chalcolithic phase. We may now turn to the ash mounds. The problem of ash mounds has been briefly stated above.<sup>79</sup> We may therefore review the results of the recent sites excavated in Karnataka.

As already referred, Allchin excavated the ash mound at the site of Utnur, in Mahabubnagar, in Andhra Pradesh,<sup>80</sup> and came to the conclusion that the mound was a cattle-pen, occupied and levelled several times during the Neolithic times. Carbon dates from the site appeared to confirm

this chronology.<sup>81</sup>

In Karnataka region, two ash mounds were subjected to limited excavations in recent years. They are Kupgal in Bellary district, and Kodekal in Gulbarga district.

The ash mound at Kupgal, at the foot of the Sanganakal hill, Dist. Bellary, had already been tapped by Newbold, some time in the nineteenth century.<sup>82</sup> In order to ascertain the nature and origin of the mounds, specially in the light of earlier observations of Foote, Newbold, Wooley, Yazdani, Zeuner and Allchin,<sup>83</sup> Drs. Mujumdar and Rajguru re-excavated the Kupgal ash mound in 1964.<sup>84</sup>

The evidence obtained from the dig as also the laboratory analyses of the soils, slag, ashes and associated materials indicated that an uneven disintegrated gneissic surface, sand along with quartz and basaltic flakes, got deposited through colluvial process.<sup>85</sup> The accumulations of ashy and slaggy layers of the mound appeared to be the result of burning of accumulated cow dung at varying, very high temperatures. The burning also appears to have taken place at different intervals, as two well made floors, composed of ash intermixed with kaolin clay, are found between accumulated ash deposits. The excavators also found that burning of cow dung on such a large scale was not due to any industrial or metallurgical function, because the top-slugs, metal ores, crucibles, corroded metalliferous pieces, etc., were conspicuous by their absence in the excavated materials. They also concluded that the metallurgical slag-pieces and iron ore lumps found in the surrounding fields, may belong to the historical period when some sporadic metallurgical activity might have taken place.

The results of the dig support the hypothesis of Zeuner and Allchin on the origin of the ashes and slag. But no conclusive evidence was available to ascribe the ash mound to the Neolithic phase.

We have already referred to small clearance operation by Dr. Paddayya, at the ash mound site of Kodekal,<sup>86</sup> in Shorapur Doab. The ash mound is located about 4 kms. south-east of the village Kodekal, and about 8 kms. away from the left bank of the river Krishna, in Shorapur Taluk. The small scraping yielded enough evidence to draw conclusions regarding the formation and

age of the ash mounds in the Doab.<sup>87</sup> The layers exposed three occupational periods, and two burnings. The occupational layers yielded large quantities of pottery, lithic artifacts, animal bones, charcoal, etc., proving human occupation.

As for the age of the ash mounds, the objects found in the excavations clearly belonged to the Neolithic complex. Further no objects belonging to later cultures were found. This cultural evidence is corroborated by the absolute dating afforded by C-14 data. The data available for one sample reads TF-748  $4285 \pm 105$  (2335 B.C.). This is calculated on the conventional half life for C-14 of 5570 years. This evidence further corroborate the dates known from the site of Utnur, in the neighbouring Andhra State.

We have thus far detailed the excavations in Neolithic sites and ash mounds in Karnataka, since 1956. All the available evidence from these excavations, which were on a small scale, have helped us to reconstruct the life in the Neolithic period in Karnataka. But first, we shall consider the chronological aspect of the period.

As already mentioned Karnataka Neolithic is one of the best documented cultural phases in the sub-continent. A large number of carbon samples have been processed by the Tata Institute, and a series of radiocarbon determinations are available (see Radiocarbon date list at the end of this section).<sup>88</sup> These dates show that Neolithic occupation in this part of the country lasted from about 2400 B.C. to about 1000 B.C., when a new wave of people, with the knowledge of iron, arrived on the scene and merged with the existing Neolithic population. From the known evidence, three distinctive phases of Neolithic occupation could be distinguished. Phase I from C. 2400 to 1800 B.C.; Phase II from C. 1800 to 1400 B.C.; and Phase III from C. 1400 to 1000 B.C.

For Phase I, we have the evidence of only the ash mounds, and details of habitations and cultural information is not available.

Phase II is well represented at the sites of Tekkalakota (Phase I), Sanganakallu (Phase 1), Hallur (Phase 1), T. Narasipur (Lower Neolithic), and Piklihal (Lower Neolithic). This phase is characterised by a pale grey ware and burnished grey pottery and polished stone tools.

Phase III is also represented in all these sites, but in the upper levels. The distinguishing

feature of this phase is that the people appear to have come into contact with the chalcolithic people of the northern Deccan (present day Maharashtra), as evidenced by the intrusive elements of a wheel-made black-painted red pottery, profusion of stone blade industry and influence on the burial customs, particularly burying the dead in multiple-posts. However, there seems to be a uniformity in the way of life and therefore, we may sketch the life of the people for the entire period as a whole.

From the evidence available from excavations, it becomes very clear that the Neolithic people inhabited both the river banks (Pl. VII a) and the open terraces of the granitoid hills, which formed a sort of natural fortresses (Pl. IVa). The latter region had the added attraction of natural springs of water and rock-shelters.

Generally the people live in circular huts with walls of thatched bombo screens plastered with mud. Excavations have exposed remains of such circular structures at Tekkalakota, Hallur and Sanganakallu (Pl. IV b). The structure at the last mentioned site had a wall of bamboo screen plastered with mud, collapsed remains of which were found, supported at intervals by circular posts. A central post appears to have supported a conical roof of grass, the burnt remains of which were found on the floor. The floor itself was raised upon a rubble foundation of granite stones. The surface of the floor was plastered with earth several times.

The people used earthen pots and pans generally hand made, globular vessels of various sizes for cooking, storage and other domestic purposes. Huge storage jars were utilised not only for storing grains but also for burying the dead.

Large quantities of animal bones recovered from all the excavations prove that the people were largely meat eaters. The bones of cattle, sheep, goats, deer etc., show that these animals were also domesticated. Milk, therefore, must also formed an important item of diet. There is definite evidence of cultivation of grains. Charred horsegram (*Dolichos Biflorus*, *Huruli*) at Tekkalakota, African Millet (*Eleusine Coracona*, *Ragi*) at Hallur prove that these were cultivated.

The tools and weapons of the Neolithic people were mainly of stone. In the majority are

polished stone axes, well ground and sharpened. The best use was made of the basalt available in plenty in the form of dykes in the region, for fashioning axes, adzes, chisels etc. The other major variety of tools includes blades made on silicious materials, such as chert and chalcedony, which seem to have been used for finer works.

The people had the knowledge of the metal copper. Copper axes, chisels and fish hooks have also been found at Tekkalakota, Sanganakallu and Hallur.

These pastoral people also had aesthetic sense and love for ornaments. This is indicated by their painting the pottery, and the occurrence of gold ornaments—pendants or earrings (Pl. V b) and the large number of beads of steatite, carnelian and shell. Copper ornaments such as bangles and rings have also been found at Tekkalakota.

The burials encountered in almost all the excavated sites indicate the peoples' belief in the life after death. The adults were buried in oval pits, while children were buried in pottery urns (Pl. VI b). In the earlier phase, they seem to have practiced secondary burials. The skull and the long bones were collected, probably after desiccation, and interred in pits dug for the purpose. The bones were placed in their anatomical positions in the pits.

In the second phase, they seem to have been influenced by burial practices of the chalcolithic people of northern Deccan, with whom they came into contact, as a result of movement of people. Not only did the people practice normal, extended burial, with elaborate burial offerings, consisting of a large number of vessels (Pl. VI a & VII b), but important persons seem to have been buried in multiple pots. In one example, at Tekkalakota, four large vessels were used to make a coffin for an adult, by carefully cutting the bases of the middle pots. As many as nine vessels of various sizes, were placed probably with food offerings at the time of burial. One interesting feature is that all the burials, whether of children or adults, were in the habitation area itself, and in many instances, under the floor of the hut itself.

There is no direct evidence concerning the religious belief of the people. But the burials with elaborate funerary furniture indicate faith in the life after death and probably ancestor worship. A pottery lid, depicting a bull, peacocks,

an antelope and a serpent (Pl. V a) must have made for a special purpose, perhaps magico-religious. Terra-cotta bulls have also been found in plenty. They are also depicted on rock paintings and bruising. Perhaps cattle was also worshipped, particularly as the Neolithic people were a pastoral folk.

Finally, about the origins of this Neolithic culture. Although radiocarbon dates take back

the culture to the middle of the 3rd millennium B.C., all the excavations have shown the culture in a highly evolved form. There is no evidence of a transitional phase between the food gathering Microlithic culture and the food producing Neolithic culture. It is, therefore, possible that the culture may have been derived from further north. But this can be confirmed only by future work.

## RADIO-CARBON DATES FROM NEOLITHIC SITES IN KARNATAKA

(All dates are calculated on the conventional half-life for Carbon-14 of 5570 years)

<i>Terdal</i> , District Bijapur. (Agrawal & Kusumgar, 1969, p. 191) <sup>89</sup>	TF-633	3615 ± 120	(1665 B.C.)
	TF-684	3755 ± 95	(1805 B.C.)
<i>Tekkalakota</i> , District Bellary (Agrawal & Kusumgar, 1966, p. 451) <sup>90</sup>	TF-262	3460 ± 135	(1510 B.C.)
	TF-239	3395 ± 105	(1445 B.C.)
	TF-237	3465 ± 105	(1515 B.C.)
	TF-266	3625 ± 100	(1675 B.C.)
<i>Sanganakallu</i> , District Bellary (Agrawal & Kusumgar, 1968, pp. 138-39) <sup>91</sup>	TF-359	3400 ± 100	1450 B.C.)
	TF-355	3435 ± 100	(1485 B.C.)
	TF-354	3440 ± 100	(1490 B.C.)
<i>Hallur</i> , District Dharwar (Agrawal & Kusumgar, 1968, pp. 133-34) <sup>92</sup>	TF-580	3560 ± 105	(1610 B.C.)
	TF-575	2895 ± 100	( 945 B.C.)
	TF-573	2820 ± 100	( 870 B.C.)
	TF-570	2970 ± 105	(1020 B.C.)
(Agrawal & Kusumgar, 1969, p. 190) <sup>93</sup>	TF-586	3055 ± 95	(1105 B.C.)
(Agrawal, Gupta & Kusumgar, 1969, p. 502) <sup>94</sup>	TF-576	3280 ± 105	(1330 B.C.)
<i>T. Narasipur</i> , District Mysore. (Agrawal & Kusumgar, 1968, pp. 139-40) <sup>95</sup>	TF-413	3395 ± 105	(1445 B.C.)
	TF-412	3645 ± 105	(1695 B.C.)
<i>Kodekal</i> , District Gulbarga. (Agrawal, Gupta & Kusumgar, 1969, p. 503) <sup>96</sup>	TF-748	4285 ± 105	(2355 B.C.)

### B. Iron Age and the Megaliths in Karnataka

The discovery and the knowledge of the use of iron forms a most important landmark in the cultural history of mankind. For, this ushers in a new era in the technological development in the life of man. With the knowledge of this black metal, the use of stone for the manufacture of tools appears to have been given up, and iron dominates tool technology.

The exact date as to when this development took place in India is still a matter of controversy.<sup>97</sup> Gordon, writing in 1950, declared that apart from the evidence of iron found in the cairn burials of Baluchistan, there was no

evidence of the use of iron by any one in India or Pakistan prior to 250 B.C.<sup>98</sup> Wheeler postulated that the Achaemenid Persians introduced the use of iron into northern India, at the end of 6th Century B.C., and the iron works of the Megalithic builders of the peninsular India are derived from the north.<sup>99</sup> On the contrary, recent discoveries in the north have shown that the use of iron was known much earlier. Iron has been associated with the users of the Painted Grey Ware, as known from the sites of Hastinapura,<sup>100</sup> Alamgirpur,<sup>101</sup> Kausambi<sup>102</sup> and Ujjain.<sup>103</sup> Examining all the then available evidence, Banerjee dated the early occurrence of iron to

about 800 B.C.<sup>104</sup> But a radiocarbon determination for a sample from an early level of Atranjikhara II offer a date C. 1025 110 B.C.<sup>105</sup> But dates for other samples from the same site, for the painted grey ware, centre around 600 B.C.<sup>106</sup> "In view of all these the date of 1025 B.C. should be considered as divergent".<sup>107</sup> Also there are about a dozen dates for the painted grey ware associated with iron, and most of them denote a date not earlier than 800 B.C. for the painted grey ware and the associated iron. Thus the evidence of early use of iron, in north India does not go beyond 800 B.C., on the present showing.

As for south India, until recently the iron implements found in the megalithic tombs were considered to be the earliest evidence of iron, and Wheeler dated these megalithic tombs only to circa B.C. 300.<sup>108</sup> Many scholars believed that 'the Iron Age India was ushered into South India later than in the Ganga plains'.<sup>109</sup> It is in the light of this controversy on the Chronology of Iron in South India, that we should review the work done in Karnataka since 1956.

Prior to 1956, four important sites have been excavated, which provide evidence of early existence of iron in Karnataka. We have already referred to the excavations at Brahmagiri,<sup>110</sup> in the context of Neolithic-Chalcolithic cultures. The other sites where iron was found during excavations are, Sanganakallu,<sup>111</sup> Maski<sup>112</sup> and Piklihal.<sup>113</sup> In all these sites, the deposit of this cultural phase was generally less than 1.20 metres (4 feet). Another important feature was this cultural phase invariably overlapped with the earlier Neolithic-Chalcolithic culture. The cultural equipments from these excavations, for this phase include, a distinctive black-and-red ware as the principal ceramic, and implements of iron. As already mentioned, this period was dated to circa 200 B.C. onwards.<sup>114</sup>

Since 1957, explorations have brought to light large number of sites all over Karnataka, which yielded the pottery, associated with this Iron Age, and which are quite a number to catalogue. But among the recent excavations at least two important sites have given a clear picture of the beginning of Iron Age in Karnataka. These sites are T. Narasipur at the confluence of Kaveri and Kapila, and Hallur on the Tungabhadra.

Excavations at T. Narasipur, by Seshadri

brought to light elements of this culture, in his period III which he designates 'Megalithic'.<sup>115</sup> This is said to be clearly represented in layer 3 of the site. The cultural equipments consisted of black-and-red ware, often with graffiti marks and iron implements. In addition to black-and-red ware, there were also a black-burnished ware and red polished pottery. The excavator states that 'this culture must have commenced some time in the 2nd quarter of the 1st millennium B.C., if not earlier'.<sup>116</sup>

There is no association of either iron or Megaliths at Tekkalakota, as seen from the excavations. However, it should be mentioned that period II at Tekkalakota, shows a remarkable change in pottery traditions. Thus, although the copper objects, lithic blades and ground axes proliferate, ochre painted and plain grey wares diminish, and a dull red ware along with black-and-red ware occur.<sup>117</sup> The latter is exclusively associated with all the burials thus far excavated. This may probably indicate a contact with the iron using people, unless this pottery is a distinctive strain, belonging to an earlier Chalcolithic wave as Dr. Sundara seems to think.<sup>118</sup>

Sanganakallu was reexcavated in 1964, in order to check Subbarao's sequence, which had clearly shown that his phase III was the beginning of Megalithic.<sup>119</sup> The recent excavation confirmed his sequence, showing the topmost deposit represented the overlap of Neolithic-Megalithic cultural elements, such as handmade Neolithic pottery and typical Megalithic, highly burnished black-and-red ware pottery.<sup>120</sup>

By for the most important excavation is the one at Hallur. Here period II represented a clear overlap of Neolithic-Chalcolithic and the Iron Age. While the characteristic features of Neolithic-Chalcolithic, except the stone blade industry, continued, new cultural traits of Iron Age, such as black-and-red wares, all black ware both with a white painted variety, and iron implements consisting of arrow heads, spear heads and knife blades make their appearance for the first time. Carbon-14 determinations for this phase indicate a date of C. 1000 B.C.<sup>121</sup> As expected no burials were found on the habitation mound. But Megaliths comprised of cairns, round barrows and passage chambers are found in the vicinity. Although these have not been excavated, they can

be assigned to a period between 1000 and 700 B.C.<sup>122</sup>

In the light of these results, the dates ascribed by scholars for the introduction of iron into South India in general, and Karnataka in particular will have to be reconsidered. As iron was already known at Hallur, around B.C. 1000, the suggestion that iron was 'ushered into South India later than in the Ganga plains' is no longer tenable.

#### *Megaliths in Karnataka\**

The problem of the chronology of introduction of iron into South India in general and Karnataka in particular is being solved. However, the question of the burials of this phase, known as the *Megaliths* is still an enigma.

Several hundreds of megalithic sites have been located, largely in the peninsular India and a few in the eastern and north-western India. In Karnataka, it was Col. Medows Taylor who first reported the existence of Megaliths at Jewargi, Andola, Chikanhalli, Hagartagi, Yammigudda, etc., in Gulbarga-Raichur region.<sup>123</sup> He exposed some of these tombs at Jewargi, Andola, Chikanhalli and Hagartagi, and faithfully reported the results of his investigations.<sup>124</sup> Burgess gave details of the dolmens at Konnur in Belgaum district and Aihole in Bijapur District.<sup>125</sup> More of these megalithic monuments were brought to light by the Departments of Archaeology in the erstwhile states of Mysore and Hyderabad, in their respective states, while the Kannada Research Institute ably directed by Panchamukhi discovered varied types of megaliths in the districts of the Bombay-Karnataka and discussed several aspects of these burials.<sup>126</sup> The discoveries of megaliths in Coorg and Kolar Districts by Cole,<sup>127</sup> in the Savandurga area by Branfill,<sup>128</sup> in Hassan District by Mackenzie<sup>129</sup> and in Brahmagiri by Krishna<sup>130</sup> deserve particular mention. In the recent past, explorations of Nagaraja Rao in Dharwar District,<sup>131</sup> Sundara in Bijapur District,<sup>132</sup> and Krishnamurthy in Mysore and Kolar Districts<sup>133</sup> have brought to light hundreds of megalithic tombs.<sup>134</sup>

#### *Megalithic types*

Explorations have brought to light a total of nearly 350 sites all over Karnataka, excepting in

the districts of Bidar and North Kanara. They present a rich variety of megalithic tombs. The main types so far distinguished are: passage chambers (without port-holes), port-holed chambers, oblong cists, rock-cut chambers, round barrows, stone circles, pit burials, burials with sarcophagus, menhirs and stone alignments.

The passage chambers (without port-hole) are found largely in the regions of the sedimentary rocks of Ghataprabha-Malaprabha Valley and the region of the Dharwar rocks of Dharwar-Bellary area.

The port-holed chambers may be classified into dolmenoid cist circles, cist circles and dolmens. They are found in large numbers distributed over a large area in the Peninsular-gneissic complex, as for example at Hire-Benkhal (Raichur District), Brahmagiri and Savandurga. There are port-holed chambers in the sedimentary rocky area of Aihole, Rajankolur and in South Kanara coastal region. They have comparatively rude features and primitive in architectural forms. They appear to precede the other port-holed chambers.

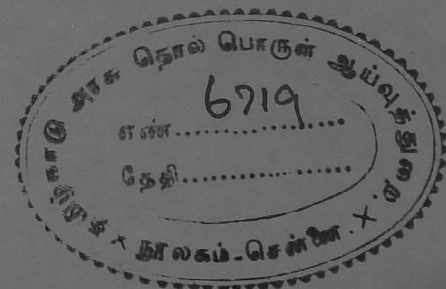
A few rock-out burial chambers from the laterite coastal plains have recently been reported from South Kanara<sup>135</sup> comparable to those from coastal Kerala.

The pit circles, pit burials and the round barrows are found over still large area, such as Jewargi, Maski and Brahmagiri, whereas burials with sarcophagus are geographically limited to Bangalore and Kolar districts and comparable to those from Chingleput area of Tamil Nadu.

Menhirs of quarried granite slabs occur in Nilaskal (Shimoga District) and Brahmagiri (Chitradurga District). They are rude slabs erected slightly obliquely and one apart from the other. Their erections do not indicate any methodical plan. Usually their numbers in a site vary from one to twenty.

The stone alignments are unlike menhirs. They are usual huge stone boulders without dressing, aligned in straight rows of definitive patterns either 'diagonal' or 'square'. The best examples of stone alignments are located at Vibhutihalli and Hanumasagar (both in Gulbarga District). The latter site contains nearly 1000 boulders aligned.

\* Dr. Sundara has contributed the results of his research in preparing this section.



Among these types, probably the passage chamber types are the earliest, and the port-holed chambers appear to have been developed from them.

Prior to 1956, Brahmagiri and Maski<sup>136</sup> were excavated and attempts were made to associate them with the habitation sites nearby. Since then, a few megalithic sites have been excavated, which are of considerable importance. The excavated sites are : Jadigenahalli,<sup>137</sup> Terdal-Halingali,<sup>138</sup> Hunur<sup>139</sup> and a couple of sites in Coorg.<sup>140</sup> We may, therefore, review the results of these excavations.

The megalithic site at Jadigenahalli, located on the Bangalore-Malur road, consists of a large number of burials lined with stone circles. Many of the circles have lost some of the stones. Seshadri excavated four megaliths during the summer of 1957.<sup>141</sup>

As already mentioned, the other sites where megaliths were excavated were Brahmagiri and Maski which showed cist-cum-pit burial complex. There, for the first time, a correlation between the megalithic burial pottery and that of the habitation site was attempted. Jadigenahalli, unfortunately did not have any habitation levels. Therefore, the purpose of the dig was to ascertain the megalithic type.

The excavation at this site proved to be important as a new type of megalith which was unknown in Karnataka came to light.

The type of megalith at Jadigenahalli was a stone circle formed by trap boulders within which is a pit burial. At the bottom of the pit, at a depth of 10 to 12 ft., there was a sarcophagus. There were a number of pottery stands.

Besides the black-and-red pottery, iron implements such as sword, dagger and tripod were also associated with the megaliths. Megalith II yielded a *trisula* and a brass bell. But no skeletal remains were found.<sup>142</sup>

In this connection, it may be noted that the megalithic burial with sarcophagus is largely associated with the Chingleput District of Tamil Nadu. The characteristic features of the Jadigenahalli megaliths have close parallels with the Tamil Nadu excavated megaliths particularly at Kunnathur.

Dating of these burials was difficult as they

are not associated with any habitation, stratigraphically. Therefore, on comparative evidence, Seshadri has assigned them to a period between the 1st Cent. A.D. to perhaps 3rd or 4th Cent. A.D.<sup>143</sup>

The next important site to be excavated was Terdal-Halingali in Jamkhandi Taluk of Bijapur District by Sundara.<sup>144</sup> Sundara excavated four megalithic burials in these twin-sites. Among these two main types were found, *viz.*, (i) cist with three rectangular courts at the cardinal points and a passage on the south, the composite plan looking like a Greek Cross, covered by a cairn (Pl. VIII a), and (ii) circular cist with passage on the south, covered by a cairn with a double circle or a circle and a rectangle (Pl. VIII b).

Megalith I at Terdal was a circular cist with a passage to the south (Pl. VIII b), and three pillars inside the cist, supporting a capstone. It was covered by a cairn surrounded by a circle and a rectangle. Within this burial were found a few sherds of black-and-red ware, red ware and fragments of human skeletal remains.

Megalith II was a cist of Greek Cross type buried under cairn-rectangle. A number of potsherds of red ware and black-and-red ware and human bones were found in this grave.

The same types were also exposed at Halingali. Megaliths I and II were found to be stone circles, but did not yield any significant remains.

Megalith III was of the Greek Cross type having pillars along the principal axis. The orthostats of the cist and the rectangle surrounding the cairn were found to be structural walls. Megalithic pottery, iron objects etc., and a few fragments of human bones were found from this grave.

Megalith IV is the most important of the graves excavated by Sundara. It was circular cairn with three short pillars at the periphery on the west, south and east. From the burial-pit were found neolithic-chalcolithic grey ware pottery and from the south-eastern quadrant a few sherds of megalithic red ware. The evidence points to a neolithic burial in a megalithic style, perhaps indicating an overlap of the two cultural elements.

The excavations at Hunur during 1968-69, was mainly to ascertain details of a new type of

megalithic tomb.<sup>145</sup> The largest megalith consisted of a huge cairn entombing three cists enclosed by stone circles and platforms. Two of the cist-tombs had passage running in south-north direction. Black-and-red ware and red ware potsherds were found in the graves. Significantly no iron was found in any of the excavated megaliths. One of the pot burials contained a copper bell, with a rectangular base and a suspension loop at the top. It is also reported that the use of black-and-red ware was fairly limited.<sup>146</sup>

Dating of these megalithic monuments has still been enigmatic. Wheeler, on the basis of the excavations at Brahmagiri, proposed 200 B.C. as the probable date for the megalithic culture.<sup>147</sup> It is now agreed that the terminal date for this culture is about 1st Cent. A.D.

However, it is the date for the beginning of this culture that is more problematic. Seshadri assigned a date of 6th Cent. B.C.<sup>148</sup> However, no carbon determination is available for any of the excavated megaliths so far. But the recent evidence from Hallur and Terdal push back the antiquities of megalithic culture to 1100 B.C. Radiocarbon dates for the period of overlap of the neolithic-chalcolithic and the megalithic, represented by the advent of a new wave of iron-using people, are 1100B.C. and 955B.C.<sup>149</sup> Another important discovery by Sundara was a neolithic burial in a megalithic cairn, which has been dated by him to 1100-1000 B.C.<sup>150</sup> Although some scholars tend not to accept the C-14 dates for Hallur, it is now fairly certain that the advent of iron and the consequent beginning of megalithic culture in Karnataka can be dated to about 1100 B.C. What is now required is to excavate some megaliths near the habitation sites and correlate data from the habitations with that of the graves. For this Hallur is an ideal site.

Although very few habitation sites of the megalithic period have been found and excavated, the excavations at Brahmagiri, Maski and Hallur give us enough idea of some aspects of the material life of the megalithic builders.

Little information is available about their domestic architecture. However, it appears that their dwellings were simple houses consisting

usually single rooms having walls of wattle and daub and thatched roof, square or circular on plan.

They exclusively used implements and weapons of iron, such as tripod stands, plate with loop-handles, sickles, knives, chisels, celts, adzes, swords, spears, arrow heads etc., objects of copper were rarely used.

The vessels are plain and utilitarian in function and of earthen ware. They are chiefly of two wares ; the black-and-red ware and red ware. The black-and-red ware in Hallur area has paintings in white.

At least two important food grains are known to have been used by them : ragi and rice. Remains of ragi and rice adhered to arrow-heads from Hallur Iron Age levels and vessels containing *ragi* and paddy husks from the megalithic burials in Coorg area, have been reported. Besides sheep, buffalo and horse were probably domesticated and used for food as well as for work.

The megalith builders were horse-riders as evident from the occurrence of horse-bits in a few megalithic burials and from the rock-paintings in Hire Benkal area near the megalithic sites. The latter depict pictures of horse-riders holding various types of iron weapons.

In addition to the domestication of animals and agriculture there were cottage industries such as pottery-making, bead-making, spinning and carpentry, the latter two being implied from what appears to be spindle whorls of terra-cotta and iron tools. Further from the proximity of the megalithic sites with iron and gold-bearing localities and the profuse use of iron tools, the megalith-builders may have been prospecting iron and gold. However, no direct evidences regarding the technology of these industries, have been obtained.

The distinctive feature of their culture, is the use of large, rough stones for burials after which the culture is named *Megalithic*. The elaborate construction of the burials evidently points out the knowledge of various rock-materials on the part of the builders, their empirical skill in using appropriate stones for and in constructions and devising different types of chambers partly in response to the local environment and partly to their traditions and organised labour.

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Historical Archaeology in Karnataka is still in its infancy, compared to the work done in the field of protohistory. Not many sites have been excavated and therefore, we still have to await major excavations to know the life and patterns of material culture during the historical period. Literary and epigraphical evidences have helped considerably for the knowledge we have today for the historical period.

Again it was Dr. Krishna who first probed into a historical site in Karnataka. Chandravalli was excavated by him in 1929.<sup>1</sup> The results brought to light a town belonging to the Satavahana period, and assignable to the early Centuries of the Christian era. The site was re-excavated during 1947, by Sir Mortimer Wheeler.<sup>2</sup> The excavations confirmed that the site was occupied during the Satavahana rule of the 1st and 2nd Centuries A.D. Large number of Satavahana coins, and the denarii of Augustus (23 B.C.—A.D. 14) and of Tiberius (A.D. 14-37) proved the contacts with the Roman world.

Besides Chandravalli, two more sites provided evidence of occupation during the Early Historic period. They are Brahmagiri in Chitradurga District and Maski in Raichur District.

Krishna excavated the site of Brahmagiri with a view to locate the town of *Isila* of the Asokan edict in the neighbourhood. The dig did not conclusively prove that it was *Isila*, but certainly brought to light the existence of early historic occupation.<sup>3</sup> Wheeler reports at the same site the remains of an apsidal brick structure, probably a Chaitya hall.<sup>4</sup>

In the erstwhile State of Hyderabad, the State Archaeology Department had explored a number of ancient sites belonging to the early historic period. The most important among these were Maski and Koppal, both in Raichur district.<sup>5</sup> Incidentally at both the sites, there are Asokan edicts. Some kind of excavations were also carried out. Except for a collection of various types of antiquities typical of early historic period, no other details are available. Even Thapar's excavations at Maski<sup>6</sup> did not yield any more details regarding the structures,

township, etc., of the period, that we know from Chandravalli or Brahmagiri.

In the Kannada Districts of the Bombay Karnatak area, Panchamukhi carried out regular survey of ancient sites and located a large number of early historic locations.<sup>7</sup> Among his discoveries the most important are Itgi in Dharwar District, Herakal in Bijapur District and Vadgaon-Madhavpur in Belgaum District.

Since 1956, explorations have been systematically carried out in Karnataka, and quite a large number of sites have been discovered. They are described as early historic sites.<sup>8</sup> The main characteristics of these sites are pottery consisting of three varieties, viz., red ware, black-and-red ware and russet coated painted ware. The last mentioned ware is a distinctive pottery of this period, and has been dated to the beginning of the Christian era.

However, inspite of the discovery of so many sites, it is still a matter of regret that not many sites have been excavated. One major reason for this is that most of the ancient sites of this period have been destroyed by being subjected to constant cultivation. But still there are extensive sites such as Vadgaon-Madhavpur and Banavasi which can yield significant results if large scale excavations are conducted.

In the recent past excavations have been carried out, but on a very limited scale, at Banavasi and Vadgaon-Madhavpur.

Banavasi, ancient Vaijayanti or Vanavasi, in the Sirsi Taluk of North Kanara District, was an important city under the Satavahanas, and the capital of the Kadambas. The ancient site, probably visited by the Chinese pilgrim Huen Tsang in the 7th Cent. A.D., spread over more than a square mile, with the mound having an elevation of about 4 metres from the surrounding plains. Recently a number of important inscriptions have been found which testify to the fact that the ancient city was under the rule of the Satavahanas and the Kadambas.<sup>9</sup> This is corroborated by a number of coin hoards reported from the site. Shri M. C. Wodeyar a resident of Banavasi has in his collection lead coins of

Chutukulananda, Mulananda and also the well-known potin types of Yajña Śri with elephant having raised trunk, found in a red polished vase.<sup>10</sup>

The Directorate of Archaeology and Museums in Karnataka, in collaboration with the Department of Ancient History and Archaeology carried out 3 short seasons of excavations between 1970 and 1972.

Major portion of the mound is covered by a huge brick fortification enclosing the present habitation. The fortification itself is constructed of large-sized burnt bricks of an average size of 40 cms. long, 8 cms. thick. The fortification is surrounded by a deep moat on three sides and the fourth by the river Varada itself. From the moat, the fortification walls have a grand view with a height of more than 10 metres.

Excavations on the mound locally called 'Donigudda' (Boat-mound) exposed a brick structure, which was apsidal in plan.<sup>11</sup> According to local tradition the mound was said to contain a chaitya structure. Even Huen Tsang mentions the existence of a chaitya in the neighbourhood of Banavasi, on the banks of Varada. Excavations of this structure yielded large quantities of terracotta floor tiles, which probably were used in paving the floor of the structure. The structure when completely exposed measured 26 m. × 13.5 m. and therefore, it is perhaps one of the largest brick chaityas of the Satavahanas in South India (Pl. IX a).

Further a number of terracotta figurines were also recovered from the site (Pl. IX b). They are of excellent workmanship and their characteristics show that they belong to the early historic period.

Since the excavations were on a small scale and confined only to ascertain the nature of the structure, other details about the township is not available. A large scale excavation at Banavasi is therefore, an urgent necessity.

Vadagaon-Madhavpur is an important early historic site in Belgaum District. It is a suburb of Belgaum city. The ancient site was discovered by Panchamukhi, who also published a Brahmi inscription from the site.<sup>12</sup> The Prakrit inscription, ascribed to 1st Cent. A.D., records that a brahmin of *Kashyapa gotra* performed the Vedic sacrifice *Vajapeya*.

The ancient site is probably one of the

known extensive sites, extending in an area of about 80 acres. Realising the importance of this early historic site, Kannada Research Institute and the Department of Ancient History and Epigraphy of the Karnatak University, Dharwar have jointly carried out three seasons of small scale excavations at the site.<sup>13</sup>

The excavations have revealed that after the desertion of the site somewhere in the 3rd or 4th Cent. A.D. it has not been occupied. For, brick structures appear just 10 to 15 cms. below surface. A deep cutting to the natural soil, by the side of a brick structure in the southern part of the site, revealed that the site was occupied probably during the Mauryan times, as highly burnished black-and-red pottery was found in the debris just above the natural soil. Above this phase, punch-marked coins were found, which could probably be assigned to 1st Cent. A.D. This was followed by an occupation of the Satavahana period and characterised by the russet coated painted ware, brick structures and lead coins of the Satavahana period.

However the excavations have been confined only to the top levels. Trench I, exposed a large brick structure, measuring about 20 m. × 15 m. The western part of this structure had a room, and the eastern part a large hall, with brick-paved flooring. The hall was divided into two parts by a wall. The southern part revealed a brick lined square pit, which was about 3 metres deep. This was probably a soak pit. The northern part of the hall also had a square pit with brick lined sides. This pit was about 4 metres deep. Around the pit, a slightly raised brick lining was also found. Around this raised lining were post holes. This was probably a storage pit meant to store grains. From the floor of the southern part of the hall, terra-cotta figurines were found, depicting female figurines and a bull. A couple of Satavahana coins were also found. The nature of this brick structure is still uncertain.

Trench II revealed a two room structure. It confirmed the fact that after digging a foundation trench and filling it with red moorum, the exterior and the interior of the walls were strengthened with pebble bedding. On the north-east of the structure, a circular well of 1 metre diameter built with a brick structure, was also uncovered. The structure yielded known type

of early historic pottery and Satavahana coins along with a few punch-marked coins. Two more circular brick wells exposed proved that such wells were common at the site.

The site, as already mentioned, is one of the most extensive sites known. Continuation of such small scale excavations, will not help to know the town pattern and cultural details. It is important to subject this extensive site to a horizontal excavation. Such a venture will certainly be rewarding.

By far the most exciting discovery is the site of Sannatti in Gulbarga District in the middle of the last decade by Sri S. Nagaraju. Situated on the left bank of the river Bhima, Sannatti has three important ancient sites. Two of them are habitation sites and the third a stupa site. The habitation sites have already been completely damaged by constant ploughing for centuries. However, they are replete with antiquities, such as Terra-cottas (Pl. XI b) and beads. One of the sites has a fortification along the river bank. The fort is constructed with large-sized bricks typical of the Satavahana period.

The third site is a stupa site.<sup>14</sup> The ancient stupa constructed with lime stone slabs has been razed to the ground owing human vandalism decades ago. Only the circular basement of the stupa now remains. The sculptured panels were lying helter-skelter, and some of them were used to construct a modern shrine near the site. From what is left, it is evident that dressed lime stone set in mortar formed the dome in regular ashlar style instead of brick. Relief sculptures

of galloping buffalo and winged horse, fragments of *Ayaka* pillars and other architectural members are the interesting remains. Some of the other reliefs depict in a simple and elegant style domestic scenes in which men and women of the rich class, flanked by *Chauri* bearers, relax with wine cups.

There are also slabs depicting Buddha's feet on throne and the Bodhi tree (Pl. X c). Typically Satavahana, these reliefs represent the early art of Karnataka. Based on the stylistic evidence and the palaeography of the inscriptions, in Prakrit, these sculptures can be ascribed to a period between 1st and 3rd Centuries A.D.

The inscriptions appear to record the names of the various donors, who contributed these panels and other ornamental pieces to cover the buddhist structures. One of the *Ayaka* pillars mentions the names of *Girijatanaka*, brother of *Naganika*, probably a resident *Ahimarika* (Pl. XI a).

There are a few more mounds which appear not to have been disturbed (Pl. X a). They perhaps contain Buddhist stupas. Only excavations will reveal.

The sites of medieval and modern historical periods have not at all been exposed so far. Among the national projects are included, a large scale excavations at Hampi. But it is also necessary to excavate important sites such as Malakhed (Manyakheta), one time capital of the Rashtrakutas; Kalyani, capital of the Western Chalukyas and Halebidu (Dorasamudra), the capital of the Hoysalas, to name some of the important sites.

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The erstwhile State of Mysore was fortunate in the field of studies in Art and Architecture, as the Directors of Archaeology evinced keen interest and published descriptive studies of monuments in the State. The studies were inaugurated by Lewis Rice who incorporated a chapter in the introductions to each of the volumes of *Epigraphia Carnatica*. R. Narasimha Charya studied more than 300 monuments and gave descriptive accounts on them in his *Annual Reports*. Further three monographs on the monuments of Somanathapur,<sup>1</sup> Belur<sup>2</sup> and Doddagaddavalli<sup>3</sup> were brought out by the Department of Archaeology. The tradition was continued by Dr. Krishna who provided detailed accounts of Hoysala temples in his world famous *MARs*.<sup>4</sup> Among the monuments of the districts of Hyderabad-Karnataka area, the Indo-Saracenic architecture of Bidar derived detailed treatment by Dr. Yazdani,<sup>5</sup> in addition to the work of Burgess,<sup>6</sup> on the Chalukyan monuments. As for the Districts of Bombay-Karnatak area, Cousens' classic account of the Chalukyan Architecture still remains a veritable source book.<sup>7</sup> Panchamukhi continued his studies in this field and made significant contribution.

Since the birth of the unified state of Karnataka, however, there is a spate of Indian and Western Scholars, to study the monuments particularly Early Chalukyan. Significant contribution has been made by Gupte,<sup>8</sup> Soundarajan,<sup>9</sup> Rao<sup>10</sup> and Tarr.<sup>11</sup> Another major contribution to the study of monuments of Sravanabelgola and Sculptures of the Hoysala period is by Dr. Settar.<sup>12</sup> We should mention in this context the Kannada work on Hoysala architecture by Dr. Srikanta Sastri.<sup>13</sup> Detailed studies on Karnataka sculptures and paintings are still wanting. The only one of its kind on the latter is the work by Dr. Karanth.<sup>14</sup>

Be that as it may. Since 1956, intensive work on the survey of monuments are in progress. We may treat them under the following groups, *viz.*, Architecture and Sculpture.

#### Architecture :

The Department of Archaeology, under a

scheme of survey of monuments, appointed a Research Assistant, with his headquarters at Dharwar. He carried out a detailed survey of villages and documented a number of monuments.<sup>15</sup>

The Officers of the Archaeological Survey of India, carrying out a village to village survey of Antiquarian remains, also documented a large number of monuments, in Bijapur, Dharwar, Mysore and Kolar Districts.<sup>16</sup> These surveys have been of a general nature, and detailed study of monuments is still a desideratum. However, in the following paragraphs the most important discoveries are noticed.

One of the most significant discoveries is the structural remains assigned to the beginning of the Early Historic period at Banavasi and Vadgaon-Madavpur. The excavations at both these places have revealed apsidal brick structures identified as probably chaitya halls. We have already referred to these in the previous chapter (see *supra*—p. 28). To these may be added, the exposition of the remains of a brick structure in front of Sangameshvara temple at Pattadakal, identified as a Satavahana brick temple by Rao.<sup>17</sup> It was found to be a "temple with a closed sanctum and an open pillared hall in front resembling in plan Gaudargudi, the earliest Chalukyan temple at Aihole".<sup>18</sup> While the excavated remains of this structure has proved beyond doubt, that it is Pre-Chalukyan, further evidence is awaited to know if it is a Satavahana structure, and if it is a temple.

Clearance operations at Aihole, by Rao,<sup>19</sup> brought to light a number of minor shrines in the Ladkhan-Gaudargudi complex. Further, this also lead Rao to establish stratigraphically that Gaudargudi was the earliest Chalukyan temple.

Another significant re-discovery by Settar, at Aihole itself, was identification of a Buddhist Vihara. The two-storeyed structure, on the way to Meguti temple, was known as "two-storeyed Jaina temple" and it was described by Cousens as a temple consisting of two long verandahs, one above the other, with a frontage of four

heavy square pillars and two pilasters. Off the verandah of the upper storey is a long room and three shrines, cut in the rock; off the lower is the beginning of a shrine. In relief upon the centre of the upper verandah ceiling, in front of the shrine door, is the figure of a small seated clothed Jina with a triple umbrella above him".<sup>20</sup> Settar made a detailed study of this structure, and identified this as a Buddhist Vihara.<sup>21</sup> To support his theory, he identified the image in the ceiling of the upper storey as that of Buddha, in *Vyakhyanamudra*, wearing an upper garment and the *Urna* on the forehead. Secondly he thought that the miniature sculptured panels on the door-jamb, represented the Buddhist Jataka stories.

This identification of the structure as a Buddhist Vihara, has not been accepted by some scholars,<sup>22</sup> but deserves further study.

So far, no structures ascribable to Early Chalukyan period in Karnataka were known outside the Badami-Aihole-Pattadakal complex. But a decorative *torana* or gateway has come to light in the centre of the village Itgi (near Kukkanur), Taluk Yalburga, Dist. Raichur. Itgi is already known for the famous Mahadeva temple, belonging to the period of the Later Western Chalukyas.

The Gateway consists of two pillars on which a sculptured lintel—all of red sand stone—is placed horizontally. Both the sides of the lintel are carved with reliefs, representing auspicious symbols, such as pot and foliage (*purva-kumbha*), double-fish (*mina-dvaya*), bull (*Nandi*), etc. At both the ends are seated *Yakshas* (probably Sankhanidhi and Padmanidhi). In the centre of the lintel is the *Gajalakshmi*. The southern faces of the brackets contain inscriptions which refer to two names of the artists, who carved the *torana*. The names mentioned are *Sri Gonadeva* and *Sri Kanappa* (Pl. XII a & b).

The eastern face of the pillar to the left (viewed from south) has an inscription in the characters of 7th Cent. A.D., which refers to the reign of Yudhamalla Satyasraya, i.e., Chalukya Vinayaditya (A.D. 681-696) and mentions a *Gana Somayaji*. Unfortunately the inscription is incomplete. It is probable that further exposition will bring out more details from this site.

#### *Sculptures :*

Sculptures may be dealt with under two

groups, viz., (a) stone (b) metal. In the field of sculptural studies, mention may be made of two works, viz., a study of Hoysala sculptures by Dr. Settar of Karnataka University, Dharwar,<sup>23</sup> and another work *Kiratarjuniyam in Sculptures of Karnataka* by Nagaraja Rao.<sup>24</sup> In the latter work, the author has made a thorough study of the epic theme in literature, tradition and sculptures of Karnataka. The study has revealed the fact that the story depicted in the sculptures is based on a strong local tradition, according to which Siva in the form of Kirata is defeated by Arjuna in the fight (Pls. XIII, a-b, and XVI a). The tradition as revealed from sculptures dates back to the beginning of the 8th Cent. A.D. (Pl. XIII a-b).

#### (a) *Stone Sculptures :*

We have already referred to discovery of relief sculptures on lime stone ascribable to 1-2 Cent. A.D., from Sannatti, Dist. Gulbarga, where Buddhist remains have been reported (supra p. 29 See also Pls. X b-c; XI a). Besides the relief sculptures in the round, mainly depicting *Yakshas*, two such figures, both without head, but comparable to the *Yaksha* from *Pitalkhora* have been known. One is in the Directorate of Archaeology and Museums, Mysore, and the other in the Kannada Research Institute Museum Karnataka University, Dharwar.

Sundara, who surveyed the Banavasi region has published a number of sculptures, and attributes them to the Early Kadamba period.<sup>25</sup> The figures represent sculptures in the round of *Yaksha*, *Rati* (?) and *Manmatha* (?). If the dating is accepted, these will be the first known sculptures of early Kadambas of Banavasi.

Rao recovered a number of sculptures, during the clearance operations at Aihole and Pattadakal.<sup>26</sup> However, the most spectacular among these, are the two relief sculptures on blocks of red sand stone, recovered in the Virupaksha complex of temples at Pattadakal. One of them represents Siva as *Kalarimurti*, attacking *Yama*, the God of death, who has come to take life of *Markandeya*. The latter is depicted in a miniature form holding on to the *lingam* by the side of the right leg of Siva (Pl. XIV a). The other is of *Siva-Tripurantaka* (Pl. XIV b). Both the sculptures are exquisite pieces of Early Chalukyan Art, exhibiting simplicity, vigour and movement.

Although the Mahadeva temple, at Jalasangi (Humnabad Taluk, Bidar District) was known, the importance of the sculptures around the exterior was brought to the fore by Dr. Desai.<sup>27</sup> He published a unique inscription being written by a lady, extolling the greatness of Vikramaditya VI, the scion of Chalukyas of Kalyani.

Almost a similar sculpture of lady engraving an inscription has been noticed on the exterior wall of the Isvara temple at Dharmapuri, District Bhid (Maharashtra) and has been published here (Pl. XV a-b).

Finally, another exciting discovery is the sculpture of Sivaji from the village Yadawad (7 miles from Dharwar). According to tradition, when Sivaji invaded the Belavadi region, the Desai of Belavadi fought and fell in the battle. But Mallavva, the wife of the Desai, braved an encounter with Sivaji. The latter was stunned by the lady and entered into a treaty with her. In order to commemorate this event, Belavadi Mallavva is said to have set up similar sculptures in most of the villages of her principality. However, only this specimen from Yadavadi is available (Pl. XVI b).

The sculpture is carved on a large slab in bold relief and in two panels. The upper panel which occupies the major part of the slab depicts an elderly figure on a caparisoned horse. The horse is beautifully decorated with various ornaments and a peacock on its head. The rider holds a sword and a shield, and has a headgear called 'Pagota'. He has long coat, and above his head is a regal parasol. He is attended by standard bearers, both in front and back. There is also another attendant and a dog. The entire panel is enclosed in a decorative *prabhavali*, perched with parrots.

The lower panel shows a domestic scene, in which the horse-rider is seated on a couch in the centre with a child on his left lap. Some ladies are attending on him. To the left is a lady with bow and arrow, and to the right is a man, who appears like the horse rider.

The man on horse back in the upper panel is identified as Sivaji who has come for war. The lower panel is said to depict the conclusion of the treaty, by way of Sivaji feeding the child of Mallavva. This identification has been doubted by many. But in the absence of any other evi-

ence, the interpretation of the panel as depicting Sivaji may be accepted.

(b) *Metal Images :*

There are not many discoveries of bronze images. But the few found are of great significance.

There are hardly any bronzes ascribable to the Ganga period. Although an inscription on a metal image found by one Mr. Crawford, while digging the ground in his coffee estate, in the Manjarabad taluk, Hassan district, was published,<sup>28</sup> the image itself was not published, till recently.<sup>29</sup> This bronze is now in the Jain Matha at Sravanabelagola.

The bronze is of a standing Jina, on a pedestal. On the pedestal is an inscription, in a single line. It extols the greatness of *Kundana Somidevi*, who is said to be elder sister of *Nolambakulantaka*. Rice ascribes this inscription to A.D. 970. It was Ganga Marasimha II (961-974 A.D.) who had the two titles mentioned in this inscription, viz., 'Nolambakulantaka' and 'Jagadekavira'. Thus this bronze image of Jina is one of the rarest pieces of Ganga art.

The second bronze, also probably belonging to the Ganga-Chola workmanship, is that of *Kali*, a proud possession of the Directorate of Archaeology and Museums in Karnataka. In 1972, the idol was accidentally stumbled upon by shepherds, near the *pitha* of a *lingam*, locally called *Mahabaleshvara*, at Malangi near Talakad, the seat of the Gangas. The solid bronze image of Devi, is placed on a pedestal and surrounded by a *prabhavali* decorated with flames. It measures 34 cms. in height, including the *pitha* and *prabhavali*. The *Devi* is in *virasana* and has 8 hands of which three (two on the left and one on the right) are mutilated. In the existing three of the right hands, she holds *khadga*, *damaru* and *pushpa*, while in the left are a *shield* and *panapatra*. Behind the head is a halo with flames. The left ear has a scroll while the right appears to have a *sarpa kundala*. The breasts are fully and realistically depicted, with a *Naga-Kucha-bandha* above them. The main deity is originally a cast bronze, with gold gilt all over.

On the comparative evidence of similar image from Tamil Nadu, the deity can be identified as *Kali*.

Again on the basis of comparative evidence,

the image can be dated to C. 1000 A.D. Gold gilding on the image also appears to be original. There is epigraphical evidence in Tamil Nadu, for the practice of gold gilding. Raja Raja's inscriptions are said to mention images of copper coated with gold (*Taghadu porti*).<sup>30</sup>

The site of discovery and the similarity in style with the Chola bronzes, strongly favours a Chola craftsmanship.

Finally, another equally interesting discovery is that of a group of bronzes from the village of Hangala, near Gundlupet, Mysore District (Pl. XVII a). The group consists of a main deity of Tirthankara, three minor images of Jinas, five lamp stands of various sizes, two bells

and five goblets (*kalasas*) with tripods. They were all donated by one Chikkajogabbe to a *basadi*, as each one of the objects is inscribed with her name. However, no traces of any Jaina basadi exist near the village.

At the back of the main image, is a four-line inscription, which states that *Chikkajogabbe*, the beloved wife of *Sarvalokasraya*, and her mother *Mankabbe* were disciples of the Jaina preceptor, *Damanandi Bhattaraka* (Pl. XVII b). It is not possible to identify either *Sarvalokasraya* or *Damanandi Bhattaraka*. But on palaeographical grounds, the inscriptions could be ascribed to 11th Cent. A.D.

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## V. EPIGRAPHY

Karnataka has been a pioneer in epigraphical studies. Great savants like, Lewis Rice, J. F. Fleet, L. D. Barnett, R. Narasimhacharya, M. H. Krishna, R. S. Panchamukhi and P. B. Desai have contributed largely for the survey, collection and publication of inscriptions in Karnataka. However, the names of Lewis Rice and R. Narasimhacharya stand out foremost among those, for the systematic survey and publication of inscriptions from the erstwhile state of Mysore. As early as 1886, the Mysore Archaeological Department, under the direction of Lewis Rice published the first volume of *Epigraphia Carnatica*, containing inscriptions from Coorg, even before the first volume of *Epigraphia Indica* was published. From 1886 to 1905, twelve volumes of *Epigraphia Carnatica* containing nearly 10,000 inscriptions found in various districts of Mysore were published. R. Narasimacharya who succeeded Rice continued the collection of inscriptions and published the texts of important ones in the *Annual Reports* of the Department. Further he revised the volume of Sravana Belgola inscriptions. He also organised the preparation of an index to the *Epigraphia Carnatica* Volumes published by Rice. He had prepared the texts of the inscriptions collected by himself, as supplementary volumes to *Epigraphia Carnatica* Volumes. These were later published by Krishna, Nilakanta Sastri and Seshadri. One more supplementary volume of Bangalore district, is now in press.

Dr. Shama Sastry who succeeded Narasimhacharya continued the epigraphical Survey and published them in the *Annual Reports* for 1922 to 1928. From 1928 onwards, M. H. Krishna continued the tradition and published the new inscriptions in his new series of *Mysore Archaeological Reports*.

As for the North Karnataka region, the Epigraphical Branch of the Archaeological Survey of India started a programme of exploring Bombay-Karnataka region in 1927. It has listed more than 2000 inscriptions in its *Annual*

*Reports*. It has also published a volume of Bombay-Karnatak inscriptions in its *South Indian Inscriptions* series. The Archaeological Survey of India also published some inscriptions from the Bombay-Karnataka area, and the districts of South Kanara and Bellary in different volumes of *South Indian Inscriptions*.

Kannada Research Institute, Dharwar, also carried out epigraphical survey and published a series called *Karnatak Inscriptions*, containing the inscriptions in the region. The series is still continuing.

With regard to the districts of Raichur, Gulbarga and Bidar, which formed part of the erstwhile state of Hyderabad, many inscriptions were published in the *Annual Reports of the Hyderabad Archaeological Department*. Epigraphs from the region were also published in separate volumes by the same Department.<sup>2</sup>

In spite of the fact that Karnataka is next only to Tamil Nadu in numerical wealth of epigraphs, and that Karnataka had, and still has, a considerable number of epigraphists, a coordinated effort to train more students of epigraphy, and to publish the epigraphical wealth of the state is still wanting. Thanks to the efforts of Lewis Rice and Narasimhacharya, majority of inscriptions from the erstwhile State of Mysore have been published. But the Northern districts of Karnataka are sadly neglected.\* This neglect can be set right only when there is a proper coordination among various institutions engaged in research, and by training more students in epigraphy.

Dr. Panchamukhi made several attempts through his *School of Indian Palaeography*, Dharwar, to impart training in epigraphy, but so far without much success. In Karnatak University, Kannada Research Institute, has been offering courses leading to a Post Graduate *Diploma-in-Epigraphy*.<sup>3</sup> However, interest in epigraphy is still wanting among students. It is necessary to train up serious epigraphists, considering the volume of work that awaits.

\* Since this was written Government of Karnataka have approved a scheme to continue the E.C. Volume series comprising the northern districts of Karnataka. The survey is now going on in Bidar District.

However, it should be conceded that the work in the field of epigraphical survey as well as publication is continuously going on, though not in the scale in which it should have. Since, 1956, the work carried out by the following agencies may be noted here. But mostly this has been in the northern districts of the State.

The Epigraphy Branch of the Archaeological Survey has continued its programme, initiated in 1926, and has explored in the districts of Gulbarga, Bidar, Raichur, Dharwar and Bijapur and copied a large number of inscriptions.<sup>4</sup>

Kannada Research Institute, Dharwar, also continued its own survey, as a research scheme. In this, the inscriptions in the taluks of Gangavati and Yalburga in Raichur District have been copied. They await publication.<sup>5</sup>

Sri S. Nagaraju of the University of Mysore carried out an Epigraphical survey in the western part of Gulbarga District and has published some inscriptions from Aland Taluk.<sup>6</sup>

A few works relating to the study of epigraphy have also come out during the period of our study. Dr. Narashimhamurthy published a book on the origin and development of Kannada Script.<sup>7</sup> Katti's work on epigraphy is a general introduction to epigraphy.<sup>8</sup> A more serious work is that of Ramesh meant for a mature audience.<sup>9</sup> But all these are in Kannada.

*Epigraphia Carnatica* volumes published by the State Department of Archaeology were out of part for a long time. A scheme to revise and reprint these volumes has been approved by the State Government, and is being carried out under the auspices of the Institute of Kannada Studies, University of Mysore.\*

We have already referred to the survey of epigraphs by the Epigraphical Branch of the Archaeological Survey of India. Two volumes of inscriptions from Bombay—Karnatak Districts have been published in the series of *South Indian Inscriptions*.<sup>10</sup> As for the districts which were in the Nizam's Dominions, the Andhra Pradesh Archaeological Department has brought out two volumes containing inscriptions from the Districts of Raichur, Gulbarga and Bidar.<sup>11</sup> The Kannada Research Institute, Dharwar continued its series of publications under the title *Karnatak Inscriptions*. So far two more volumes have

been published.<sup>12</sup> Apart from these a number of scholars have published various inscriptions in learned journals.

The foregoing account shows the wealth of epigraphical material available in the state. It also indicates how much work still remains to be done. Although a very rich collection of epigraphs has been made in the past decade and a half, only a few of them have been published. Some important inscriptions, however, may be mentioned here.

*Brahmi Inscriptions from Sannatti, Taluka Chitapur, District Gulbarga.*

Among the most spectacular discoveries, mention has already been made of the famous Buddhist site of Sannatti (*supra.* p. 29). From the site as many as 49 inscriptions, many of which are fragmentary in character, have been found. Forty six of them are in Brahmi characters of about 2nd Century A.D. Two others are in the characters of 7th Century A.D.<sup>13</sup> All the Brahmi inscriptions are donative records.

Amongst them a two line inscription is carved on the sculptured face of a square *Ayaka* pillar. The top of the pillar is hexagonal. Below this are carved in low relief three *chaitya* window motifs. Below this is carved a couple seated on a couch. The male is holding a chalice. They are attended by two servants. Below the sculptured panel is the two line inscription in Brahmi, which reads as follows :

1. *Ahimarikāya Nāganikāya*
2. *Arikā bhātuno Girija Tanakasa*

It probably registers that this pillar was the gift of *Girijatanaka*, brother of *Arika* and *Naganika* of *Ahimarika*. *Ahimarika* referred to here is probably a place name (Pl. XI a).

This name *Ahimarika* also occurs in two more inscriptions from Sannatti. A fragment of an inscribed slab has a fragmentary inscription which reads as follows :

. . . *niya ahimarikāya*

The third record containing the name *Ahimarika* was found built into the wall of the Durga temple, in the Stupa site.

\*The scheme is being implemented steadily and so far five volumes, containing inscriptions from Coorg, Sravanabelagola and Mysore districts have been published.

1. *Mudāṇa Mahāgomitta*
2. *Mārasa Latikasa*
3. *Bhaṭi bālikāya*
4. *Ahimarikāya*
5. *Purisadatāya*

Another fragmentary inscription mentions *Vāsiṭhiputasa Siri Sa...* which probably refers to Vasishṭhiputra Sri Sātakarṇi of the Satavahana family. Another inscription reads :

*Rājāmāchasa Gaganakasa*  
*Bhāriyāye rājamachaya Rāmasiriya*

This evidently records the donation of Ramasiri, wife of a royal minister, (designated *rajamacha*) Gaganaka. Apart from these members belonging to the royal court several people belonging to various strata of society have made donations of sculptures etc., among whom mention may be made of a householder (*gahapati*) Sulasa, a nun (*samanikā*), several housewives (*ghariniya*), a trader (*vaniya*) Senanha and members of a family of *naṭikas*.

All these donations are evidently made to the Buddhist establishment at Sannatti.

#### *Brahmi Inscription from Belvadigi<sup>14</sup>*

Belvadigi is a village in Chitapur Taluk, Gulbarga District, about a couple of miles away from Sannatti. The inscribed slab in question at this village was found set up against the back wall of a building about two miles away from the village. The slab has a single line Prakrit inscription in Brahmi script. Below the inscription are two panels of relief sculptures.

The top panel depicts a man facing front, seated on a circular seat with his left leg folded and kept on it and the right one hanging down. His left hand is resting on his left lap and the right hand is raised and holds probably a cup. On a smaller seat to his right sits a woman, facing him. Her right hand rests on the edge of the seat. A chauri bearer stands to the left of the male figure.

The lower panel depicts a bullock-cart in the foreground with two bullocks shown standing in the back-ground. An indistinct figure, of an animal is also carved behind the bullocks. The cart itself is empty with no occupants.

The inscription at the top of these panels reads :

*Kalakasa Chhāya Pa (ṭima)*

This means that this represents the memorial image (*Chhaya Pratima*) of one *Kalaka*. There are a number of inscriptions from Nagarjunakonda, referring to the setting up of memorial pillars (*Chhaya-Khambas*), commemorating the death of persons killed in a battle-field or otherwise.<sup>15</sup> One particular inscription from Nagarjunakonda relates the erection of a memorial pillar (*Chhaya Khamba*) in memory of a queen.<sup>16</sup> It is also engraved on a lime-stone slab below a scene, in bas-relief, and depicts the queen seated in a *Mandapa* and attended by a couple of persons. On this analogy, the male may be identified to be *Kalaka* of the inscription. The lady seated opposite him may be his wife. It is not clear if she followed him upon his death, in which case, this will be the earliest example of *Sati*.

The significance of the lower panel is not clear. As Ramesh has interpreted,<sup>17</sup> it may either represent the death of *Kalaka* while performing the journey in the cart or the unyoked cart may be symbolic representation of the journey's end.

#### *Nundem Inscription of Siharaja<sup>18</sup>*

This record is engraved on a loose slab, lying outside the Mahamaya temple, at Nundem, a small village in the Sanguem Taluk, Goa. The inscription consists of eleven lines, in Southern Characters of 5th century, but without the box head usually found in the characters of the period. Instead, lines 2 to 5 are written with horizontal lines, as in modern *Devanagari*. The language of the record is Sanskrit.

The inscription begins with the auspicious terms *Svasti Śrī*, and is followed by the imprecatory verses declaring that the five great sins will accrue to anyone who tries to misappropriate a *devasva* or gift to God.

The record registers the grant of one gateway (or doorway) to the deity Parvatisvamin, and one Panasaka Kshetra and one gateway (or doorway) to the god Ēlāsvamin, by one Siharaja.

The temple of Mahamaya where the inscription is found, is dedicated to Parvati. Elāsvamin may be the consort of Parvati (Siva). Siharaja is the Prakrit form of Simharaja. He may have been the subordinate, local chieftain, under either the Bhojas or the Mauryas of Konkan, who ruled the territory of Goa during 4th and 5th centuries of the Christian era.

### *Kadamba Inscription from Banavasi*<sup>19</sup>

This fragmentary record was found buried in the backyard of a house in Banavasi village. The inscription is engraved on the dressed top four faces of a pillar 16 feet high. The upper part of the pillar is mutilated and lost. Only five lines are now available.

The language of the record is Sanskrit, and the script is box-headed Brahmi of the southern variety, of the type seen in the Talgunda Inscription of Kakusthavarman.<sup>20</sup> Peculiarly the writing is done from bottom to top.

It begins with a prayer to Vishnu, and then states that Kakusthavarman was like the Sun of Kadamba family and his son was Santivarman who had the title 'Rajabhīma'. Further there is mention of Mrigesā who may be identified with Mrigesavarman son of Santivarman. There is a further reference to a victory over a Pallava king, lord of the city of Kanchi. As the record is mutilated, we do not know to which ruler this refers.

Incidentally, it may be noted that this is the first Early Kadamba record discovered at Banavasi.

### *Gudnapur Inscription of Kadamba Ravivarman*<sup>21</sup>

Gudnapur is a village 5 Kms. north-west of Banavasi, in Karwar District. The record is engraved on the four faces of a pillar, about 20 feet high. The pillar is square at lower part, and the top portion is octagonal. Like the Banavasi inscription mentioned above<sup>22</sup> this record is also engraved from bottom to top. There are 27 lines in all.

After the invocation an account of the Kadamba family is given. Virasarma, a brahmin, was born of *Manavya Gotra*. His eldest son was Bandhushena. His son was Mayuravarman, who is said to have been well versed in Vedas and Angas. He is stated to have been installed king by Kumara or Shanmukha. Mayuravarman's son was Kangavarman, whose son was Bhagiratha. Bhagiratha's younger brother was Kakustha. The latter's son and grandson were Santivarman and Mrigesavarman respectively. Mrigesā's son was Ravi, born to the daughter of a Kekaya king. Here onwards the record eulogises the valour and greatness of king Ravivarman.

The record then states that king Ravivarman built a temple for Manmatha, and then the boundaries of the temple are defined. To the

right of the temple was said to be the Palace of the king, while to the left, dancing halls, in front of the *antahpura*.

Further on, the epigraph records the grants made for the worship and maintenance of the *Kāma-jinālaya*, by the king. A large tank *Gudda-tatāka* was excavated to the south of the boundaries of Idiyur (Idur), Kantararyapati, Kallangodu (Kallagodu) and Meguru, and all lands coming under cultivation below this tank, were made over to this temple.

A postscript engraved on the top portion of the record registers another gift of the village Mukundi made to the temple of Kama at Hakinapalli and the temple of goddess Padmavati at Kallili.

There is no date in the record. Palaeographically it can be assigned to late 5th or early 6th century. Ravivarman ruled from c. 485 to 519 A.D.

The importance of the record lies in the fact that it throws fresh light on the ancestors of Mayuravarman, by mentioning the names of his father and grand-father as Bandhushena and Virasarma respectively. It confirms that the founder of the Kadamba family was a *brahmana*, as stated in the Talagunda record. It also states that the family was known as *Kadamba*, even at the time of Virasarma.

Another important reference is to the construction of a temple to Manmatha or Kama (*Kāma Jinālaya*). In the Jaina pantheon Manmatha is not worshipped as a deity. Therefore, Gopal has suggested that this temple of Manmatha was nothing but a temple of Bahubali and in support he states that the word "Gommata" is the *tadbhava* of the Sanskrit word Manmatha.<sup>23</sup> If this interpretation is agreed, this will be the earliest structure for Bahubali Gommata.

Another important reference is to the existence of secular buildings, such as the royal palace, the dancing halls and the female apartments. Since the boundaries of the temple are well defined, with careful exploration, it should be possible to locate the sites and expose these structures.

The references to Kamadevalaya at Hakinapalli and the temple of Padmavati at Kallili, are also of great interest. If we agree with the suggestion that Kamadeva was Bahubali himself, we should be able to locate another temple of Gommata. The reference to the temple of Padmavati is again the earliest to the Jaina goddess

of that name.

Finally, the numerals, 1 to 9 are found in this record. This is probably the only record of this period, in which the first nine numbers are found engraved.

*Honnavar Plates of Kekaya Chitrasena, Year 1.<sup>24</sup>*  
(Pl. XVIII).

The set of three copper plates found in Honnavar region belongs to the reign of Kadamba Ravivarma and is dated in the first regnal year of the feudatory chief Chitrasena. The record begins with the praise to Buddha. The purpose of the record is to register the grant of a garden, along with *Kanasapukkolli* (probably a kind of land), situated in the village *Nāpitapalli* to the *Ārya-Sangha* (Buddhist monastery) by *Chitrasena Mahakella* of the *Kekaya* family. It is interesting to note that the Gudnapur inscription (*supra* p. 37) states that *Kadamba Ravi* varma's mother was a *Kekaya* princess. Chitrasena was probably a close relative of Ravivarma.

The record is important as it introduces an unknown ruler of the *Kekaya* family, who is Chitrasena, as ruling from *Ambudvipa*. Several branches of the *Kekayas* are known from the peninsular region<sup>25</sup> as from the same epigraphs.<sup>26</sup> His title *Kella* and *Mahākella* are also interesting. We know of one *Ela kella* of *Kekaya* family from the *Kapali* plates of *Bhoja Asankita-varman*.<sup>27</sup> The feudatory status of Chitrasena is indicated by the reference to *Kadamba Ravi* maharaja. The record also refers to places such as *Ambudvipa* and *Nāpitapalli*. Although originally, *Ambudvipa* was identified with *Anjdiv* islands,<sup>28</sup> we would probably be right in identifying *Ambudvipa* with the present town of *Honnavara* itself. For *Honnavara* is skirted by two arms of *Sharavati* (or *Ambu* river, *Sara* in Sanskrit=*Ambu* in Kannada, meaning arrow), forming an island.<sup>29</sup> *Nāpitapalli* is difficult to identify at the moment.

*Huli Plates of Mangalaraja.<sup>30</sup>*

These plates were found while digging the earth on *Marulasiddhesvara* Hill, to the west of the village *Huli*, *Saundatti* Taluk, *Belgaum* District.

The record commences with an invocation to *Santinatha* Jina, the 16th Tirthankara of the *Jaina* pantheon. Then it records that at the command of the *Chalukya* king *Mangalaraja*,

*Raviśakti*, son of *Kanraśakti* who was the chief of the illustrious *Sendraka* family and belonged to the lineage of the *Naga* race, made a grant of fifty *nivartanas* of cultivable land to the temple of *Lord Santinatha* in the village of *Kiruvattakege* which was under his feudal authority. The gift was entrusted into the hands of the preceptor *Abhayanandi*, (engaged in the performance of austerities and self-restraint), disciple of the preceptor *Srinandi* who belonged to the community of teachers of *Paralur Sangha*.

*Mangalaraja* is *Mangalesa* of the *Badami Chalukya* dynasty. The inscription is important for the study of the political and other aspects of this dynasty. The two members of the *Sendraka* family, namely, *Raviśakti*, the donor, and his father *Kanraśakti*, are known for the first time from this charter. The two *Jaina* teachers, *Srinandi* and his disciple *Abhayanandi*, were also not known previously. They belonged to the succession of the community of monks, established at *Paralur*, called *Paralur-sangha*.

It is of interest to note that *Mangalesa* was a follower of *Vaishnavism* and a staunch devotee of *Vishnu*. His approval of an endowment to a *Jaina* institution is a proof of his catholic outlook in religious matters.

The royal emblem on the seal is a unique device in the epigraphical world, since no where is found such a symbol. The effigy of the tigress facing the proper right with her cub below is conspicuously impressive.

*Itgi Inscription of Yuddhamalla Satyasraya (Pl. XII a)*

*Itgi*, in *Yalburga* Taluk of *Raichur* district is well known for the *Later Chalukyan* temple of *Mahadeva*. In the centre of the village is a decorative *torana* of red sandstone belonging to the period of the *Chalukyas* of *Badami*, as already referred (*supra* p. 31). On one of the faces of the pillar is an inscription belonging to the reign of *Yuddhamalla Satyāśraya* of the *Chalukya* family. *Yuddhamalla* was the title of *Vijayaditya* who ruled between A.D. 681 and 696. The inscription which is incomplete refers to the king with his titles as *Yuddhamalla Satyāśraya* and to a *Somayaji*. There are three more label inscriptions on the two brackets and one face of the second pillar. The *torana* itself is beautifully carved with the eight auspicious symbols, and labels show as to who carved them. The

names mentioned are Sri Goṇadeva, Srimat Aṇaga and Sri Kaṇappa.

The records are important as they prove that the structure is one of the few early Chalukyan structures in Karnataka, other than those known from Badami-Aihole-Pattadakal Complex.

*Jamalaḡama Grant of Chalukya Vijayaditya, Saka 619 (A.D. 697)<sup>31</sup> (Pls. XIX & XX).*

Though from outside Karnataka, this copper plate record is included here, as it belongs to an Early Chalukyan king. The set of three plates fastened together with ring, having a boar seal, are in possession of Shri Dinakar Rao Bajirao, Police-patel of Kasar-Sirasi, in Nilanga taluka of Osmanabad district (Maharashtra).

The record provides the geneology of the western Chalukya family till Vijayaditya. The purpose of the record is to register the donation of the village of *Jamalaḡama*, located between *Pullavadali* and *Muguli*, in *Bhallunkidesa* to three *Brahmanas*, Kottisarma, Prabhakara and Prabhakara, who were well-versed in Vedas. The grant was made in the first regnal year of the king, when he was camping at *Resenapura*.

Though the record does not provide anything about the king or the dynasty, its importance lies in the fact that it is dated in the first regnal year of the king Vijayaditya, as such is the earliest known record of the king. It also confirms the surmise of Fleet that Vijayaditya commenced his rule from 696 A.D.<sup>32</sup>

The record is also important for the identification of some of the places, particularly *Morakhandi*. Although *Morakhandi* was originally identified with *Mayurakhandi* of Rashtrakuta records, in Nasik district,<sup>33</sup> it is now clear that this is identical with the small village *Morakhandi*, a few miles north of Kalyani, the capital of the later Chalukyas in Humnabad taluka of Bidar district. This is also near Bhaklki, which is *Bhallunkidesa* of the epigraph.<sup>34</sup> This *Morakhandi* probably became the capital of the Rashtrakutas, as we find a number of Rashtrakuta epigraphs in the village.

*Sakrepatna Plates of Pallava Simhavarman, Year 41<sup>35</sup>*

These plates were unearthed while digging a pit in a village near Sakrepatna in the Chikmagalur District.

The charter was issued from the victorious

camp at Maudgalī-taṭa by the Pallava king Simhavarman who is described as the son of Skandavarman (II), the grandson of Viravarman and the great grandson of Skandavarman (I). The main purpose of the charter is to register the gift, made by Simhavarman, of all the royal enjoyments in the *Valvili* or *Valvilli-agrahara* in *Sēndraka-rājya* to the brahmins of the same agrahara. The charter is dated in the regnal year 41, tenth day of the dark fortnight of the month of Praushṭhapada (Bhādrapada).

The record is important in many respects. It belongs to that group of charters which is commonly known as the Sanskrit charters of the early Pallavas and is a welcome addition to the series.<sup>36</sup>

Discussing the problem of the Simhavarman in Pallava history in the light of the statements in the present inscription it has been surmised that Simhavarman I was elder brother of Yuva-maharaja Vishnugopa and was succeeded by latter's son, Simhavarman II. The present record indicates further Simhavarman I, ruled for at least 41 years.

The present charter was issued from Maudgalī-taṭa i.e., the bank of the river Maudgalī and the king made some gifts in Valvili or Valvilli agrahara situated in Sēndraka-rājya. It is difficult to identify the river Maudgalī as well as the place Valvili or Valvilli. But Sēndrakarājya, which is mentioned as Sēndraka-vishaya in some of the Kadamba grants, comprised the area round about modern Shimoga District in Mysore State.<sup>37</sup> It is, therefore, clear that Simhavarman was ruling over this area at the time of the grant.

*Udiyavara Inscription of Chitravahana<sup>38</sup>*

This inscription found in the village Udiyavara, Udupi Taluk, South Kanara District, belongs to the Alupa King Chitravahana II. The characters are of later half of the 8th century A.D. and the language is Kannada.

It records that while Chitravahana was ruling the kingdom and Śrī Māra was governing Koḡāla, Dharmmana son of Jakkanayga, along with the residents of the village, conferred the title 'Paṇḍya Nāyakan' on Kiriya Nagadatta in Mangalapura.

*Belmannu Copper Plates<sup>39</sup>*

(Pl. XXI)

These copper plates of the Alupas belonging to

the 8th century A.D., were found in the Durga Paramesvari temple, at Belmannu village in Karkala Taluk of South Kanara District.

According to Dr. P. G. Bhat, who discovered these plates, they are the earliest of their kind in Tulunadu. In 1971, Dr. Bhat discovered a 6 feet high stone inscription, in Udiyavara, bearing the Alupa symbol of two fish, ascribable to the 9th century A.D. The same symbol of two fish adorns the ring of the present set of copper plates.

The epigraph is engraved in Kannada characters assignable to the 8th century A.D. It records the grant of property by Srimat Aluvara to the Bailmanna Sabha free of tax on the day of Solar eclipse. The translation of grant portion runs as follows, "Srimat Ulavarasa whose family was protected by Pitamaha, along with Eraiyapparasa, made a grant to the Bailmanna Sabha, free from tax to be paid to Shivalli, on the day of solar eclipse. This grant was made in the administrative sub-division of Manideva of Kantapura (Kantavara) and the document was prepared in the presence of Chokkapadi Bhatta. The grant will be protected by Boygavarma of Kapu, Nanda of Bela (Bolo), Nanda of Kolamura (Kodandur) Heggadthi of Santoru (Santhuru) and Terpanna who will receive innumerable boons for their work of protection".

The presiding deity of Belmannu is referred to as *Vindhyavasini* adored by great saints.

Dr. Bhat makes the following inferences :

1. Aluvarasa of the record may be identified with Aluvarasa II who seemed to have reigned over Aluvakheda (Tulunadu) between A.D. 770 and 790.
2. The Eraiyapparasa mentioned in the document must be no other than the second son of Ganga Sripurusha.
3. The place name mentioned as Shivavalli is Shivalli (present Udipi) which is described as a place of great sanctity, as important as Varanasi.
4. Mention of Heggadthi of Santoru may mean the existence of Bunts, at that time following the "aliya santhana" system.
5. Reference to Lord Siva prefacing the grant indicates that the Alupas were the worshippers of Siva.
6. Another important information is the possibility of the Alupas belonging to

the Pandyakula, the prosperity of which is sought by the great. Among the Pandyas, there must have been a number of families. This is also corroborated by the Shiggaon plates of A.D. 707.

*Itgi Inscription of Butuga II, 939 A.D.*

The inscription slab is in front of Kallimatha in the village Itgi, Yalburga Taluk, Raichur District.

This record belongs to Ganga King Butuga II and is dated 939 A.D. It mentions Rashtrakuta king Krishna and then Butuga, and his wife Revakanimmaḍi. Further it states that Butuga was governing *Gangavāḍi*-96,000, *Purigere*-300 and *Belvola*-300 and *Butṭayya* was the *Perggade* of *Eḍedore*-2000. Butuga constructed a *tirtha* (tank?) and fixed the boundaries of *Belvola*-300, *Kukkanūr*-30 and *Keḷavāḍi*-300 by fixing this inscription stone in the boundaries.

The inscription is important for mentioning Butuga II's wife Revakanimmadi, sister of Krishna III and daughter of Baddega.

*Kukkanur Plates of Ganga Marasimha II, 968 A.D.<sup>40</sup> (Pl. XXI a & b)*

This set of seven massive copper plates fastened together with a ring attached to a royal seal was unearthed in an old habitation site at Kukkanur in Raichur District. Now they are in the Museum of Art and Archaeology, Karnatak University, Dharwar.

The charter belongs to the Ganga king Marasimha II who bore the titles Guttiya-Ganga, Ganga-Chūḍāmaṇi, Ganga-Vajra and Ganga Kandarpa and is dated in Śaka 890 (968 A.D.).

It contains long description of the ruling king and his predecessors whose achievements are recounted. It states that the king had an elder sister named Kundanasami who had married Rajaditya, a prince of the Chalukya family. She made a gift of the village Addavurage, to the west of Rajapura and north of Kukkanuru (modern Adur, Rajur and Kukkanur respectively in close proximity). The donee who received the gift was Koloparya, an erudite scholar whose ancestors hailed from Kanchi.

The royal seal crowning the document is superb among all the royal seals of the dynasty discovered so far. In the artistically carved square framework stands out in bold relief a majestic caparisoned elephant symbolising the

royal emblem of the Ganga house. This figure is surmounted by a rider under a canopy flanked by fly-whisks. In front of the elephant are placed chakra on a staff and lampstand. Behind the elephant are set up *sankha* on a staff, a dagger in vertical position and a lampstand. In the upper left and right corners are the sun and moon. In the panel below the elephant is engraved in handsome Kannada characters the distinguished title of the Ganga king, *Sri Ganga-Kandarpa* (The illustrious God of love of the Ganga house) (Pl. XXI b).

Kudlur plates of this Ganga ruler, dated 963 A.D., found long ago in T. Narasipur Taluk, Mysore District, were then reckoned as the best among the Ganga characters on account of their number, quantity of matter (198 lines) and decorated seal. But the present document (229 lines) excels that record in many respects.

#### *Bodhan Inscription of Jinavallabha*<sup>41</sup>

Though this inscription is found outside Karnataka, it is an important record to students of Karnataka history and Literature as it mentions the name of the famous Kannada poet Pampa.

The inscription is written on a big rock on the hill called 'Bommamma Gutta' about five miles north of village Kurikyala in Karimnagar District in Andhra Pradesh.

It commences saying obeisance to the *Siddhas*. Then it describes the work of Jinavallabha for the growth of Jainism. He was well versed in all arts. He was a son of Bhimappayya and grandson of Abimānachandra belonging to *Jamadagni Panchārshēya Śrīvatsagotra* of *Kamme* branch of Brahmins, of Vamgipara village in seven villages of Bemgināḍa. His mother was Abbarabbe, grand-daughter of Joyisa Singha of village Anṇigeṛe in Belvola. Jinavallabha was younger brother of Pampa. He was a disciple of Jayanandisiddhantadeva of *Koṇḍakundānvaya Desiyagaṇa*, *Pustakagachchha*, and *Paṇḍarangavalli*. On a rock called *Siddhasīle* on the south of Vrishabhagiri, north of Dharmavura, in the middle of Sabbināḍu Jinavallabha got carved figures of his family gods viz., Jinas, Chakresvari etc. He also caused the construction of *Tribhuvana tilaka* basadi, *Kavitagunārṇava* tank and *Madanaviḷāsa* garden. Next comes the praise of Jinavallabha. Then it says how quickly he got carved the figures of Jinas and Chakresvari and converted this centre of Brahmins into a centre of Jains.

Then comes the proclamation of *danasasana* in which chalukya king Arikesari granted the village Dharmavura to Pampa for his work 'Vikramarjuna Vijaya' as *Kirtisasana*. Further *Dharmavura Agrahara* is described. Lastly, it is stated that the inscription was incised by Ereyamma.

#### *Jalasangi Inscription of Chalukya Vikramaditya VI*<sup>42</sup>

An important discovery, by Dr. P. B. Desai is a sculpture of a lady writing an inscription on a plaque (*phalaka*), in one of the recesses of the sculptured exterior of the Isvara temple, at Jalasangi, a village 8 miles away from Humnabad, in Bidar district. The inscription on the plaque is in praise of Chalukya Vikramaditya VI, and reads as follows :—

1. *Sapta dvīpodari bhūtam bhūtaḥ Svīkarīṣya-*
2. *ti Chālukya Vikramādityaḥ Sapta-*
3. *mo Viṣṇuvardhanaḥ* "

A similar sculpture, but a mutilated one, is known from Dharmapuri, district Bhid, in Maharashtra (Pl. XV a & b). Here also, the inscription is in praise of Chalukya Vikramaditya, who is said to have caused the erection of a temple dedicated to Narayana. The text, in Kannada, is a beautiful piece of poetry worth quoting :

1. *Sura śaiḷamgentu Nārāyaṇan-utsahadimḍēri*  
*tadvistā-*
2. *ra Sānughrānta bhāsvallaḷita phalākadoḷ-*  
*Vikramānkange lokottara-*
3. *māgild - amka - māḷavāḷiyane palavuri*  
*bhaṅgiyimi -kirttisuttam bared-ācham-*
4. *drārka - tārambaram = esedire*  
*kūrtt = arthiyimi kirttisuttam* "

#### *Tambur Record of Bijjala, 1136 A.D.*<sup>43</sup>

This is a memorial stone found at the village Tambur, thirty miles south of Dharwar, in the Kalghatgi Taluka. Now it is in the Museum of Art and Archaeology, Karnatak University, Dharwar.

The viragal is carved on a thick slab (178 cms. × 74 cms. × 19 cms) of diorite and depicts sculptured reliefs in three panels—the hero's fight, his journey to heaven and his attainment of *Virasvarga*. In between the panels, is the inscription engraved in Kannada characters of 12th century A.D.

The inscription is dated in the 11th regnal year of the reign of western Chalukya king *Bhulokamalla Somesvara III* (A.D. 1126-1138), in the cyclic year

*Nala, Jyeshtha Suddha 14, Tuesday.* This corresponds to A.D. 1136, May 16, the week day being Saturday.

According to the inscription, the hero who died in the battle was Keteyanayaka, son of Jālagāra Machisetti Commanding Officer of *Mahasamanta*, Governor of *Hanumgal* Fort, while Mallikarjuna of the Kadamba family was ruling the kingdom, as the *Mahamandaleshvara* under the Chalukyan monarch. It is stated that *Tarekadu Bijjala* attacked the fort and himself led the attack mounting on an elephant. Keteyanayaka valiantly fought and repulsed Bijjala's elephant face-to-face and died.

The war between Keteyanayaka and Bijjala is beautifully carved in the lowest panel of the slab. Keteyanayaka is shown on the left, with his tuft tied in bun fashion and, with sword and shield in his hand attacking a horse and its rider. Above him are a drummer, and another blowing trumpet, while a third one is holding a severed

head. Keteya himself is trampling on the head of a dead soldier and advancing. At the right Bijjala is shown seated in a *howdah* on the elephant holding a spear in his raised right hand. Over his head is a regal parasol.

The memorial stone is important for many reasons. The earliest date so far known for Bijjala is A.D. 1142. But the date of the present record falls in A.D. 1136. Thus this is the earliest known date for Bijjala, when he was probably a *Mahamandalesvara*. Secondly even though the effigy of Bijjala portrayed here is conventional, it is the only example which depicts him sculpturally. Finally it throws welcome light on the custom of setting up of memorial stones. It is interesting that this memorial is set up at Tambur, in honour of a hero who died fighting at Hangal, further south. It indicates that Keteyanayaka probably belonged to Tambur and therefore, a memorial was set up in his home-town by his kin.

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3. This course is now being continued jointly by Kannada Research Institute and the Department of Ancient Indian History and Epigraphy. Of late, University of Mysore is also offering a Course in Post-graduate Diploma in Epigraphy.
4. About 1,500 inscriptions were copied.
5. Dr. M. S. Nagaraja Rao of the same institution surveyed 18 villages in the Sholapur and Osmanabad districts of Maharashtra during 1970-71, and copied 29 inscriptions, mostly in Kannada and of the period of Chalukyas of Kalyani.
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  34. Originally, this had been wrongly read as *Challunki desa*:
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  36. Amongst the charters of this class, the following may be listed here:
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    - (2) Vesanta grant of Simhavarman, son of Skandavarman II (*C.P. Inscriptions of Andhra Pradesh Government Museum*, Vol. I (1962), ed. by Ramesan, pp. 211 ff.);
    - (3) Uruvapalli grant of Yuvamaharaja Vishnugopa issued in the 11th regnal year of Maharaja Simhavarman (*IA*, Vol. V, pp. 50 ff.);
    - (4) Nedungaraya grant of Yuvamaharaja Vishnugopa issued in the 12th regnal year of Maharaja Simhavarman (*Bharati*, Vol. 18 (1941), pp. 699 ff.; *A.R. Ep.*, 1941-42, No. A2);
    - (5) Omgodu-II grant of Simhavarman, son of Yuvamaharaja Vishnugopa (*EI*, Vol. XV, pp. 252 ff.);
    - (6) Pikira grant of the same king as in No. 5 (*EI*, Vol. VIII, pp. 159 ff.); (7) Mangalur grant of the same king as in No. 5 (*IA*, Vol V, pp. 154 ff.);
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## VI. NUMISMATICS

The study of Karnataka numismatics started around 1856 with the publication of Hawke's work on gold, silver and copper coins of Mysore.<sup>1</sup> Elliot's work on South Indian Coins<sup>2</sup> included many coins of the region. This was followed by the catalogue by Thurston<sup>3</sup> which also referred to the coins from the Mysore region in the Madras Museum. Bidie's work<sup>4</sup> described the coins of Chalukya, Vijayanagar and Mysore dynasties. In 1891, the Roman coins discovered near Bangalore were described by Lewis Rice<sup>5</sup> in a small monograph. In 1889, Tuffnel published a catalogue of coins in the Government Museum, Bangalore.<sup>6</sup> Other important works of this early stage of study of Karnataka numismatics were, Jackson's work on coin collecting in Mysore,<sup>7</sup> Taylor's work on coins of Tippu Sultan,<sup>8</sup> and Henderson's work on coins of Hyder Ali and Tippu Sultan.<sup>9</sup>

While almost throughout the major part of the 19th Century the study of numismatics was mostly in the hands of lay enthusiasts, the introduction of Indian Treasure Trove Act (1878) brought most of the newly discovered coins to the various archaeological departments and museums. Thus rich collections began to grow in the Government Museums at Bangalore and Madras, the Prince of Wales Museum, Bombay, and the Departments of Archaeology of Mysore and Hyderabad States. Notes on Karnataka coins began to appear in the publications of the above institutions. In this connection, R. Narasimhacharya's descriptive notes published in the Mysore Archaeological Reports added much new information. Later, Dr. M. H. Krishna in his reports included parts of his doctoral thesis on Deccan numismatics and provided good source material for the study of the coins of this region. Recently, in 1969, Dr. B. D. Chattopadhyay submitted a thesis on '*Coins and Currency systems of Early South India*', to the University of Cambridge, England, which contains a treatment on coins of Karnataka.<sup>10</sup>

Since, 1956 about 80 hoards consisting of about 6500 coins, issued by various dynasties have come to light. However, only some of the important ones are referred to here.

### (a) Punch marked coins

A punch marked coin was found during the excavations carried out by the State Department of Archaeology, and the Department of Ancient History and Archaeology of the Mysore University in Banavasi. The coin is almost square and the traces of the punched symbols can be seen but they can not be clearly identified. This coin was found in the pre-Satavahana levels and may be ascribed to late Mauryan period.<sup>11</sup>

Excavations at Vadagaon-Madhavpur, conducted by the Ancient Indian History and Epigraphy department and Kannada Research Institute, Dharwar, (1972), yielded a few punch marked coins made on thin sheets of base silver and copper containing symbols like sun, hill, spiral, etc. These coins are found below the floor of a room in a structure in the Satavahana levels ascribable to first century A.D.<sup>12</sup>

### (b) Coins of the Chutu family

In the collection of Sri M. C. Wodeyar of Banavasi are three Chutu coins. One of these belongs to the King *Mulānanda* and the other two belong to the King Chutukulananda. These are similar to those found in Karwar and Chandravalli. These are very large and thick and their obverse contain a big symbol of eight arches in three rows, arranged in the order of four, three and one in bottom middle and top rows respectively. Above this symbol is the Brahmi legend mentioning the names of Kings *Mulananda* and *Chutukulananda*. The reverse of the coins contains a tree in railing and to the left of this is a symbol resembling letter *a* in Brahmi, and below the latter is a small circle with two dots on either side.

### (c) Roman Coins

A large number of hoards of Roman silver coins as well as a few gold ones were known from the peninsular India.<sup>13</sup> Among these mention may be made of a hoard of 163 *dinari* found in a pot, of Augustus, Tiberius, Claudius and Antonia, near Yashwantpur railway station, in Bangalore.<sup>14</sup>

The excavations at Chandravalli, near Chitradurga also yielded six coins of the Roman Kings.<sup>15</sup>

During 1965, when the Hindustan Aeronautics Ltd., Bangalore, were extending the runway at H.A.L. airport, Bangalore, they encountered a pot containing 256 silver coins of the Roman emperors. The pot was a long necked jar of red polished ware. The other pottery associated with the coins was the well known Russet-coated painted pottery, dated to 1st Century A.D. All these evidences allude to the existence of a Roman settlement near Bangalore in the beginning of the Christian era. This is also confirmed by the Yashwantpur hoard referred above.

Among the 256 coins of the HAL hoard, 27 coins are of Augustus and 229 of Tiberius. It is believed that all these coins came from the mint at Lagdunum\* (Pl. XXIII a).<sup>16</sup>

#### (d) Satavahana Coins

There is a Satavahana coin in the collections, of Sri M.C. Wodeyar of Banavasi, belonging to the King Sri Yajna Satakarni. The coin has on the obverse an elephant standing to the right and above it is a legend 'Siri Yana Satakanisa' in Brahmi script, and the *Ujjain* symbol on the reverse.

In the village Bhimanahalli, Chitapur Taluk, Gulbarga District, were found nine large and ten small coins of Satavahanas. These are made of potin and are not in well preserved condition. Some of them bear the *Ujjain* symbol on the reverse and some legends on the obverse.

Thanks to the interest of Shri B.A. Patil of the village of Hippargi, Jamkhandi Taluka, Bijapur District, a hoard of 18 potin coins, along with a few fragments of a coin, was saved. Among these ten coins are complete while 8 of them are broken. They all belong to the Satavahana

period. They have a decorated elephant to right with a raised trunk, on the obverse, with a Prakrit legend in Brahmi characters on the periphery. The reverse has *Ujjain* symbol. The Kings represented are *Sri Satakarni*, *Yajna Sri Satakarni* and *Pulumavi* (Pl. XXIII, b).

In the excavations, at the Satavahana site of Vadgaon-Madhavpur, a few copper and potin coins have been unearthed. Some of them bear elephant to right, and Brahmi legend on the obverse and *Ujjain* symbol, bow and arrow etc., on the reverse. One of the coins has a clear legend mentioning *Vasishthiputra*.<sup>17</sup>

#### (e) Ganga Coins

Two hoards were found in the villages Ganjigatti in Kalghatgi Taluk, Dharwar District, and Hiregonnegur in Kushtagi Taluk, Raichur District consisting of seven and two gold coins respectively. They bear on the obverse a caparisoned elephant to right, with a couple of letters of 10th Century A.D. seen above the elephant. On the reverse is a decorative motif. Although the legend is not clear, such coins have been ascribed to Ganga family.

#### (f) Chola Coins

Director of Archives of Maharashtra State, sent to the Director of Archaeology in Mysore, 650 silver coins belonging to the Chola King Rajadhiraja I. The obverse of these coins contain tiger and the reverse of 20 coins contain the legend 'Rajadhiraja' in Nagari, 5 contain a single letter 'Ra', 3 contain stars and others are blank.

#### (g) Gold coins of Dandinagova<sup>18</sup>

Ten gold coins were found in a field, about a furlong from the Ramdurg-Badami Road, in the village of Mudakavi, Ramadurg Taluk, Belgaum District. The coins contain the figure of a warrior with decorations on the obverse. He wears a helmet and an armour, holding in the right hand a long dagger pointing to the front and a hawk in the left hand which is bent and turned upwards. Figures of the sun and moon are also depicted to the right and left of the warrior's head. The reverse bears the legend, in Kannada characters of the 12th Century, reading *Nigalankamala Dandinagova*. This legend is the combination of two titles *Nigalankamalla* and *Dandinagova* which are often found in inscriptions of the same period. An inscription<sup>19</sup> from

\* Since this was written another hoard of 46 gold coins has been found (1977) in a field, in the village of Akki Alur, Hangal Taluk, Dharwar District. Of these, three are of early Roman emperors, Augustus (B.C. 29 to A.D. 14) and Antonius Pius (A.D. 138-161). Rest of 43 are of Byzantine kings dating from about C. 408 A.D. to C. 527 A.D., viz. Theodosius II (A.D. 408-450), Marcian (A.D. 450-457), Leo (A.D. 457-474), Zeno (A.D. 474-491), Anastasius (A.D. 491-518) and Justinus I (A.D. 518-527). All the latter 43 coins are minted at Constantinople. One more Byzantine coin, also of gold, has also been found near Maski. Another silver coin, probably of Augustus, has been unearthed during the excavations at Vadgaon-Mahavapur by Dr. Sundara., (Personal Communication and mentioned with grateful thanks).

Torgal in the Ramadurg Taluk, dated 1187-88 A.D., describes the achievements of a local chief by name Barmabhupala, who had the above two titles. He was governing the parts of present Bijapur, Belgaum and Dharwar Districts. From this it is clear that these coins were issued by him.

(h) *Alupa Coins*<sup>20</sup>

Sri M. M. Prabhu, of Mallya Soap factory, Mangalore, has a few Alupa coins collected from Mangalore, Udyavara and Barakur, in his collections. The obverse of these coins has two fishes with other figures and the reverse has legends like *Sri Pandya Dhananjaya*, *Vī* and *Sā* in Kannada and Nagari, indicating the titles of the kings to whom they belong. The coins having the legend *Sri Pandya Dhananjaya* belong to *Udayādityarasa Pandya Pottigadeva* (1088 A.D.) and *Gopisvararaya*. The coin bearing a single letter *Vī* belongs to *Vira Kulasekhara* and that bearing *Sā* (or *So*) belongs to *Soyideva*.

(i) *Virarayi phanams*

About 300 small gold coins known as *Virarayi phanams* were found in Mysore, Bangalore, Tumkur, Shimoga and Bellary Districts. These coins contain lion on the obverse. This lion is similar to that of the Hoysala coins. But the reverse contains boar and other symbols which are not found in the Hoysala coins. These coins are taken to be those issued by the Hoysalas.

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5. Lewis Rice, *Find of Roman coins near Bangalore*.
6. Tufnell, *Catalogue of Mysore Coins*.
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12. ಸುಂದರ, ಅ., 'ಎರಡು ಸಾವಿರ ವರ್ಷ ಹಿಂದಿನ ಕರ್ನಾಟಕ ನಗರ ಬೆಂಗಳೂರಿನ ಬಳಿಯ ಉತ್ಖನನದ ವಿವರ', ಸಂಯುಕ್ತ ಕರ್ನಾಟಕ,

(j) *Vijayanagar Coins*

A considerable portion of the numismatic discoveries during the period under review pertains to that of Vijayanagara dynasty. A total of about 900 gold coins have been found in Bidar, Raichur, Bellary, Belgaum, Dharwar, Chitradurg, Hassan, Tumkur, Bangalore, Mysore and South Kanara Districts. These coins include various denominations such as quarter *varahas*, half *varahas* and *varahas*, and are mostly issued by the kings Harihara II, Devaraya II, Krishnadevaraya, Achyutaraya and Sadasivaraya. The types of the coins are *Lakshminarayana*, *Bala Krishna*, *Umathesvara*, *Gandabherunda* etc.

(k) *Coins of Mysore Kings*

Another considerable portion of the discoveries consists of about 2300 coins belonging to Mysore Kings. These coins found mostly in Bangalore, Hassan and Kolar Districts, are of gold, silver and copper. These coins are mostly *panas*, *half varahas* and *varahas* issued by Kanthirava Narasaraja Wodeyar, Haidar Ali, Tipu Sultan, and Krishnaraja Wodeyar III.

(l) *Other Coins*

A large portion of the discoveries is that of the Kings of the family of Adil Shahis of Bijapur and Moghuls consisting of about 1400 gold, silver and copper coins. These coins were found mostly in the North Karnataka. About 1000 coins of British period were also found. Mostly they are silver rupees of the period of Queen Victoria.

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18. Desai, P.B., *Gold Coins of Dandinagova, Ep. Ind.*, Vol. XXXII, pp. 77-78.
19. *Ind. Ant.*, Vol. XII, pp. 95 ff.
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## VII. HISTORICAL RECORDS AND MANUSCRIPTS<sup>1</sup>

The Indian Historical Records Commission, under the auspices of the National Archives of India, New Delhi, sponsored a scheme of National Register of Historical Records, according to which every State Government was to constitute a Regional Committee for the Survey of Historical Records and Manuscripts. The scheme envisaged a systematic survey of historical records and manuscripts, in private custody, and their documentation. This work was entrusted to the Department of Archaeology in Karnataka.

Accordingly, Government of Karnataka constituted a Regional Committee for the purpose. A district-wise survey of historical records was carried out. The main sources for collection and documentation, by this survey were the religious *mathas* (monasteries) and institutions, individuals who held professional positions such as Desais, Deshpandes, etc., in the erstwhile states and principalities. During the survey, while it was endeavoured to collect the records, mostly the work pertained to documentation only. A summary report on the work done by the Regional Committee has also been published.<sup>2</sup>

In the following pages, a brief description of the important records belonging to various dynasties and chiefs noticed by this survey is given.

It is of considerable interest to go through the nature of various records found in the private possession of some individuals and some of the religious institutions in the State.

### (a) Vijayanagar Rulers :

One of the records found at Nayakanahatti is a Copper Plate grant made by king Tirumalaraja ("Srimanmahamandalesvara Ramaraju Kodanda Ramaraju Tirumalarajadeva maharajulugaru") registering the grant of villages called Bukkasagara, Hirigasamudra, Kalasapura, Kamalapura and its tank to Doddamallappa Nayaka, pleased with his obedience to the King, to be enjoyed for ever. It is a *nirupa*. The usual name 'Virupaksha' is found at the end. The record is in Telugu and contains 16 lines.

### (b) Nayaks of Ikkeri and Keladi :

The 'Ashtamathas' at Udipi have been good repositories of records and manuscripts datable from the 17th to the 19th Centuries. Some of the '*Nirupas*' issued by the rulers like Bhadrappa Nayak, Venkatappa Nayak and Queen Chennammaji of Keladi and Hyder Ali, Tipu Sultan and Krishnaraja Wodeyar III were found to have been copied in an old bound book which is itself datable to the 19th Century.

Thirtyfive old documents were examined at Challakere in Chitradurga District. Twelve of them refer to the early rulers of Vijayanagar and the Nayak Chieftains of Nidugal, Anegondi and Nayakanahatti, which flourished as small principalities under the suzerainty of the Empire. The records reveal to us the close contacts which existed between the successive kings of the Vijayanagar Empire and the Nayaks of Ikkeri and Keladi. We also get a glimpse of the religious life of the people during that era.

One of the records is a *nirupa* issued by King Rangaraja ("Srimadrajadhiraja Veerapratapa") of Vijayanagar ("Vidyanagara") to Tippanaraja, the ruler of Nidugal, appointing the latter as the custodian of "12 Boxes" (pertaining to Gods) etc. The signature of King Rangaraja is found at the end.

The records found at Keladi and Ikkeri in Sagar taluk, Shimoga district, are of supreme historical significance for the study of history of the period. Among all the minor dynasties of Karnataka, those of the Nayaks of Ikkeri and Keladi are of great importance. The rulers of these families were distinguished for their exceptional valour, intellectual brilliance, fabulous wealth, magnanimous temperament and religious fervour. They had developed very cordial relations with the monarchs of Vijayanagar Empire. King Basavaraja of Keladi was the author of a monumental encyclopaedia called 'Sivatatva Ratnakara'. Queen Chennammaji of Keladi valiantly fought with the Moghul Emperor Aurangzeb just after the fall of Vijayanagar.

Thus the Nayaks of Keladi and Ikkeri endeavoured much to defend and promote Hindu Culture and tradition against the onslaughts of the Moghuls, the Sultans of Bijapur and Ahmednagar and Hyder Ali of Mysore.

There is a medieval Veerasaiva Mutt at Keladi built under the patronage of the celebrated king Basavaraja. Three Copperplate grants issued by him on the occasion of the religious ceremony of his mother Queen Chennamambe to Sri Chenna Veeraswamiji and Smt. Gangadevi, the royal preceptor and his spouse respectively, were found in the custody of the present Head of the Mutt. These plates reveal that the Mutt was caused to be built by the same king Basavaraja.

In the same Mutt, 14 more records on paper pertaining to the times of the successive rulers of Keladi were also examined. Most of them are found to be in the form of correspondence between the Queen Mother and the kings of Keladi, as well as between the royal preceptor and Hyder Ali of Mysore. These original documents are of considerable historical interest as they throw welcome light on the political and cultural history of the period.

A document (*Kadata*) found in the possession of the Swamiji give the genealogy of the Nayaks of Ikkeri and Keladi along with their history in brief.

Another *Kadata* is a historical poem composed by Smt. Gangadevi, wife of Sri Chennaveeraswamiji, dealing with the history of the Keladi rulers till the time of king Basavaraja.

One of the *sannads* is issued by Hyder Ali Khan of Mysore to Sri Siddalingadevaru of Keladi. While acknowledging the letter and the original *sannad* sent by the royal preceptor, Hyder Khan grants confirmation to the gardens and other landed property and special honours conferred by the Keladi kings. Further, he categorically assures the preceptor that all the things and honours bestowed upon him would continue to be enjoyed by him and his descendants. Hyder Khan had also requested the Swamiji to send him his blessings frequently. The seal at the top bears the legend 'Hai-ki-Jai' and he has signed the document.

Sixteen records of considerable historical interest were found in the Historical Records Office at Panaji, Goa. They are in the form of correspondence in Kannada and Persian, belonging to the period of the Nayaks of Ikkeri and

Keladi and Hyder Ali. The letters are addressed to the Portuguese Viceroys in the names of the Keladi kings Somasekhara Nayaka and Basavappa Nayaka and Hyder Ali. The theme of the correspondence is trade and commerce between these rulers and the Portuguese. It is also learnt from these records that the rulers of Malabar were obstructing the commercial contacts between them. Therefore, the Portuguese who had maintained cordial relations with the Malabaries, were asked to intervene and restore trade and commerce between the Keladi Kingdom and Portugal.

But the majority of important records dealing with Karnataka History and Culture, are known to be in the Portuguese language and yet to be studied in detail.

(c) *Wodeyars of Mysore* (See Pl. XXIV b) :

A palm-leaf manuscript of historical nature found at T. Narasipur, Mysore District, is of interest as it consists of copies of about 15 records datable to the 18th century. They refer to a grant of an Agrahara made by Dalvay Devarajaiah of Mysore in 1749 A.D. and rest of the records pertain to the regime of Krishnaraja Wodeyar II. All of them are *Nirupas* issued by the king conferring the grant of revenue from some of the villages in Mysore District, upon the *Donnas* of the Agrahara. We also learn that Dalvay Devarajaiah was dominating the political affairs in the Mysore Court, the king himself having been relegated to the background. The *Nirupas* also shed light on the revenue administration in Mysore in the 18th Century.

A *sannad* was found in a mosque at Gubbi, Tumkur District. It was issued to the Khaji of the mosque recording details of the grant of lands for its maintenance. Dewan Purnaiah has signed the document.

At a mosque in Chitradurga were found three *sannads* issued by the king Sri Krishnaraja Wodeyar of Mysore to one Khaji Syed Mohiyuddin Husseini, granting him 10 varahas as a grant per month for the upkeep of the mosque. The King has signed in the end 'Sri Krishna'. On the top left side of the record is found a seal bearing the legend 'Sri Chamaraja Wadera Tanuja Krishnaraja Wadera' in Devanagari. These *sannads* bear testimony to the catholicity of outlook and generosity of mind of the Wodeyars of Mysore.

At Gubbi Hosahalli, Tumkur District, were found 28 *sannads* and *nirups* issued by the King Sri Kanthirava Narasaraja Wodeyar, Sri Krishnaraja Wodeyar, Sri Chikka Devaraja Wodeyar, Sri Chamaraja Wodeyar, Dalvoy Veera Rajaiah of Mysore and Nawab Hyder Ali Khan, Nanjarajaiah, Dalvoy Devarajaiah and Sri Pradhana Channappayya of Mysore to Sri Honnappa Gowda and his descendants of Gubbi Hosahalli.

These documents speak about the cordial relations which existed between the kings of Mysore and the Chieftains of Gubbi Hosahalli. The Chieftains were held in very high regard by the Kings and the former in turn had absolute devotion, loyalty and obedience to the latter.

One of the 28 documents is a letter written by Sri Pradhana Channappayya of Mysore to Sri Honnappa Gowda of Gubbi Hosahalli, informing the latter about the desecration of the Channakesava idol at Kaidala by Nawab Nasserjung, and that he should take measures to install there the Channakesava image lying in the Beteraya temple at Gubbi, which was not under worship.

One original record on paper, of interest, was found in the possession of Sri D. Puttaswamy, an eminent advocate of Mangalore. It throws light on the contacts between the Mysore King Sri Krishnaraja Wodeyar III and the authorities of Sri Manjunathesvara temple at Dharmasthala. It is a *nirup* sent by the king to Sri Manje Heggade and is dated in Prabha Samvat-Kartika-ba-1 (corresponding to the 12th Wednesday, November, 1867). Two signatures of the king are found—one on the cover itself containing the *nirup* and another on the document. A seal with a Persian legend, partly broken, is found on the cover along with the signature of the King.

The substance of the *nirup* is that Shri Kumara Heggade had sent a troupe of actors ("*Rakshasavesha Hakuvaru*") to the royal court at Mysore, which was kept there permanently. The king informed that unfortunately some of the actors in the troupe had expired and hence Shri Heggade might send another set of such actors. "Sri Krishna" in Kannada, is the King's signature found on the document. It may be mentioned here that even today an Yakshagana troupe is maintained by Manjunathesvara temple at Dharmasthala, and is sent to perform outside.

(d) *Hyder Ali and Tippu Sultan and Dewan Purnaiah* :

At Mulbagal, Kolar District, three *sannads* issued by Hyder Ali, Tippu Sultan and Dewan Purnaiah were found in the possession of Sri Keshavachar, the Head Archak of Sri Anjaneyaswamy temple. All the three have made grants for the maintenance of the temple.

The Sreepadarayara matha, headed by His Holiness Sri Satyanidhitirtha, has in its possession 29 *sannads*.

From the 4 *sannads* issued by Sri Krishnaraja Wodeyar, it is learnt that the King had granted all the necessary materials for the observance of *Chaturmasa* by the Swamiji. In one of the *sannads*, the King has written the last few lines in his own hand. Eight *sannads* issued by Dewan Purnaiah contain instructions to the revenue authorities to restore all the old grants to the Mutt without any obstacles.

In one of the *sannads*, Hyder Ali has assured the Swamiji of the Mutt that all the old grants would be continued without any disturbance. The letter '*Hai*' in Persian is the signature found on the record. Two more such *sannads* issued by Tippu Sultan to the Swamiji reinforce the assurance of Hyder Ali.

At Kolar, in the custody of one Sri Abdul Latif, who is residing near the famous Darga, two manuscripts on paper were found. They are in Urdu. One of them contains details about the twelve tombs in the Darga belonging to the ancestors of Hyder Ali and Tippu Sultan and their names are also mentioned in it. The document also gives a detailed account of the Maqbara, particularly about the tombs of Fateh Mohammed and Razia Bibi, the parents of Hyder Ali. It also speaks of the visits paid to the Darga at Kolar by Hyder Ali and Tippu Sultan and about the grants made by them. '*Sardar Sahib*' Dewan Purnaiah was entrusted the task of constructing the Darga. The author of this manuscript was one Mohammed Usman.

The second manuscript is called *Hyder Nama*, written by Mohammed Habib, after he had read the original. It narrates the history of Hyder and Tippu in detail and also deals at length with the struggle between Hyder Ali and Tippu Sultan and the British and the Nizam of Hyderabad. It also reveals the friendly relations of Tippu with the French.

(e) *Coorg Rajas* :

Ninety-nine historical records were surveyed at Arkalgud, Hassan District. Most of them are dated between the years 1830 and 1860 A.D., and are original documents issued by the Revenue Offices and Local Courts. They are of considerable importance for a study of the judicial and revenue administration of the East India Company. A few of the records in this series pertain to the period of the Coorg Rajas also.

Recently ten letters of the family of Coorg Rajas have been collected by the Government Museum at Mercara. Of these, seven belong to Virarajendra Wodeyar I and three to Lingarajendra II. They are *Nirups* (Pl. XXIV a).

(f) *Maratha Chieftains* :

The Mutt at Sivaganga, Bangalore District, has preserved some *nirups* and *sannads* issued by the Maratha Peshwas. These records are in Modi-Marathi and are interesting as they reveal the high esteem and reverence in which His Holiness of the Sivaganga Mutt was held by the Peshwas. We also learn from these documents that His Holiness was highly honoured in the Maratha country and even without prior intimation about his visits to that country, the Officers of the Peshwas had been issued standing orders to the effect that the Swamiji should be offered all the usual honours due to him.

(g) *Miscellaneous* :

(1) *Vittal Hegdes—South Kanara and Vittal* :

One Hundred and fifty records were studied at the Phalimar Mutt, Udupi. Most of them are in the form of correspondence between the *Pithadhipathis* of the Mutt such as Raghurathna Tirtha, Raghubhushana Tirtha and the people of the villages round about Udupi. The records range in date from 1810 to 1860 A.D., and provide an insight into the socio-economic and religio-political life of the people of South Kanara during that period.

Some of the extremely interesting historical documents were studied in the Palace at Vittal, South Kanara District. Ravivarma Krishnaraja, the custodian of these records, is the direct descendant of the family that ruled the area around Vittal right from 14th century A.D. The Chief-

tains of this line are known as 'Vittal Heggades' and a number of lithic and copper plate records testify to their sway over this part of the country right from the time of Vijayanagar upto the 18th century. The Chieftains continued to be acknowledged as the rulers of the area even after the accession of the region to Hyder Ali. But during the war between Hyder Ali and the East India Company in 1766, the Vittal Chieftains seem to have supported the Company, and enraged by this, they were ousted by Tippu Sultan in later years.

The old documents found in the possession of the present Raja are datable from 1800 to 1866 A.D. They may be classified into two series—(a) Accounts and (b) Correspondence. They are a veritable source for the reconstruction of the economic history of the period.

Among the records relating to correspondence, there is one which is very interesting. It reveals that one Appadikshita, disciple of Chitrambara Dikshita and a devotee of Ujini Mahalakshmi, narrates that the Company troops had entered and desecrated the Mahalaxmi temples at Kolhapur and Ujini, after plundering them. The record further informs, that enraged by this act of desecration, the Goddess herself killed many of the people who participated in it and also 'appeared' on some persons threatening that she would uproot the army and the kingdom of the British in addition to the release of epidemics. If such a thing was to be found anywhere, it was to be considered that it was the inevitable consequence of the misdeeds of the Company government. The record is interesting as it shows how political chaos and unrest were spreading throughout the country, exciting the religious sentiments of the people by interpreting the occurrence of natural calamities like epidemics due to the misdeeds of the Company rule.

(2) *Nayaks of Nidugal, Anegondi, Nayakanhatti and Chitradurga* :

Thirty-five old documents were examined at Challakere in Chitradurga District. Twelve of them pertain to the latter part of the 14th century and refer to the early rulers of Vijayanagar and the Nayak Chieftains of Nidugal, Anegondi and Nayakanhatti which were small principalities under the suzerainty of the Empire. The records reveal the kind of contacts which

existed between the successive emperors of Vijayanagar and the Nayak Chieftains. We also get a glimpse of the religious life of the people during that era.

One of the documents discovered at Challakere reveals the history and the dynastic lineage of the kings of Anegondipitham, a prominent principality under the suzerainty of the Vijayanagar Empire.

Six copper-plate grants were found at Chitradurga. They narrate the pious deeds of

the local Chieftain Madakari Nayaka and others of his family.

A record found at Arsikere, Pavagada Taluk, Tumkur District, provides the history of the rulers of Nidugal in brief. It also informs about the contacts between the Nidugal Chiefs and Hyder Ali and Tippu Sultan.

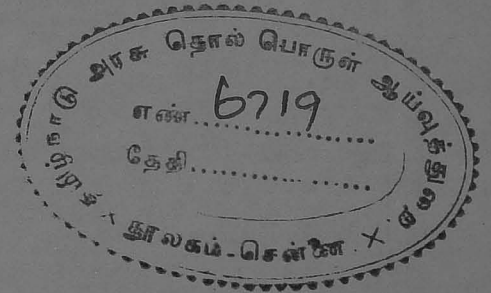
One document from Edeyur in Tumkur District gives in detail the names of the various disciples of Sri Siddalingesvaraswamy of the Edeyur Mutt.

\* \* \* \* \*

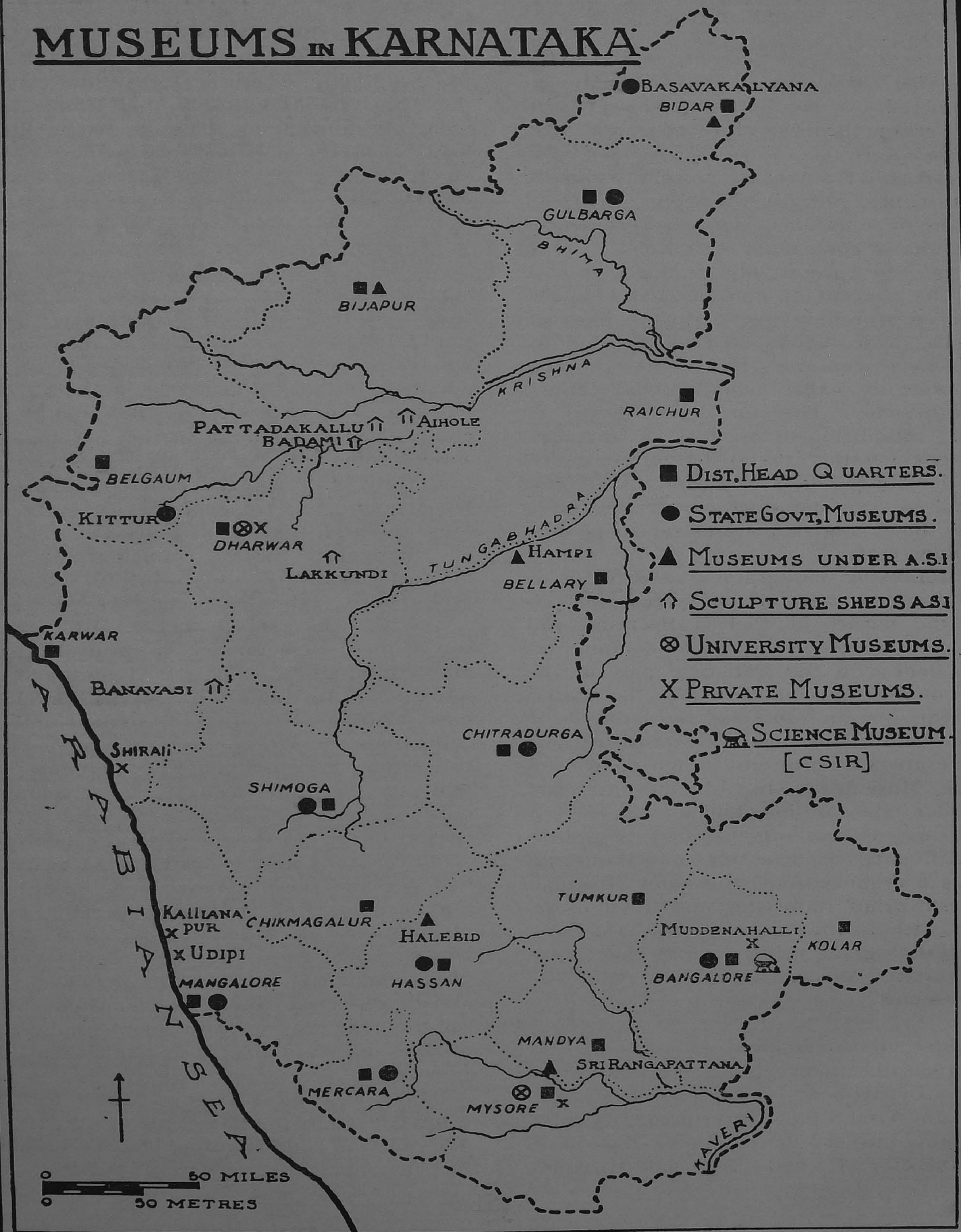
*References :*

1. This section was compiled by Shri D. V. Devaraj of this Directorate who also carried out part of the Survey of Historical Records.

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# MUSEUMS IN KARNATAKA



Before 1956, the erstwhile State of Mysore could boast of only a couple of Museums in the State. The reorganisation of States and the unification of Karnataka in 1956 added the Museum of Art and Archaeology of the Kannada Research Institute, Dharwar. Since then, a large number of museums, both Governmental and private, have come into existence. Today Karnataka can be proud of as many as 28 museums. The concept of museum has changed from that of a storehouse of curios to that of an institution, dedicated to educate the public. The State is today conscious that a museum can make the public to realise visually what cannot be done otherwise. Therefore, the State is aiming at the establishment of museums in every district besides helping the existing museums, enrich and develop. For, such museums are not only essential to save and store our art treasures and heritage, but bring rich art closer to people, to see and appreciate.

In the following paragraphs an attempt is made to give an account of Museums in Karnataka, the nature of their collections and the service they are rendering to the community.

Now to deal with the statistical part of the distribution of the museums, it may be stated that under the direction of the Department of Archaeology and Museums, Government of Mysore, there are 9 institutions, which have been classified as Museums. They include an art gallery. Under the Archaeological Survey of India, there are 4 museums and 3 sculpture sheds. The Council of Scientific and Industrial Research has 3 organisations, the chief of which is the Visveshwariah Industrial and Technological Museum with its headquarters in Bangalore. It is a matter of great pride to find that there are 3 University Museums and as many as 5 private museums.

#### *Museums under the Government of Karnataka :*

Before 1960, the then existing museums were under the Department of Industries and Commerce. In 1960, the Government decided that these museums should be under the direction of the Director of Archaeology and Museums

in the State. Therefore, the administration of the Museums were transferred from the Department of Industries and Commerce to the Department of Archaeology and Museums. As already stated there are at the moment 9 museums under the Department of Archaeology and Museums.

#### *1. Government Museum, Bangalore :*

The Government Museum at Bangalore started functioning in a rented building during the year 1865 with the specimens donated by public. A separate building in the Cubbon Park was constructed by the Government on the lines adopted in the Western Countries. The new building was occupied in 1879 and the museum commenced functioning in the new building from 1880. Some of the specimens such as coins, sculptures, inscriptions, etc., excavated by the Department of Archaeology were given to the Museum and they are displayed. The museum at Bangalore is a multipurpose museum. Separate galleries for natural history, art, architecture, ethnology, etc., are provided.

With the small grant allotted by the Government, specimens on natural history, art and ethnology were acquired and added to the museum. In addition, some philanthropists have also donated rare specimens out of their collections to the museum. Since 1935, the collections of specimens by purchase, gift and exchange were increasing. It was found that the building was insufficient to present all the specimens on modern methods. The show cases, display stands and pedestals previously acquired had become obsolete and new ones had to be purchased. After Independence, the importance of museums in the country was keenly felt. During the 2nd and 3rd Five Year Plans, Government of India sanctioned financial assistance to the Government museum, Bangalore for the construction of Museum Annexe, purchase of museum equipment and publication of picture post cards.

The Central Advisory Board for Museums resolved for the establishment of regional museums in the country. In accordance with the decisions of the Central Advisory Board of

Museums, the question of establishment of regional museums in the State of Mysore was taken up for serious consideration. Since then, the following regional museums have been established in the State.

2. *Sreemanthi Bai Memorial Government Museum, Mangalore :*

The Sreemanthi Bai Memorial Museum is one of the prime tourist attractions of the city of Mangalore. Situated on a prominent hillock, in the Kadri hills, it commands a magnificent view of Arabian Sea, the Western Ghats and one can easily identify that familiar land mark, the "Kudremukha" from the terrace of the building. The building itself is a beautiful structure constructed in the shape of a ship with Italian mosaic flooring. It consists of a ground floor, the first floor and an open terrace with a room on the top and an underground strong room for storing valuables. It is located in the centre of an attractively laid garden.

The present Sreemanthini Bhavan in which the museum is housed, was gifted in 1957, to Government of Mysore by Late Col. V. R. Mirajkar, one of the foremost surgeons in the country, for the purpose of organising a museum to perpetuate the memory of his beloved mother Sreemanthini Bai. While gifting the Building and the land on which it is situated the donor has also gifted a large collection of valuable objects of art which formed nucleus for starting a museum. The museum was declared open to the public on May 4th 1960 by Sri B. D. Jatti, the then Chief Minister of Mysore.

The building as already mentioned, consists of a ground floor, first floor and a terrace with a room. The art objects in the collection of the Museum can be broadly classified into 4 groups.

1. Art
2. Archaeology
3. Ethnological and
4. Natural History Specimens.

The ground floor of the building is mainly donated for the presentation of art, archaeological and ethnological specimens. The first floor houses the specimens of natural history. Within 10 years of establishment the museum has made very good progress and has become very popular, particularly among students. The public of Mangalore have been responding enthusiastically to the many

sided programmes and special exhibitions conducted by the Government Museum. Special exhibitions form part of activities, among which mention may be made of the following with the said themes :

1. "Crib to Cross" on Christmas day
2. "Children Painting"
3. "Festival of lamps" arranged on the festival of Deepavali.
4. "Exhibition of coins"
5. "Rare silver ware"
6. "Artists of South Kanara"
7. "Life of Mahatma Gandhi" from Photographs.
8. One man show by local artist Sri P. N. Punchithaya.

Besides organising such special exhibitions, the museum avails every opportunity to participate with the public actively in any special exhibition organised by the other educational institutions in the region. We will be failing in our duty if we do not remember the help and service rendered by Sri C. J. Padmanabha, I.A.S., who helped in no small measure to enrich collections of this museum.

3. *District Museum, Shimoga :*

There was a great demand for a museum in the district headquarters of Shimoga. Thanks to the help and enthusiasm of many local people and particularly of Sri H. L. Nagegowda, I.A.S., a museum was started in the present Library building in the town of Shimoga. It is still housed in the Library building. It is the desire of the Government to have a building of its own commensurate with the needs of the city and the needs of the collection. Collections of this museum consist mostly of Art and Archaeology. A large number of sculptures have been collected and presented in the museum. As we know, the district of Shimoga and the adjacent district of North Kanara are very rich being the centre of the early Kadamba Dynasty. This art is full of beautiful specimens of sculptures and it is our endeavour to enrich the Museum and give an opportunity to the public, to the students of this area to see and enjoy the early art of Karnataka.

4. *Government Museum, Gulbarga :*

The twin domed-structures on the Sedam Road, Gulbarga, were renovated for housing the

regional Museum. The Museum is now one of the important institutions, in the area. Because it has one of the most valuable collections of early art of Karnataka. The site of Sannati in Chittapur taluka was discovered in 1965 and from surface explorations at this site a very rich collection of antiquities has been made including terracotta figurines, coins, stone sculptures and inscriptions. All these antiquities definitely prove the existence of Buddhism in this part of Karnataka. In the site itself there are monumental evidences such as the remains of Buddhist Stupas. These antiquities, on comparative evidence can be dated from 1st century B.C., to 1st Century A.D. Therefore, the regional museum at Gulbarga is of great importance. Besides these valuable antiquities, the Museum also has a collection of coins, pre-historic tools etc.

#### 5. *Government Museum, Basavakalyan :*

Basavakalyan is a very important town in the region. It was the capital of the Chalukyas and was known in the 10th-12th Centuries A.D. as Kalyani. The town has an old fort and within the fort a museum has been started and the museum consists of specimens, such as inscriptions, sculptures etc., and almost all the specimens come from the region itself. It serves the purpose of a site museum.

#### 6. *District Museum, Madikeri :*

This museum was started in 1971. The museum at the moment is housed in an old Church. It has collections of antiquities made in the surrounding area. The most important antiquities in this museum include a large number of sculptures, mainly of the Tirthankaras, a number of coins and documents belonging to the Coorg Rajas. This Museum deserves to be developed further.

#### 7. *Local Antiquities Museum, Chitradurga :*

Thanks to the personal effort and love for the local antiquities of one Sri Hullur Srinivasa Jois, a small museum was started. Initially it consisted only of antiquities from the famous site of Chandravalli which was excavated by the Department of Archaeology and Museums in 1947. But later on, it increased its collection from the area around. The tradition was continued by the son of Sri Hullur

Srinivasa Jois, who was an Honorary Curator, when the museum came under the administration of the Department of Archaeology and Museums at a later date. Now Sri H.S. Panduranga Jois is the Honorary Curator of the Museum. The museum is located in the 2 rooms at the gate locally called "Rangayyana Bagilu". The antiquities presented are mainly of local importance and are collected from Chandravalli, Brahmagiri and Chitradurga itself. Many of the antiquities belong to the famous Nayaks of Chitradurga. Recently, with a view to develop this museum, a new room has been constructed above the Rangayyana Bagilu and it is hoped before long a new site will be available for the construction of a suitable building for museum at Chitradurga.

#### 8. *Kittur Rani Channamma Memorial Museum, Kittur :*

Kittur is a famous principality and its queen Channamma Rani very bravely fought the English. Thanks to the unshinced interest of the then Minister for Education Sri S. R. Kanthi, a museum to commemorate the famous queen of this small principality of Karnataka came into existence in 1967. This museum is also of regional importance. The museum fortunately has a building of its own situated within the ancient fort of Kittur, a few yards away from the remains of the Palace of Kittur. The museum has specimens of Armoury, Coins, Sculptures and inscriptions. The Kittur Rani Channamma Memorial Committee has donated a land in the adjoining area within the fort itself for the construction of a building for this museum.

#### 9. *Sri K. Venkappa Art Gallery, Bangalore :*

The State Government was very seriously considering the establishment of an Art Gallery in the State capital. This cherished desire fructified itself when Sri Ramaraju, the nephew of late Sri K. Venkatappa an artist of international repute, came forward to present to the Government of Mysore, the art works of Sri K. Venkatappa. In 1966, Government of Mysore decided that an art gallery with the collection of the famous paintings, bas-reliefs in plaster of Paris and musical instruments—all creations of Sri K. Venkatappa,—as the nucleus. The result is now people can see a beautiful piece of modern architecture, executed by the State Public Works Department, adjacent to the Government Museum,

Bangalore. This building is named after artist himself and is situated in an idyllic spot in an artificially created Island. One of the interesting features of this art gallery is that the entire gallery is Air-conditioned. The building is planned to have 5 floors in course of time. Now, only the ground floor and the first floor have been completed (Pl. XXV a).

Besides the permanent exhibitions, all the above Government museums organise periodic exhibitions. Regular film shows and guided tours form the main educational activities. Frequent requests from schools and colleges from rural areas, and other cultural organisations, to arrange special exhibitions are also promptly complied. In short the State Museums are trying to serve the community in the process of social change.

#### *Museums under the administration of the Archaeological Survey of India :*

The Archaeological Survey of India decided to establish as many site museums as possible in the entire country. In the State of Karnataka 4 such museums have been established at places of great historical interest. These are located at Halebid, which was anciently known as Dwara-samudra, the capital of the Hoysalas ; Hampi, the capital of the Empire of Vijayanagar ; Bijapur, the Capital of Adil Shahi's of the Bahmani Kingdom ; and Srirangapatna, famous for the Mysore Tiger, Tippu Sultan.

The Museum at Halebid is located within the temple complex of the Hoysaleswara. In one of the corners of open area, a museum of sculptures has been established, presided over by a Curator. The collections of this museum consist of sculptures found in the area around Halebid. The entire region is full of sculptural wealth and the Archaeological Survey of India must be congratulated on this novel idea of this site museum.

The next site museum is at Hampi, known as Vijayanagara. In this City of Victory, the museum has been established by the Archaeological Survey of India, with a Curator in charge. At the moment, the sculptures and various antiquities collected from the area around have been housed in the Gaja Sala, or Elephant Stables. It is the endeavour of the Archaeological Survey of India to construct prominent

museum buildings for these site museums.\*

Thirdly, the city of Bijapur is famous for the monument of Golgumbaz. Here again the museum has a Curator and is housed in the *Nagarkhana* of the gumbaz. The collection in this museum consists of beautiful miniature paintings of the Bahamani period, sculptures, inscriptions and coins. The main purpose of this museum is to collect antiquities of the region, and exhibit them there for the benefit of the public.

Finally, the site Museum established in 1959 at Srirangapatna is located in the *Darya Daulat Bagh*, the summer palace of Tippu Sultan. The museum has a collection of antiquities from the area mainly consisting of coins and paintings belonging to the reign of Hyder and Tippu.

In the recent past, because of the enormous rise in the theft of art treasures of our country, the Archaeological Survey of India, formulated a policy of collection of sculptures from sites of importance and then place them under the custody of one of the staff members of the Archaeological Survey of India, in specially constructed sculpture sheds. For our purpose it will not be wrong to take them as museums. In the State of Karnataka, there are 4 such sculpture sheds under the Survey. They are located at Badami, Aihole, Pattadakal and Balligave. These sites have yielded a rich collection of sculptures from around the area. The excellent conservation work carried out by Sri S. R. Rao, Superintending Archaeologist, Archaeological Survey of India, at Aihole, Pattadakal and Badami brought to light magnificent pieces of sculptures of early Chalukyan period and are to be housed in these sheds which in course of time will become site museums.

*Science Museums under the Council of Scientific and Industrial Research :*

*Visveshwaraiah Industrial & Technological Museum, Bangalore : \*\**

The Council of Scientific and Industrial Research established 2 Science Museums, one in Calcutta and other, fortunately in the State of Karnataka, at

\* Since this was written, the museum is housed in a modern building at Kamalapuram and opened to public in 1977.

\*\* I am grateful to Shri R. Chakraborti, Sr. Curator, Visveshwaraiah Industrial & Technological Museum, for the information ; M. S. Nagaraja Rao.

Bangalore. A learned Society called the Visveshwariah Industrial Museum Society constructed a museum building on Kasturba Road, Bangalore to commemorate the memory of the famous Engineer-Statesman *Bharata Ratna*, Dr. Sir M. Visveshwariah. In 1962, the Society donated the building to the Council of Scientific and Industrial Research for setting up an Industrial and Technological Museum. Today we have the Visveshwariah Industrial and Technological Museum in this building.

The aims and objectives of this museum are to collect, restore and preserve important historical objects which represent land marks in the development of Science, Technology and Industry to portray the growth of Science and Technology and their application in industry and human welfare ; to popularise science and technology in cities, urban and rural areas for the benefit of students and common man ; to supplement the Science education given in schools and colleges to train teachers in improving scientific teaching aids towards further science education for students, to render assistance to Universities, Technical institutions, schools and colleges in planning Science Museums and also training of museum personnel in museum profession to conduct research in the History of Science and Technology, to design and develop demonstration equipment and scientific teaching aids for furtherance of science education. It must be admitted that the museum has more than fulfilled its cherished ambitions so far. The museum has till now set up the following galleries :

1. Electronic gallery
2. Motive Power Gallery
3. Popular Science Gallery
4. Timber and Paper Gallery.

In addition to the above 4 galleries, exhibits on the life and activities of Dr. Vishveswariah, different types of ores and minerals and various models of spacecrafts are on exhibiton. In all the galleries a certain amount of historical background is introduced and the objects are so arranged as to tell a sequential story and to appear interesting and attractive, so that the visitors may feel that learning Science is a pleasant experience. The exhibits are designed to suit the modern Museum standards and are all participatory exhibits. Guided tours are arranged round the galleries on request and at fixed time,

and demonstrations are given on certain important working exhibits.

#### *Regional Science Centres :*

Under the Visveshwariah Industrial and Technological Museum, two separate branches have been actively participating in educating the people about Science. One is Regional Science Centre and another is a Mobile Science exhibition.

The Regional Science Centre is located at Gulbarga. As the Industrial & Technological Museums are situated in the principal cities, the rural population cannot make much use of them due to conveyance difficulties and high cost of transport. Hence it is desirable that every big city in the State with a population of more than one lakh should have a Science museum or a Regional Science Centre. With this end in view, the Regional Science Centre at Gulbarga was inaugurated in November 1970 with 32 exhibits with the theme "*our familiar electricity*". Recently the exhibits have been replaced with a new set of 32 exhibits on popular science. The Regional Centre runs a hobby centre also, screens Scientific films, conducts demonstration lectures for the high school students. The Vishveswariah Industrial and Technological Museum have plans for setting up of such Regional Centres at Bellary, Mangalore and Hubli/Dharwar, and the State Government is actively considering the grant of land and building for the purpose in all the above places.\*

#### *Mobile Science Exhibition :*

To take Science to the door of the common man, the Vishveshwariah Industrial & Technological Museum organises popular Science exhibitions and sends them to rural areas in specially designed mobile units. Each unit consists of a pulling unit and a trailer with 24 exhibits on a particular theme. The first unit on "*Water the fountain of life*" was inaugurated in April 1970, and so far visited all the districts and talukas of Karnataka State. The second unit has for its theme "*Man must measure*".

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\* Since this was written, the State Government has granted land and Rs. 4 lakhs for the building at Gulbarga.

### *University Museums :*

Karnataka State has 3 museums under the administration of the Universities. One is in Dharwar and two in Mysore.

#### *Museum of Art & Archaeology, Kannada Research Institute, Karnatak University, Dharwar :*

The Kannada Research Institute was started in 1939. Formerly, it was administered by the Government of Bombay. After the reorganisation of states, the Institute came under the Government of Mysore and later on, it was taken over by the Karnatak University. Under the patronage of Government of Bombay, the Institute started a museum of Art & Archaeology. The main collections of this museum constituted sculptures and a very rich collection of inscriptions which was set up in the form of palaeographic gallery and thousands of palm leaf manuscripts. Under the administration of the Karnatak University, the museum got a building of its own and is now a well organised museum with a sculpture gallery and gallery of inscriptions and main museum hall which has been remodelled recently on modern exhibition methods. Its valuable collections include pre-historic antiquities and ancient and medieval inscriptions, a large number of Copper Plate grants, wooden figures, paintings particularly those of the Adil Shahi period of Bijapur and antiquities collected from the excavations conducted by the Institute. The museum is research oriented and students and scholars benefit by the museum (pl. XXV b.).

#### *Museums under the University of Mysore.*

There are 2 museums under the administrative control of the University of Mysore.

##### *1. Museum of Art & Archaeology :*

The Museum of Art & Archaeology has a fairly good collection of sculptures, and excavated materials. Being a University Museum, it is research oriented.

##### *2. Folklore Museum :*

Under the direct administration of the Institute of Kannada Studies, University of Mysore, a novel idea of establishing a Folklore Museum was thought of and very recently, the museum has been established. It has one of the best collections of ethnographic materials in Asia, which represents the entire state of Karnataka

and its folklore. The museum has no building properly suited to its collection. The University authorities are planning the construction of a building, to suit the needs of the collection.

### *Private Museums :*

As already referred to, there are 5 private museums in the State. They are : the Jaganmohan Chitrashala, Vishveshwariah Museum at Muddenhalli, Mahatma Gandhi Memorial College Museum, Chitrapur Mutt Museum at Shirali and Indological Museum, Kallianpur, South Kanara.

#### *1. Sri Jayachamarajendra Art Gallery, Jaganmohan Palace, Mysore : \**

The Jaganmohan Palace was constructed in 1861 initially for Royal residential purposes. It was constituted as a museum in the year 1915 by His Highness the late Sri Krishnaraja Wodeyar IV. The Late Maharaja transformed this into a reputed gallery of Indian Arts and Crafts in the year 1924 by adding a treasure of invaluable paintings of different schools of Art. Between the years 1932-37, the Art gallery was further extended under the able guidance and supervision of Mrs. P. Metcalfe, assisted by Sri K. Venkatappa and other artists of repute. In 1942, the Jaganmohan Palace was further extended and reorganised with the enterprise of Dr. James H. Cousins of the Department of Fine Arts in Travancore. The year 1946, again witnessed further reorganisation and prize winning exhibits in the Mysore Dasara Exhibition found their place in the gallery. The reorganisation resulted in grouping of paintings according to the different schools of Indian Art with particular emphasis on Ivory, Ceramic and Sandle Wood objects and the Indian Art Gallery. The Musical instruments and decorative arts were exhibited in the 'Vasanta' Room. Etchings and Photographic copies connected with the reign of Hyder Ali and Tippu Sultan were exhibited during the year 1950.

In 1950 His Highness Sri Jayachamaraja Wodeyar bequeathed the entire art gallery to the nation under a trust deed to be maintained as a public trust for the propagation of art and culture. The gallery has acquired the famous

\* I am grateful to the authorities of the Jaganmohan Palace for the information : M. S. Nagaraja Rao.

Ravi Varma paintings graciously presented to the gallery by his Highness Jayachamaraja Wodeyar. The gallery once again reorganised in 1960 and constituted a pictorial representations of different types of arts which affords an illustrative study of arts and culture prevailing in the different parts of the world.

The art gallery has in its treasure the invaluable oil paintings of Raja Ravi Varma, the painting of "Lady with the Lamp" by Sri Haldenkar entitled "Glow of Hope", the celebrated paintings of Nicholas Roerich, Nandalal Bose, Venkatappa and many other paintings and water colours of numerous local artists. It can also boast of a collection of the most intricate and minute carvings done on particles of rice and exquisite pieces of metallic, sandal, ivory and other objects.

#### 2. *The Indological Museum, Kallianpur :*

This museum is a result of the un stinted work of one individual Dr. P. Gururaja Bhat. He has worked all over South Kanara and visited every village and recorded large number of sculptures, Copper Plates, etc. He started an Indological Research Institute at the Milagres College, Kallianpur. As an adjunct to this Indological Institute, a small museum has been developed. It contains antiquities, such as inscriptions, Copper Plates and sculptures.

#### 3. *Rashtrakavi Govinda Pai Memorial Museum Udipi :*

The Rashtrakavi Govinda Pai Memorial Museum was started as an important programme of the Rashtrakavi Govinda Pai research centre of the Mahatma Gandhi Memorial College, Udipi. It has been a place of attraction since its inauguration in 1972. It was the culmination of the efforts of the Mahatma Gandhi Memorial College, Udipi, which saw the need for an Archaeological museum in the College to excite interest among students and kindle in them a sense of enquiry about history of their environment.

The museum is housed in the ground floor of 'Vikramashila', the new building of the college. The main collection includes sculptures in stone and wood, and paintings. The latest

acquisition of the museum consists of 71 bronzes donated by the Swamiji of Chitrapur Mutt, Mangalore.

The Institution has made a beginning thanks to the personal interest and efforts of Dr. K. S. Haridasa Bhat and Dr. P. Gururaja Bhat, and it is hoped, it will grow into a museum complex.

#### 4. *Visveshwariah National Memorial Trust Museum at Muddenahalli :*

This is a novel type of Museum. It is a personalia museum. As a befitting memorial to Sir M. Visveshwariah, his rural home at Muddenahalli is being developed as a Museum by the Visveshwariah National Memorial Trust. The Museum was thrown open to the Public on 14th May 1972.

At present the Museum's collection is restricted to the personal belongings like furniture, books, letters, photographs and the mementos of Sir M. Vishveshwariah. With a view to make the Museum more interesting, attractive and popular among the Students, Research Scholars and the general public, new sections and galleries are being planned. New collections are already forthcoming in the form of gold and silver coins, palm leaf manuscripts etc., by donation.

#### 5. *Museum and Art Gallery, Chitrapur Mutt, Shirali (North Kanara) :*

"Preservation of Ancient Art and Culture" was the aim which promoted His Holiness Parijnanashrama Swamiji of Chitrapur Mutt, Shirali, to start a museum in a part of his Mutt premises. He has already ear-marked a land, on a prominent hill, a couple of kilometres from the Mutt, for the Museum building. The museum was launched on 16th April 1973.

Most of the pieces exhibited were collected from the old Saraswat temples in the districts of Kanara and also from some of the old Saraswat houses where they were found dumped, or deposited reverantly in wells, as it is ordained in the scriptures that mutilated idols should not be worshipped. The personal efforts of the Swamiji have largely enriched the collections.

The collection includes 134 bronzes, 23 sculptures, 7 copper plates, 1300 coins, 150 leaf manuscripts.

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## IX. CONSERVATION OF MONUMENTS

The State of Karnataka is extremely rich in ancient and historical monuments. These monuments fall into two categories, viz., Monuments of National importance, which are looked after by the Archaeological Survey of India, and Monuments protected by the State Directorate of Archaeology and Museums.

There are more than 460 monuments of National importance.<sup>1</sup> These have been divided between two circles, and are under the administrative control of the Superintending Archaeologists with their headquarters at Aurangabad and Madras. Thus the Officer in Aurangabad has 260 monuments in the districts which were in the erstwhile states of Bombay and Hyderabad, while the Office in Madras has about 200 monuments in former Mysore State and the districts of South Kanara, Coorg and Bellary.

Among the most important groups of monuments of National importance, under the protection of the Archaeological Survey of India, mention may be made of the following: Early Chalukyan Monuments of Badami, Aihole and Pattadakal in the Bijapur District, Hoysala groups of temples of Belur, Halebid, Sravanabelgola and Somnathapur, Monuments of the Vijayanagar empire at Hampi, Bahmani tombs of Bijapur and Bidar, and Dariya dowlat bagh Palace and Gumbaz at Srirangapatna. Considering the importance of the ancient monuments, and the need to provide them equal attention, Government of Karnataka has been pressing the Archaeological Survey of India, to place these important groups of monuments under one Officer, with a new Archaeological circle. This desire is yet to be fulfilled.\*

Although there are more than 700 monuments under the state protection list,<sup>2</sup> so far the conservation and upkeep of these monuments were looked after by the State Public Works Department. But having considered importance of the ancient monuments and with due regard to the resolutions of the Central Advisory Board of Archaeology, the Government of Karnataka have created a special conservation wing in the Directo-

\* A new circle called Mid-Southern circle has since been formed with Bangalore as its headquarters and having jurisdiction over entire Karnataka, except Bidar, Gulbarga and Raichur districts.

rate of Archaeology and Museums, with the requisite Engineering staff to attend to the Conservation of monuments protected by the State. This wing will start functioning in full swing from 1974-75.

Therefore, while evaluating the Conservation of Monuments since the formation of the new State of Karnataka, it becomes clear that major contribution is only that of the Archaeological Survey of India (Pls. XXVI a & b ; XVII a & b ; & XVIII a & b). Specific mention must be made of Shri S. R. Rao, Superintending Archaeologist, South Western Circle, Aurangabad for his exquisite conservation work of the early Chalukyan group of monuments, particularly at Aihole and Pattadakal, in Bijapur District, since 1968, and the resultant discoveries.<sup>3</sup>

Until a decade ago, the monuments of Badami, Aihole and Pattadakal were converted into residential quarters and cowpens by the local inhabitants. In some cases, structures were created on the roof of temples,—and an example still exists today, near Kontigudi at Aihole.<sup>4</sup> The debris accumulated in the past two hundred years or more, had completely covered the original pavements and temples to a height of about 2 to 3 metres high, concealing the beautifully carved mouldings. This also subjected the monuments to irreparable human vandalism. A vigorous campaign to remove the encroachments in the past decade has saved the monuments for posterity.

The clearance of debris in and around the temples of Ladkhan, Gaudargudi and Kontigudi at Aihole has brought to light paved courtyards, beautifully moulded plinths, and the plinth of an hitherto unknown temple. A number of loose sculptures and inscriptions have also been brought to light. Particular mention must be made of the sculptures of Kubera and a figure of Varaha, and an inscribed slab of A.D. 700.<sup>5</sup> The monuments have now been properly exposed and lawns and garden are being laid, to enhance the beauty of the monuments.

At Pattadakal, the Virupaksha, Mallikarjuna and the complex of temples, have been cleared of

the accumulated debris and the beautiful sculptured and moulded plinths have been exposed. The friezes of fighting elephants and lions carved in bold relief on the newly exposed plinths of Mallikarjuna temple and its *Nandimantapa* remind us of similar relief sculptures in the Kailasa temple (cave 16) at 'Ellora'.<sup>6</sup> The clearance of debris in the vast expanse of the complex also brought to light a number of minor shrines around the temple. Further two exquisite panels of sculptures in red sand stone were also recovered. They represent Siva as Kalarimurti and Siva as Tripurantaka. Both of them represent simple, but vigorous style and movement, for which the sculptures of the period are known (Pl. XIV a & b).

In front of the Sangameshvara temple, the excavations have revealed a brick structure which is claimed to be of Satavahana period.<sup>7</sup> However, this requires to be further examined and confirmed.

While such excellent work has been done, for this early Chalukyan group, attention to the monuments of later periods, particularly to the group of Hampi monuments, requires much to be desired. Chemical cleaning of monuments such as at Somanathapur have given clean look to many of the monuments.

Conservation of monuments by the State Directorate, as already stated, is still in its infancy. However, mention must be made of the conservation of the temple of Narasimha at Vignasanthe, Tiptur Taluk, Tumkur District. The State Public Works Department, have renovated the almost collapsed sikhara, by employing traditional *sthapatis*, and re-setting the structure with the original architectural members. The State Directorate has now undertaken the organisation of the conservation section on scientific lines.

\* \* \* \* \*

#### References :

1. These are covered under Central Act of 1958, viz., *The Ancient Monuments and Archaeological Sites and Remains Act, 1958*.
2. These are covered under State Act of 1961, viz., *The Mysore Ancient and Historical Monuments and Archaeological Sites and Remains Act, 1961*.
3. Rao, S. R., 'A Note on the Chronology of Early Chalukyan Temples', *Lalit Kala*, No. 15, pp. 9-18.
4. *Ibid.*, pl IV, fig. 8. Stone structure seen in the background.
5. *Ibid.*, pl. V, figs. 9 & 10.
6. *Ibid.*, p. 12, and pl. IX, figs. 18 & 19.
7. *Ibid.*, pp. 18-19.

## EPILOGUE

The foregoing account on the progress of Archaeology shows that the prophecy of *Rao Bahadur*, K. N. Dikshit, which we considered to hold good to the entire state of Karnataka, is proved beyond doubt. However, it also becomes apparent that the progress is rather uneven, whether it is subjectwise or regionwise. Let us elaborate.

The studies in the fields of prehistory and protohistory have received more attention than others. If the erstwhile State of Mysore paid more attention to the prehistoric studies before 1956, it is the region north of the Tungabhadra and only the Kaveri basin in the extreme south which have been subjected to thorough investigation since 1956. The region in between the Tungabhadra and the Kaveri has been completely neglected. Historical archaeology has received no attention it deserves. Epigraphy which formed the main concern of the State Archaeology, has received little attention in the integrated districts, but for the sporadic surveys conducted. A systematic survey, and publication of the volumes of *Epigraphia Carnatica*, in continuation of the original series, in respect of newly added districts is, therefore, an absolute necessity. Studies in Architecture of the entire state is another field which is sadly neglected. A systematic survey and publication of simple and descriptive monographs on monuments is urgently needed. Study and publication of catalogues of Coins already available in various research departments and institutions is long over due. It is also necessary to train urgently young scholars who can take up the studies in the above fields.

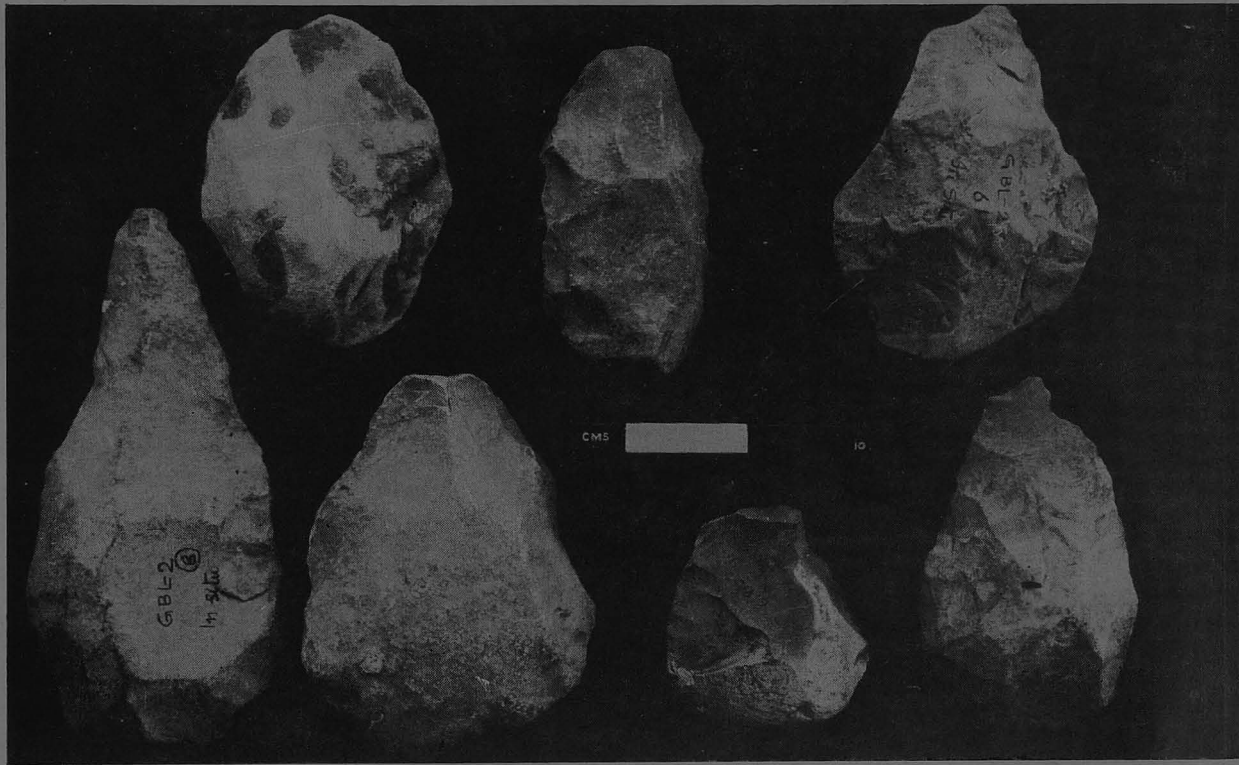
Another lacuna is the lack of scientific and problem-oriented approach to the study of

various facets of Archaeology in the State. There is no attempt to adopt scientific methods, available in the country, except perhaps utilisation of the dating facilities. So far, the approach to the study of this discipline has been only descriptive in nature.

The Directorate of Archaeology and Museums in Karnataka has been attempting to remove some of these lacunae by a phased programme. A scheme to carry out Epigraphical Survey and publication of *Epigraphia Carnatica* Volumes in respect of the northern districts of Karnataka has been submitted to the Government and has been approved and already started (*supra*, p. 34). Conservation of monuments has been facilitated by the sanction of a Conservation Wing with necessary engineering staff. Having realised that preservation of cultural heritage will be possible only by creating awareness among people, a programme to create awareness has been launched. As a first step, youth are being involved in this project, and National Service Camps are being conducted near the monuments with "preservation" as the theme. As an extension of this project, district museums are being set up in all the districts, where museums do not exist, so that people are provided an opportunity to know and appreciate the cultural heritage of the region.

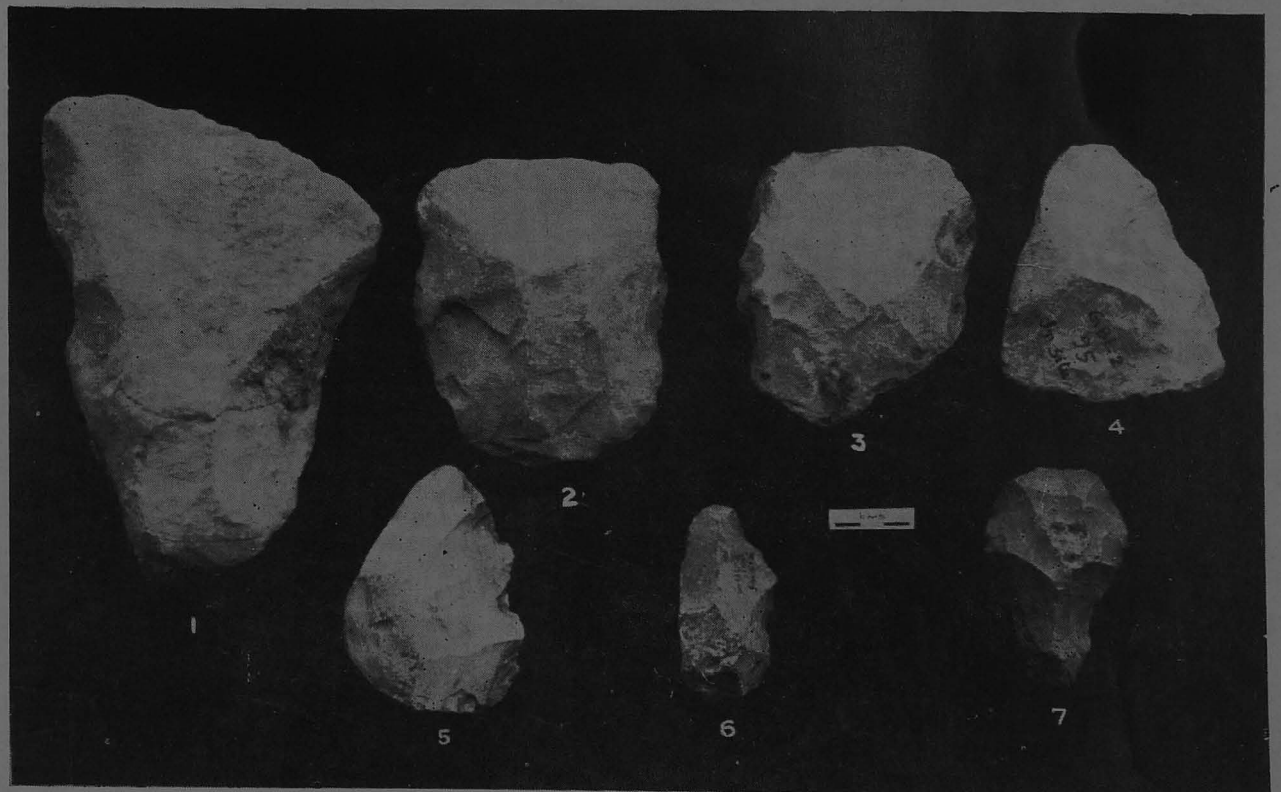
Karnataka has been one of the few fortunate states to have a rich heritage of cultural remains, and also trained and talented personnel. An integrated approach, with cooperative spirit, among the scholars and institutions, to unravel the past of this many splendoured state will bear rich fruits to posterity.

\* \* \* \* \*



a  
Hand axe types

EARLY STONE AGE ARTIFACTS, GULBAL, SHORAPUR DOAB, DIST. GULBARGA  
*Courtesy : Dr. K. Paddayya, Poona*



b  
1-3 Cleavers;  
4-5 Knives;  
6-7 Bifacial points



a  
1-6 Scrapers;  
7-8 points;  
9-11 cores

MIDDLE STONE AGE ARTIFACTS, SHORAPUR DOAB, DIST. GULBARGA

*Courtesy : Dr. K. Paddayya, Poona*

Artifacts of Blade Tool Culture



b  
1-6 Simple & retouched blades;  
7 Scraper; 8-10 Borers;  
12-13 Tanged points;  
11 Fluted core;  
14-15 Burins



1-2 Fluted cores; 3-7 Backed blades; 8-11 Lunates; 12-13 Triangles; 14 Borer

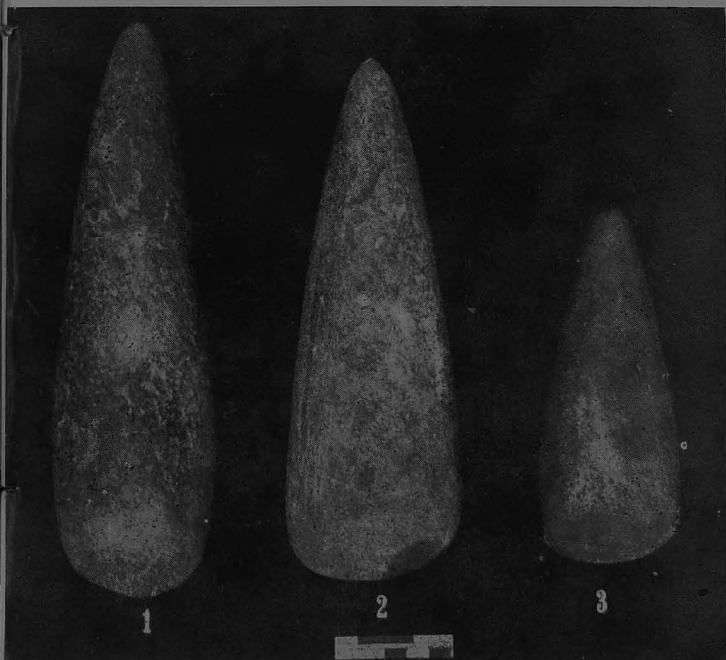
*Courtesy: Dr. K. Paddayya, Poona*

NEOLITHIC TOOLS, DIST. SHIMOGA

*Courtesy: Sriyuts N. D. Sundaresh, K. R. Shamanna & A. S. Ramachandra Rao*

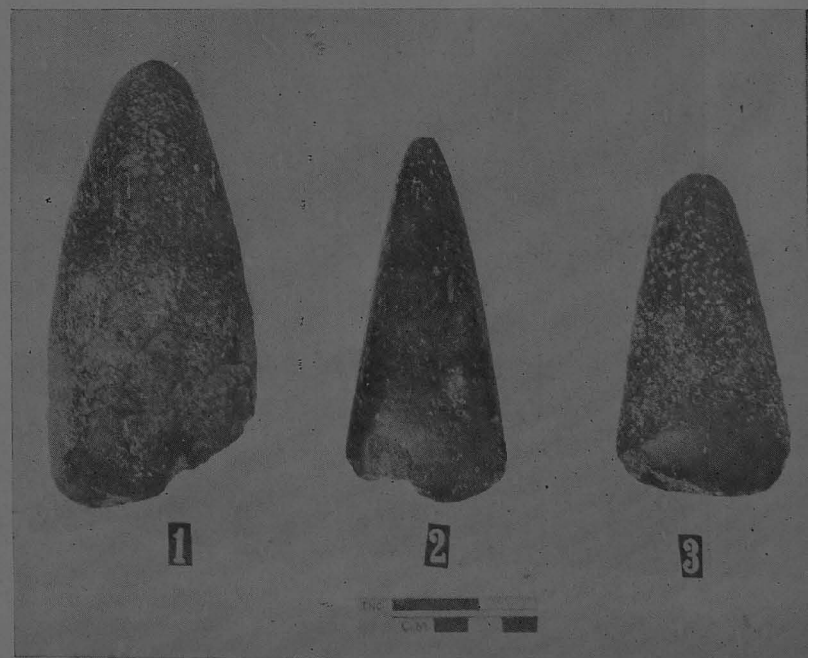
b

Ashoka Nagar



c

Bhagavatikere





a

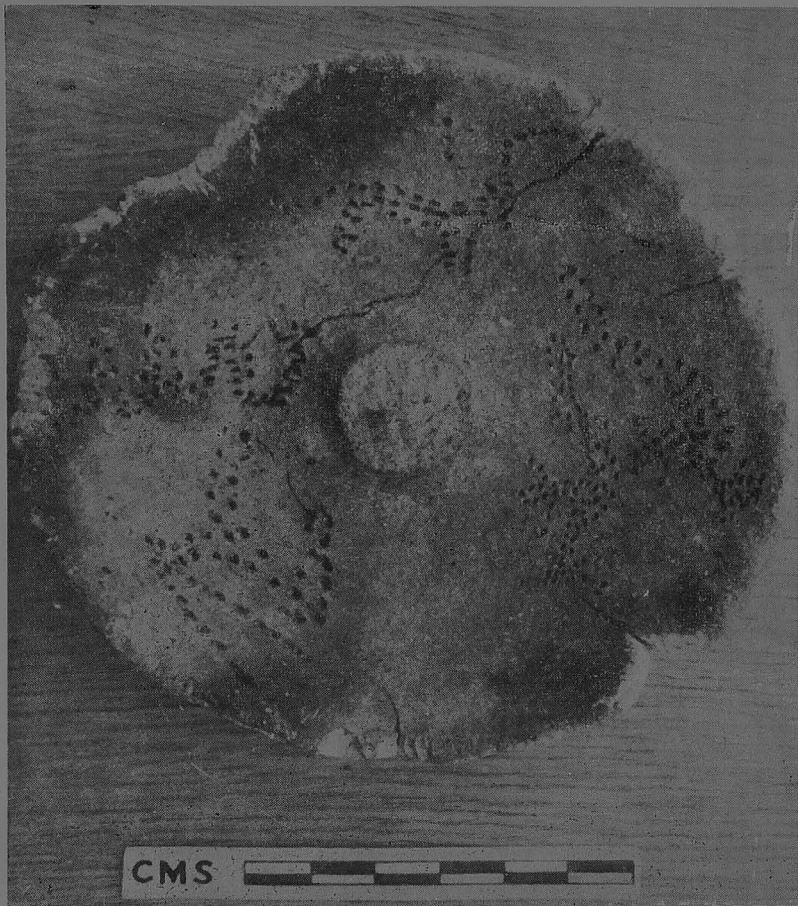
Tekkalakota, Dist. Bellary, Locality TKT—1



Sanganakallu, Dist. Bellary

b

Ground plan of  
a circular structure  
with post-holes



a

Pottery lid with  
animal designs in dots

Tekkalakota, Dist. Bellary

Plates IV & V Photos: *Courtesy*: Dr. H. D. Sankalia, Poona

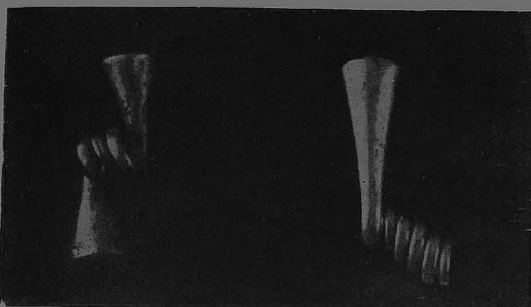
c

Adult burial in multiple pots



b

Gold ornaments





a

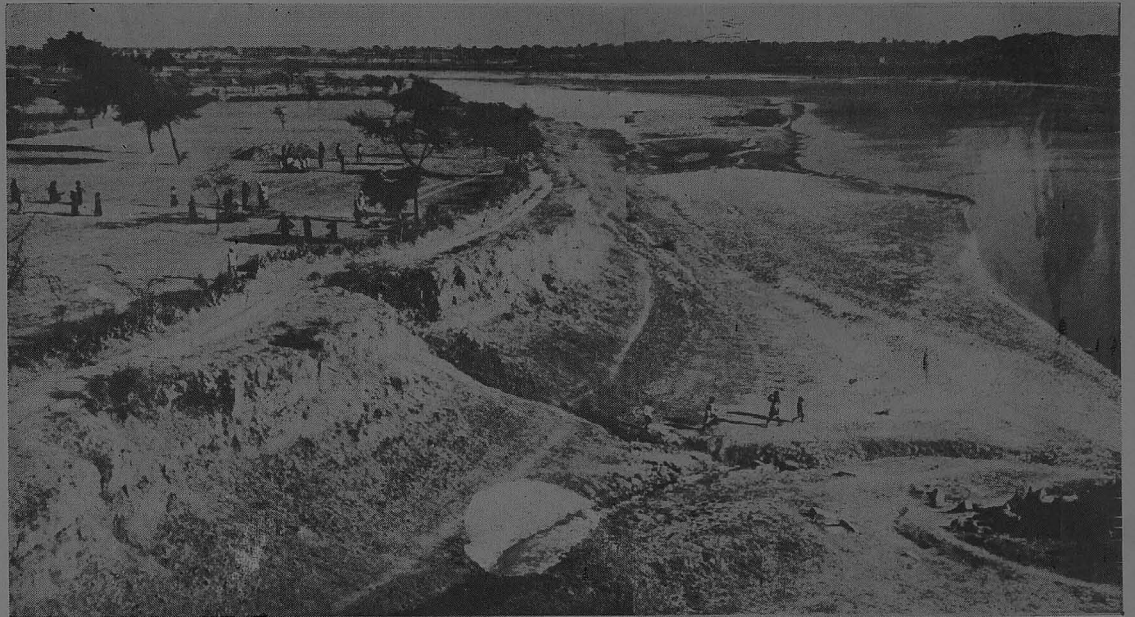
Adult burial, Tekkalakota, Dist. Bellary



b

Child burial, Hallur, Dist. Dharwar

T. Narasipur, Dist Mysore

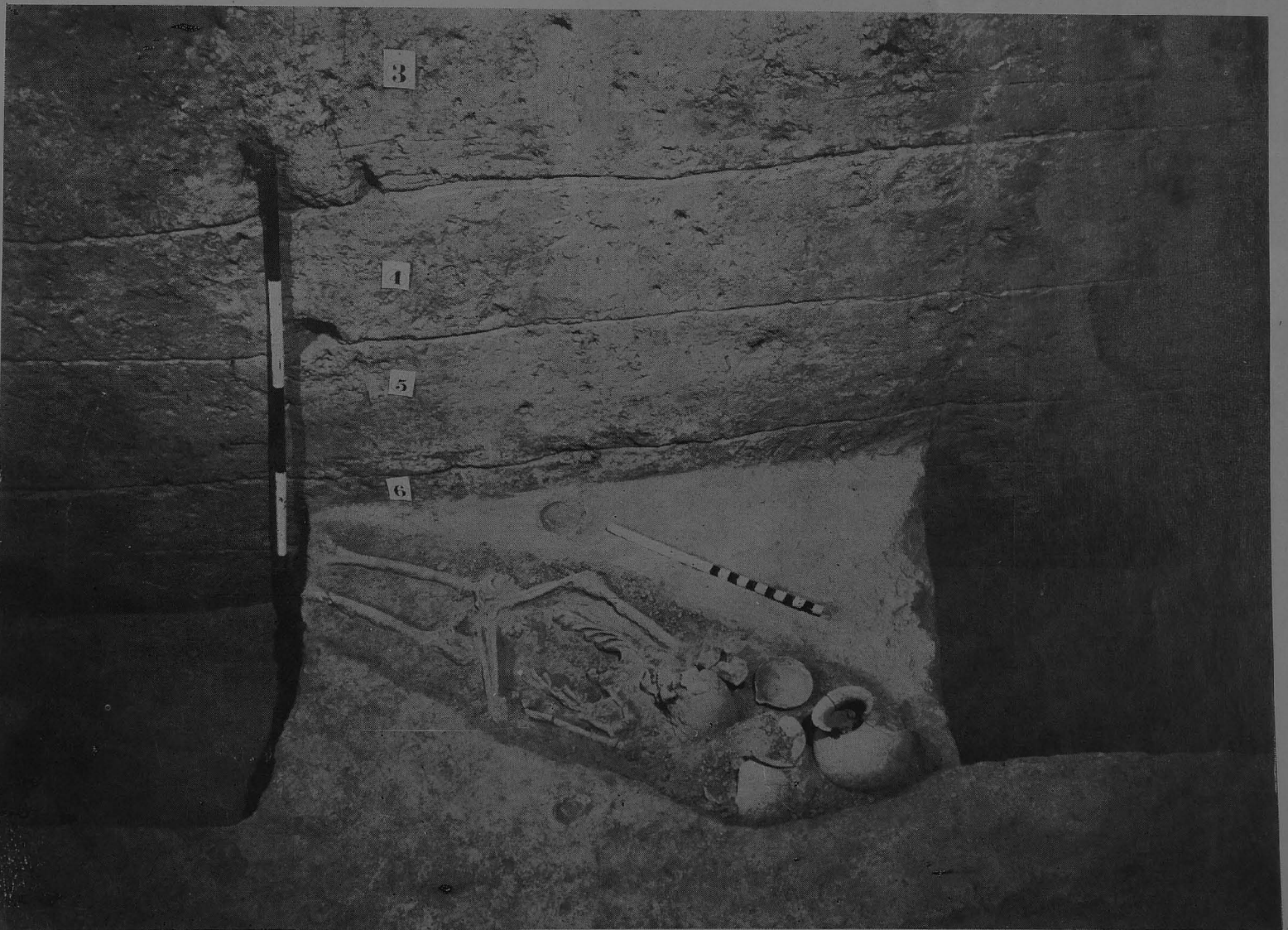


a

Neolithic site—  
General view

b

Burial with headrest





a

Passage chamber Tomb  
*Courtesy : Dr. A. Sundara*

b

Megalithic burial





a

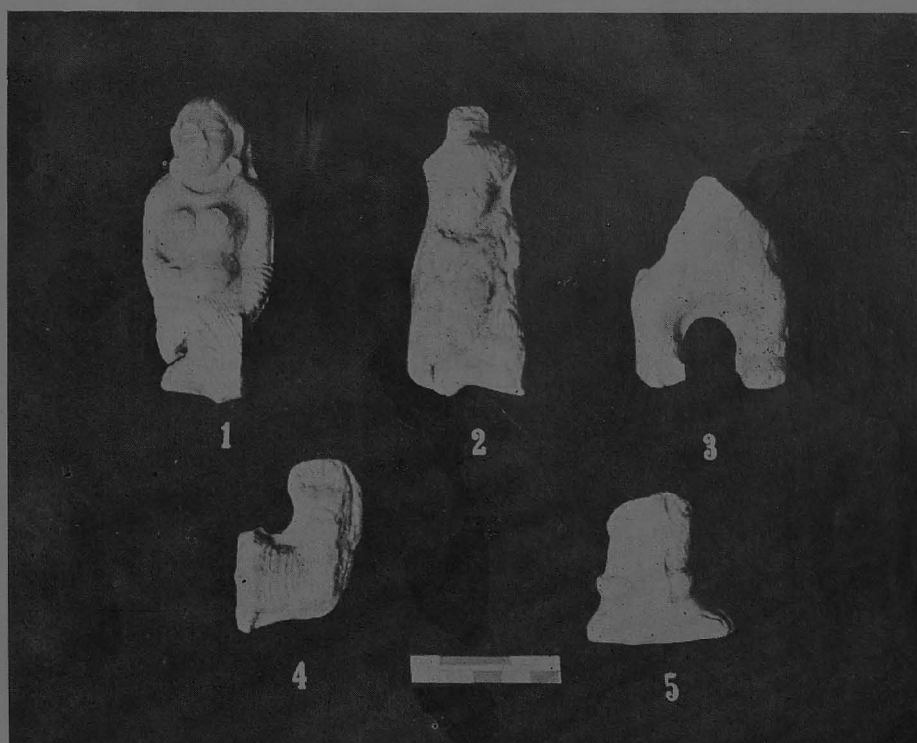
Buddhist Chaitya

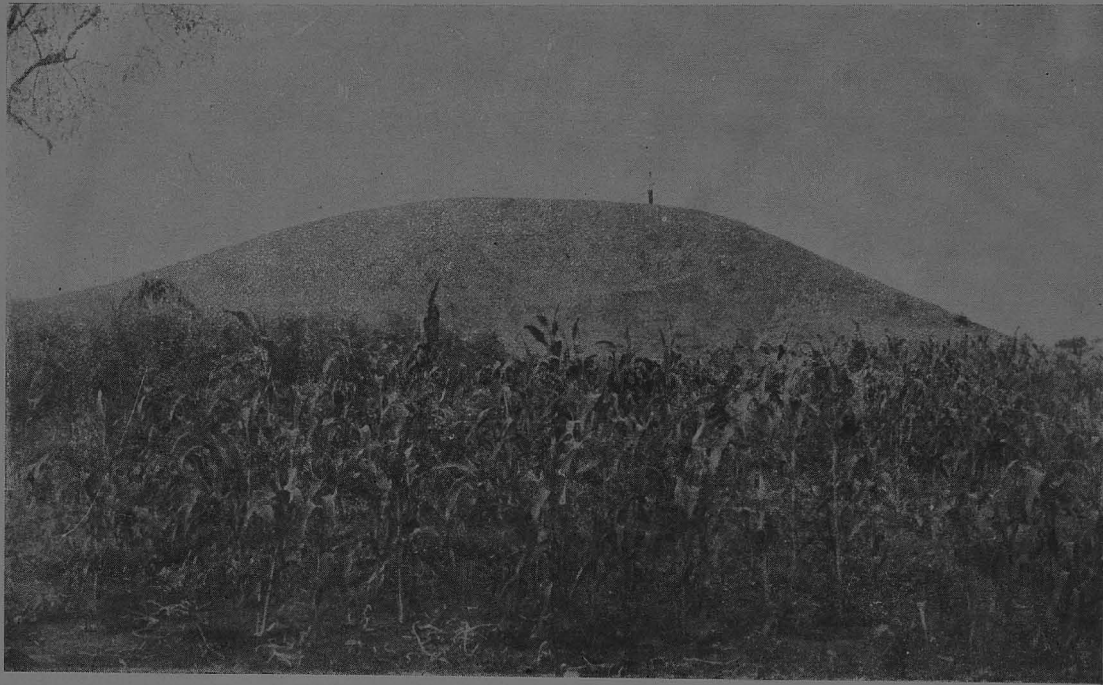
EARLY HISTORIC PERIOD  
BANAVASI, DIST. NORTH KANARA

*Courtesy* : Dr. A. V. Narasimha Murthy  
University of Mysore

b

Terra Cottas





a Stupa Mound—General view



b Sculpture representing a cart

EARLY HISTORIC PERIOD  
SANNATTI, DIST. GULBARGA



c  
Buddhapada

a

Ayaka Pillar with Inscription

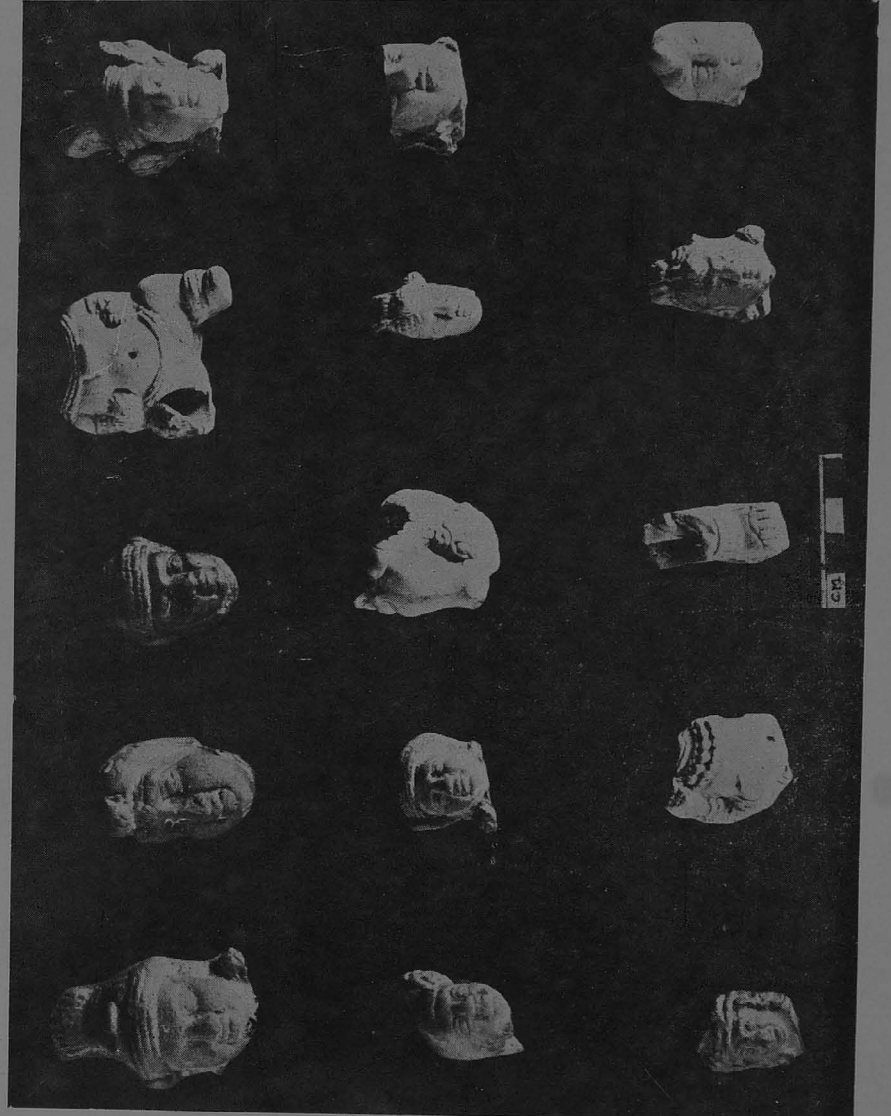
Ahimarikaya Naganikaya  
Arikabhatuno Girijatanakasa



EARLY HISTORIC PERIOD  
SANNATTI, DIST. GULBARGA

b

Terracottas, Surface collection





a

Decorated Torana—View from South

ITGI, DIST. RAICHUR  
*Photo : Dr. M. S. Nagaraja Rao*

b

Decorated Torana—View from North



SCULPTURES

PATTADAKAL, DIST. BIJAPUR



a

Papanatha Temple

KIRATARJUNIYAM



b

Mallikarjuna Temple



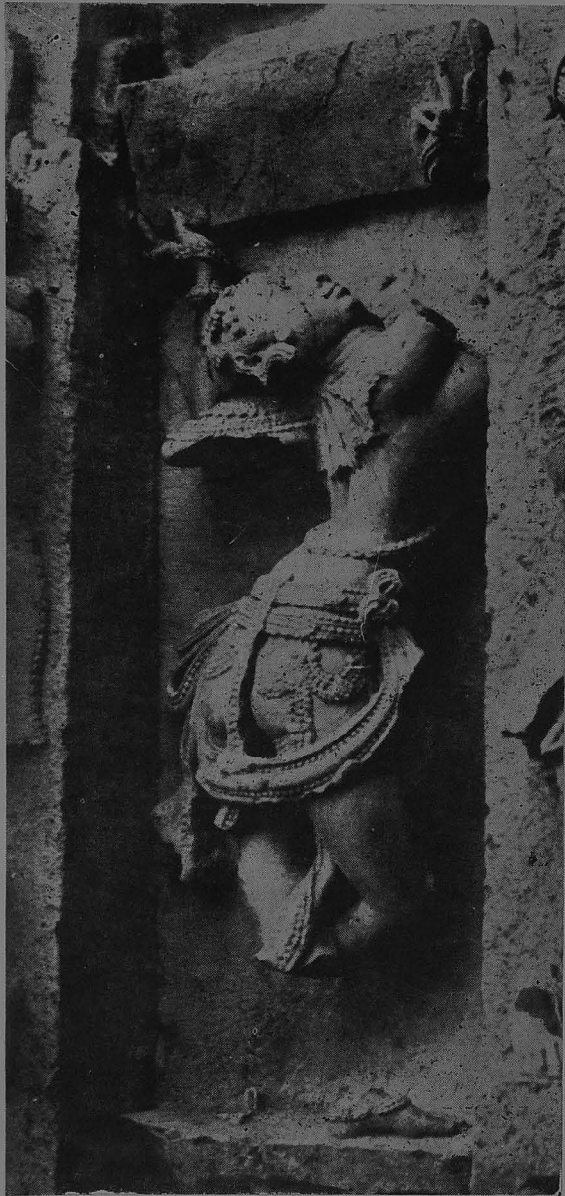
a

Siva-Kalarimurti  
Courtesy : Superintending Archaeologist, Archaeological Survey of India, South-Western Circle, Aurangabad



b

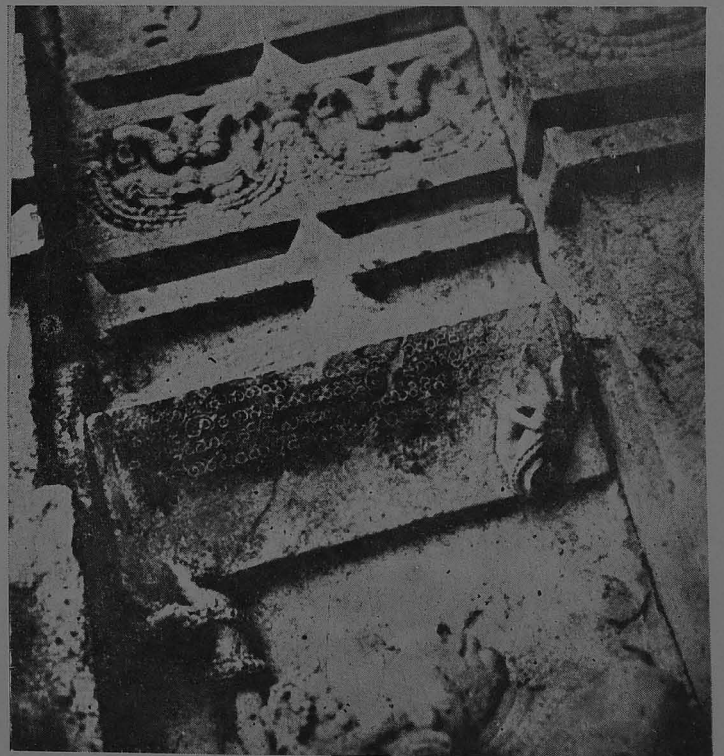
Siva-Tripurantaka



a

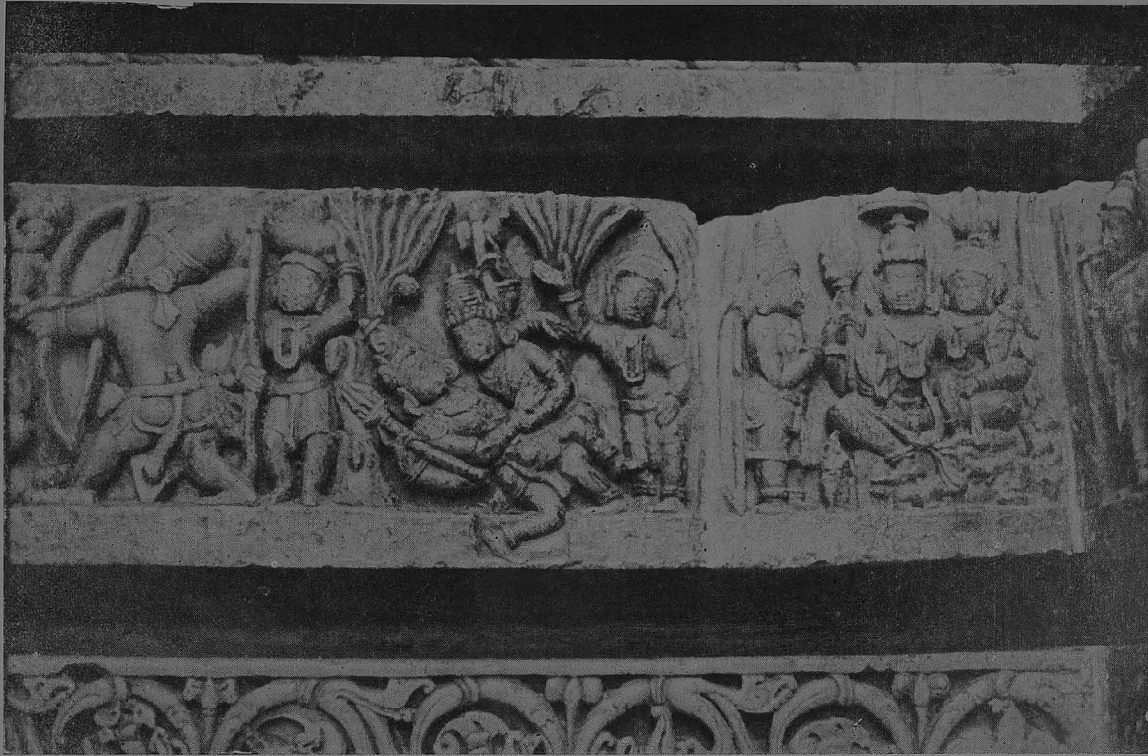
Lady writing an inscription

DHARMAPURI, DIST. BHID, MAHARASHTRA



b

Close-up of the inscription



SCULPTURES

HALEBID, DIST. HASSAN

a

Kiratarjuniyam—Hoysaleswara Temple



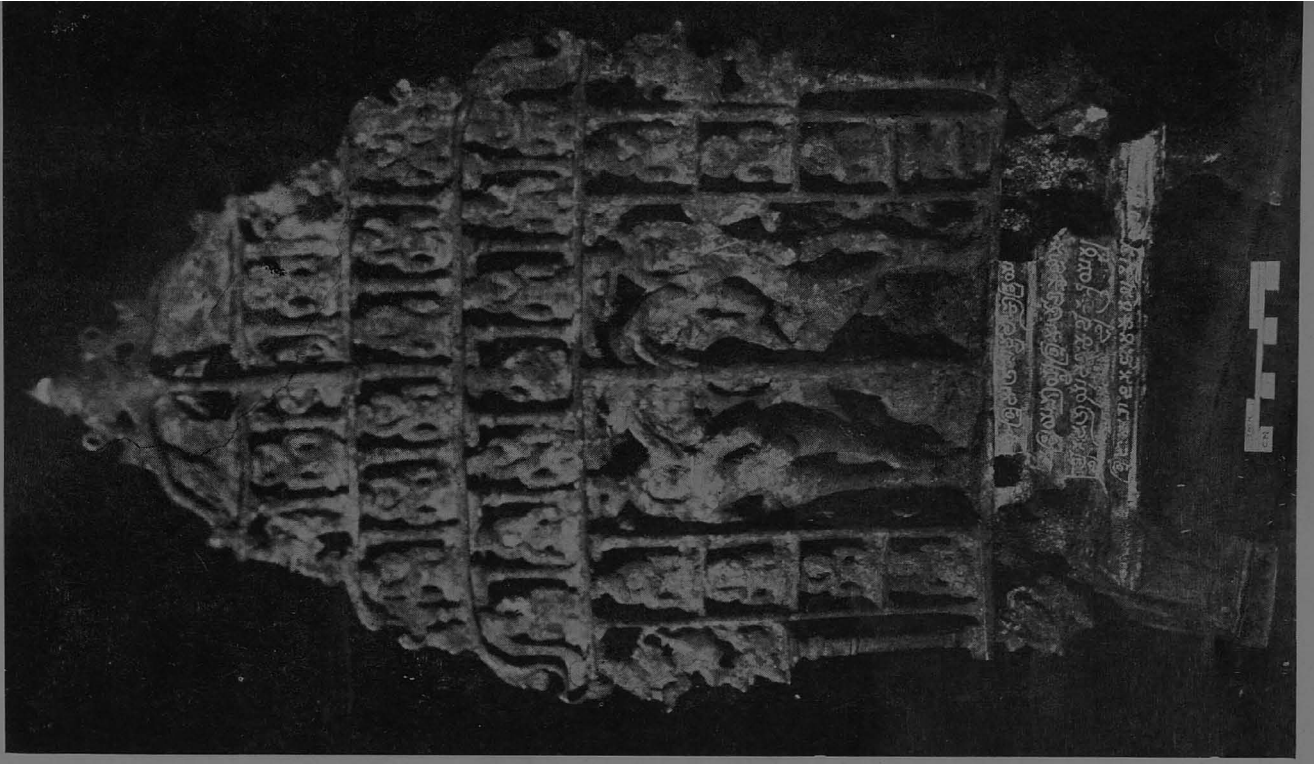
Yadwad, Dist. Dharwar

b

Sivaji

b

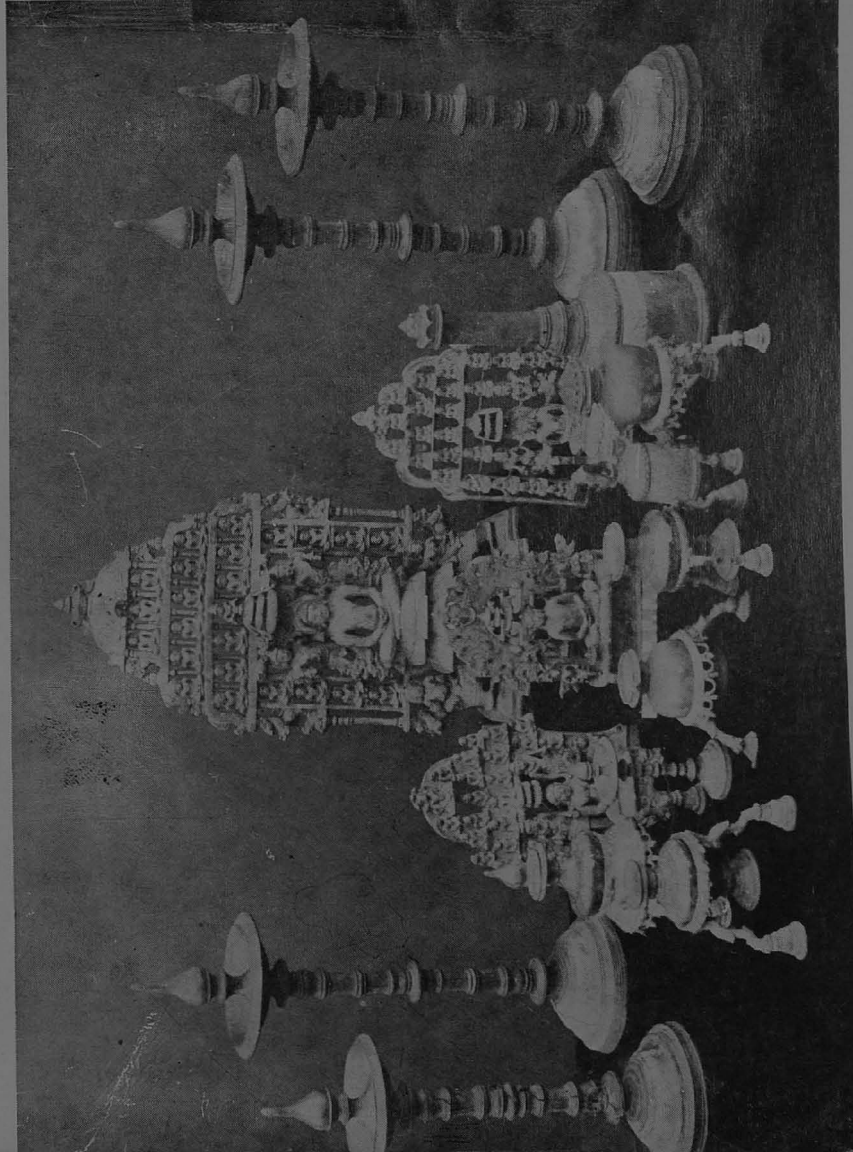
Details of inscription on the back  
of the main deity



HANGALA, DIST. MYSORE

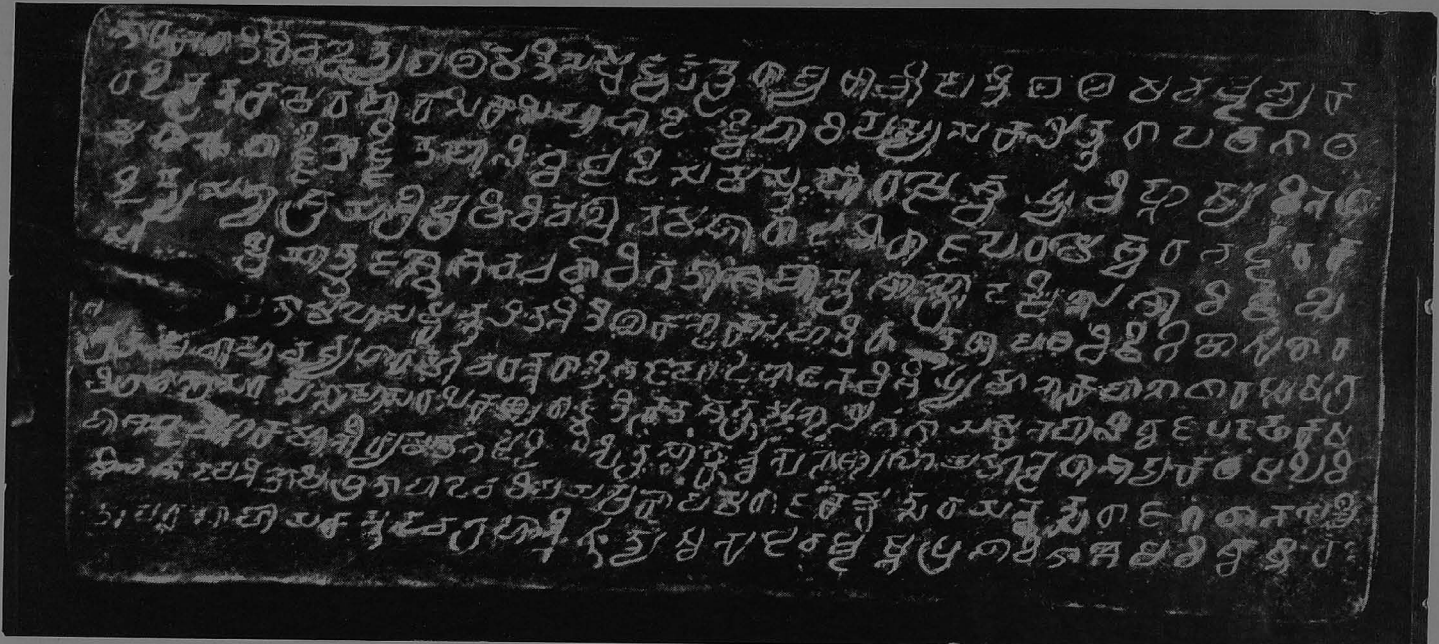
Group of Inscribed Jain Bronzes

a

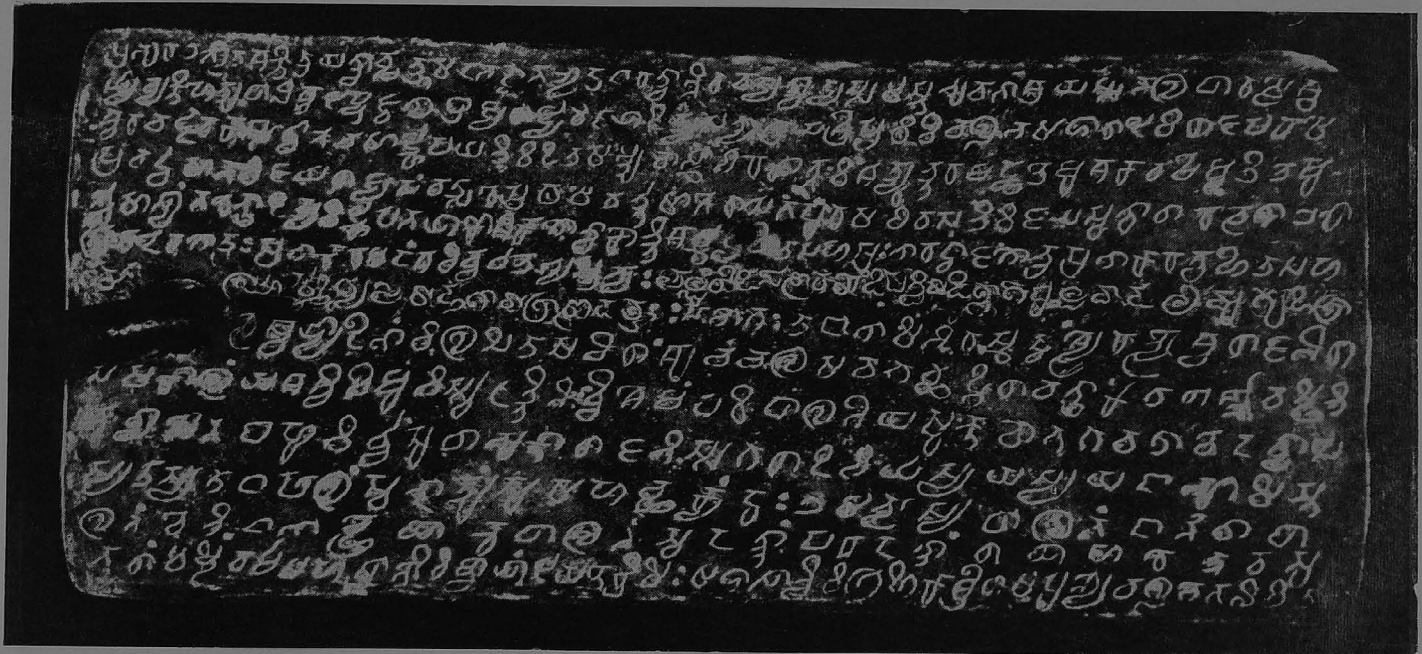








ii b



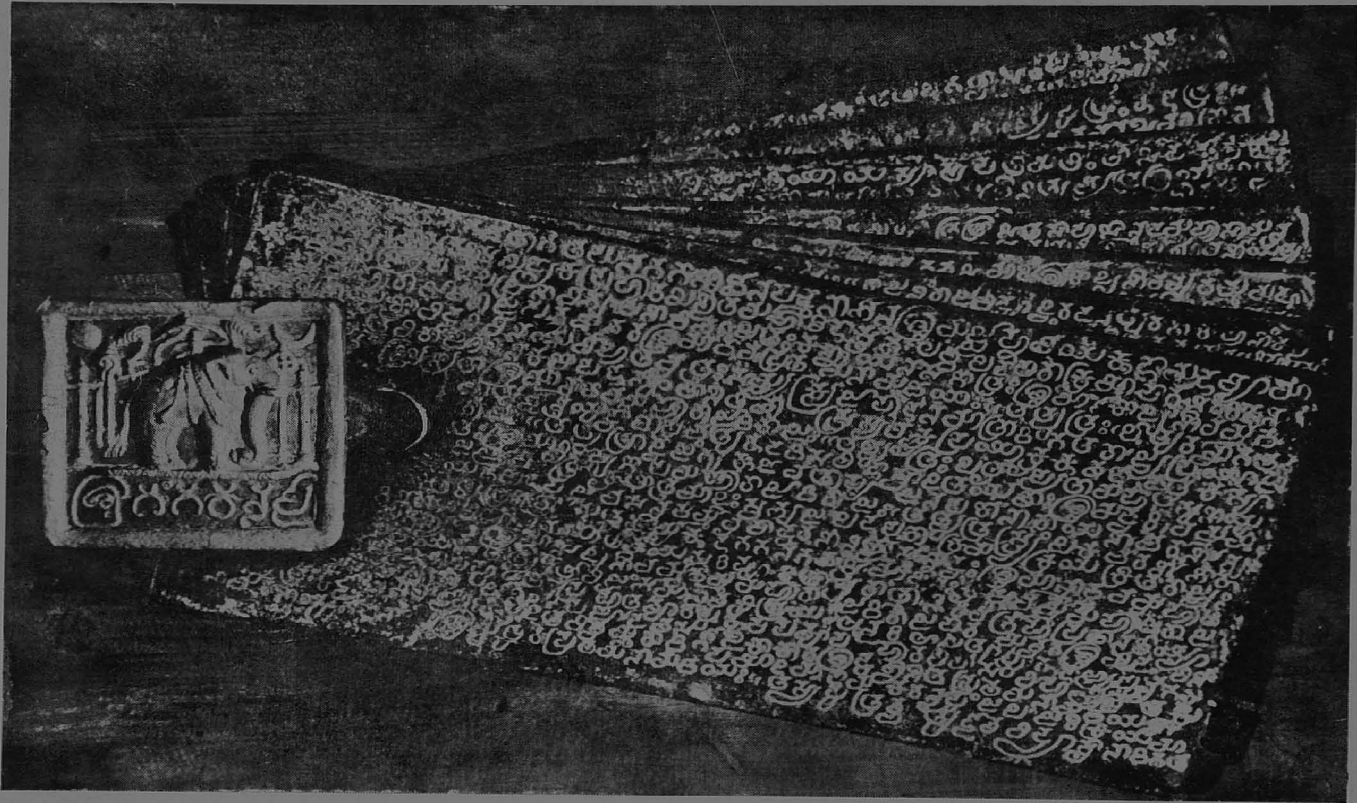
iii



Jamalagama grant of Chalukya Vijayaditya, Saka 619

Seal

EPIGRAPHY



a

Grant of Ganga Marasimha II

KUKKANUR, DIST. RAICHUR  
*Courtesy : Dr. P. B. Desai, Dharwar*



b

Details of the Seal

EPIGRAPHY

BELMANNU, DIST. SOUTH KANARA

Grant of Aluvārāsa II



*Courtesy : Dr. P. Gururaja Bhat, Kallianpur, South Kanara*

NUMISMATICS



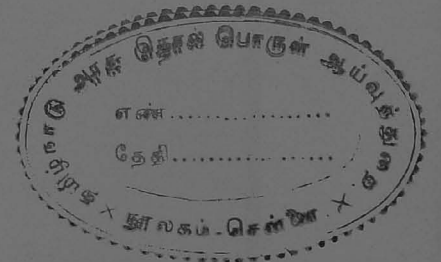
a

Roman Coins  
from H.A.L. Airport,  
Bangalore

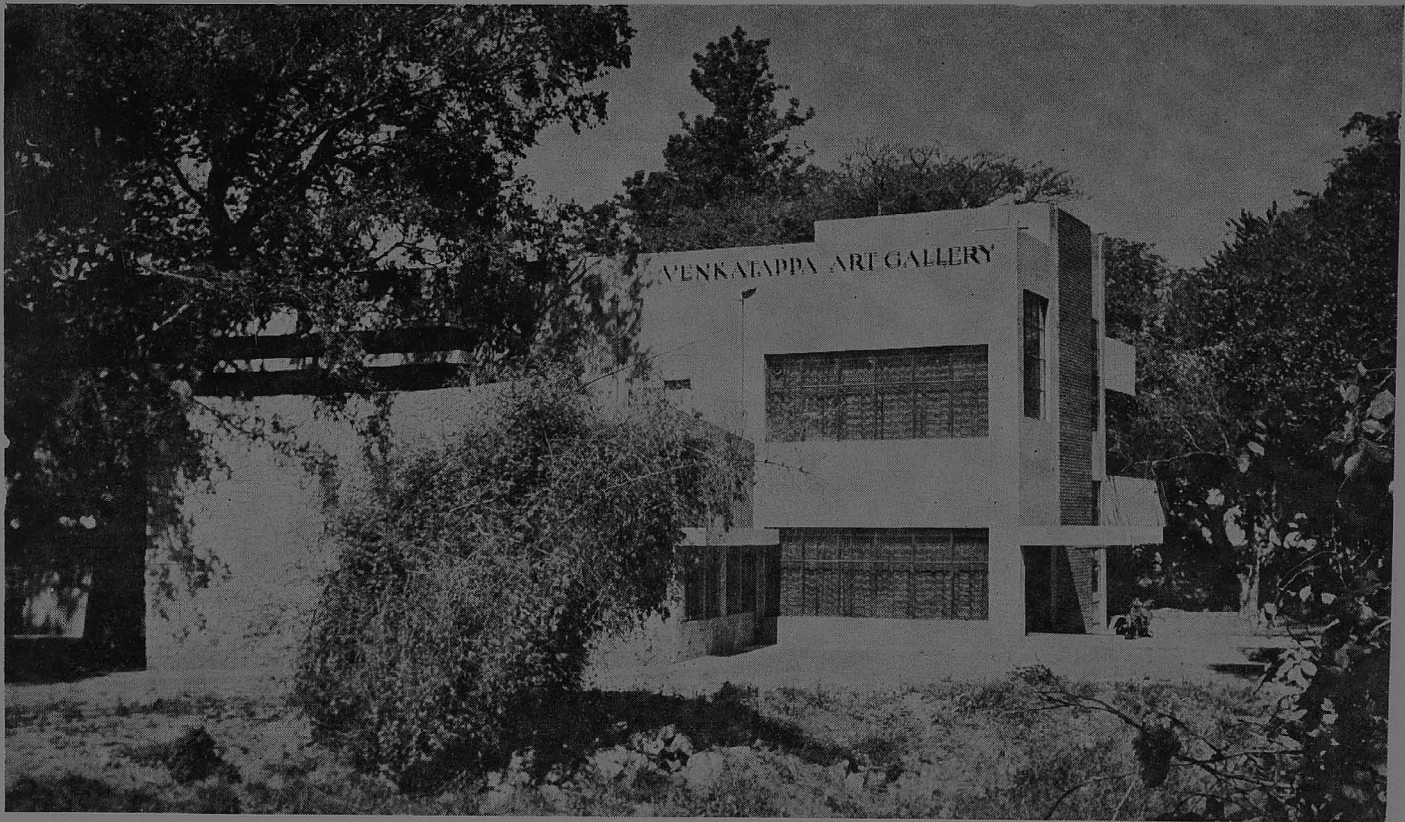


b

Satavahana Coins  
Hippargi,  
Dist. Bijapur







a

Venkatappa Art Gallery, Bangalore—General View



b

New Gallery of Kannada Research Institute Museum, Dharwar  
*Courtesy: The Registrar, Karnatak University, Dharwar*



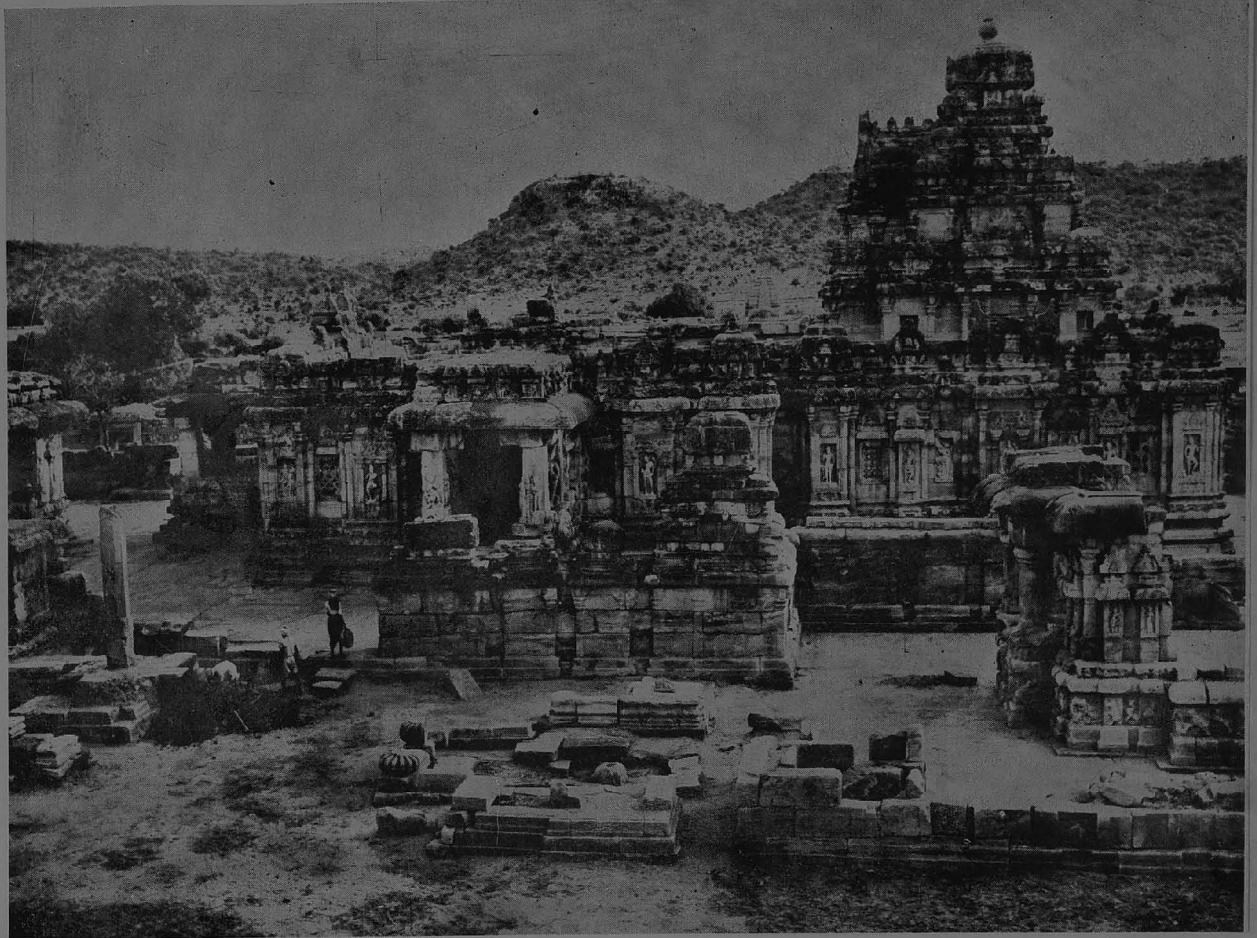
a Before Conservation

Virupaksha Temple, Pattadakal, Dist. Bijapur



b

After  
Conservation



a

Virupaksha Temple  
View from North

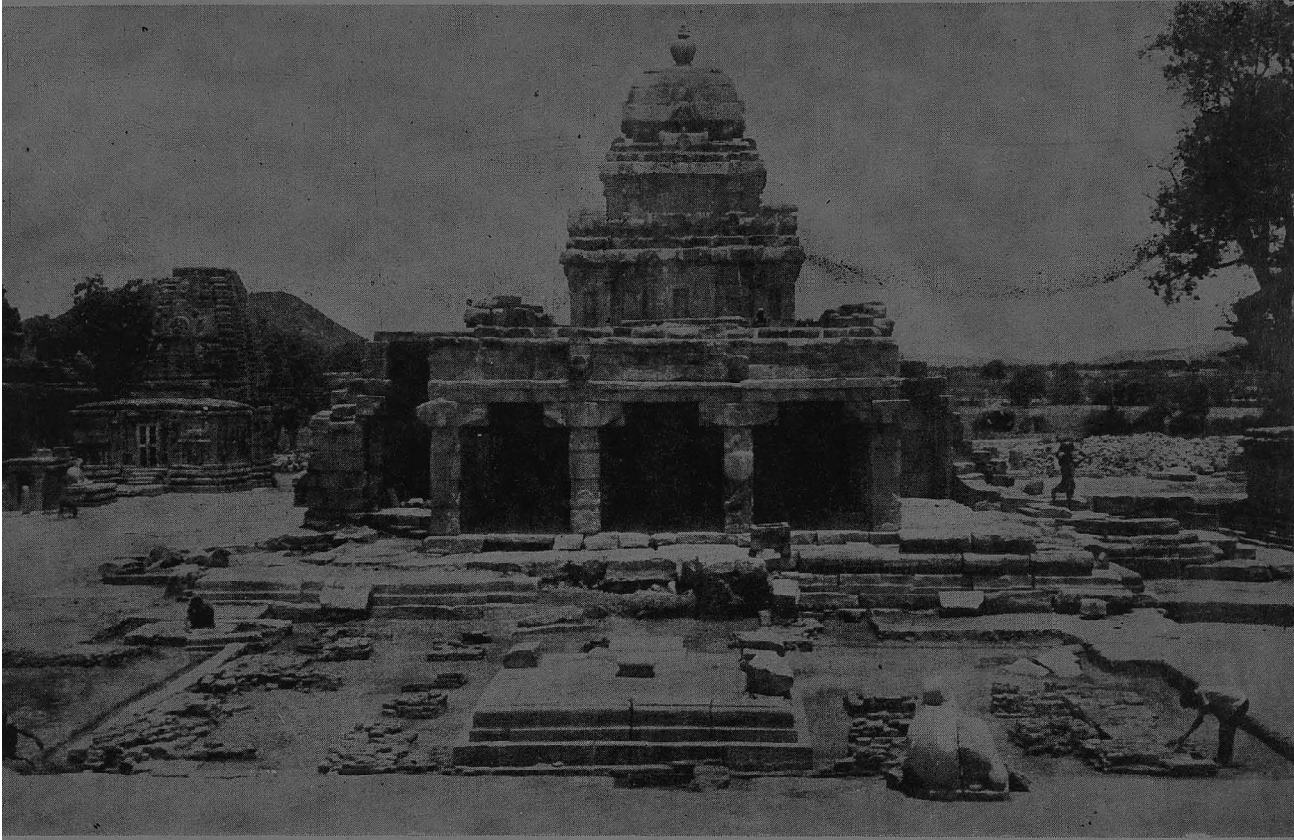
Pattadakal, Dist. Bijapur



VIEWS  
AFTER CONSERVATION

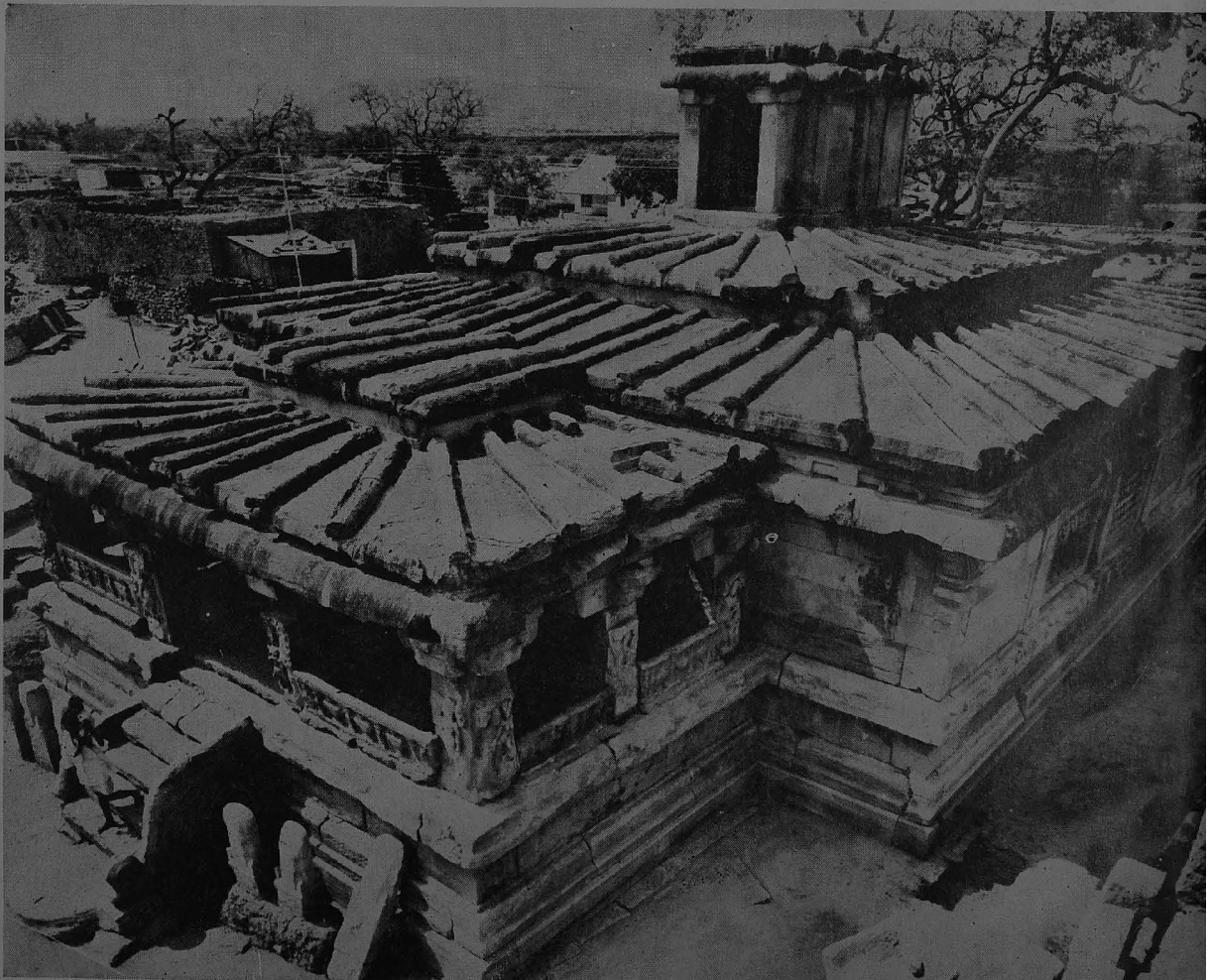
b

Virupaksha  
&  
Mallikarjuna  
complex,  
General view



Pattadakal, Dist. Bijapur  
Sangameshvara Temple

a Note the Early Historic brick structure in the foreground



IEWS  
AFTER CONSERVATION

Aihole,  
Dist. Bijapur

b  
Ladkhan Temple