EDITORIAL

Intersections: From Research to Outreach in Indian Prehistory

As I sit down to write this editorial, stone and bone artefacts, features and fossils embedded within Quaternary sediments are being scooped up by earthmovers and doomed to destruction. As we move forward in time, our prehistoric past is moving rapidly towards yet another extinction consigned to the pages of textbooks, relatively inaccessible research papers and museum cabinets. Prehistoric sites in India comprise a wealth of stone tools with rare fossil remains and even rarer hominin fossils – embedded within and eroding out of Quaternary deposits dating back to ~1.7 Ma or older (Pappu *et al.*, 2011; Sankhyan, 2020; Sonakia, 1984). Despite the wealth of this prehistoric heritage, the Bhimbetka rock shelter complex is currently its only representative on the UNESCO World Heritage list (https://whc.unesco.org/en/list/925/). Prehistoric sites comprise stone tools, pottery, fossils and features (e.g. burials, traces of structures and hearths), within Quaternary sediments or represented by rock art, grinding grooves and the like, constituting part of rock surfaces. All of these are fragile and susceptible to rapid destruction by mining, quarries, infrastructure development, unplanned tourism and unstructured or random collection of artefacts by visitors, students, archaeologists and other scientists. This is accentuated by ignorance of what constitutes stone tools or fossils, apathy towards this aspect of heritage, paucity of strict legislations for impact assessment prior to infrastructure development or mining, sparse of funding and complexity in acquisition of licenses by professionals for rapid documentation and salvage activities. An overall emphasis on the more glamourous or visible aspects of the past, exemplified in monuments, structures, artistic and architectural remains, previously labelled the 'Taj Syndrome' (Pappu, 2006) has also contributed to the present crisis of rapid destruction. While considerable attention has been paid to more recent phases of Indian archaeology and history, the deep past remains in a dense fog as far as most of the community is concerned, of little interest for either construction of knowledge or ideologies, be they social, religious or political.

In order for Indian prehistory to survive into the next century beyond museum collections or publications, three major approaches require to be urgently implemented in consultation with as diverse a group of stakeholders as possible. These comprise the following: 1. rethinking existing strategies for planning and executing research programs aimed at long-term inter-disciplinary research, setting up systems for funding and sustaining those efforts, and revising systems for granting yearly licenses for work by removing uncertainty and ensuring reduction of red-tape and sustainable long-term

planning; 2. public outreach, particularly in relation to education and awareness-creation of India's prehistoric heritage, thereby developing a sense of pride amongst communities and with a special focus on children and teachers; 3. balancing local needs and development with conservation through innovative ways that will promote local economies. This would also entail the issue of controlling unplanned tourism and the negative effects it can have on the delicate nature of prehistoric sites through controlled access or development of alternate modes of virtual experiences. The latter two issues fall within the broad rubric of what is termed 'Public Archaeology', loosely encompassing the interfaces between archaeologists, the diverse aspects of archaeology, and the world (Grima, 2016; Merriman, 2004; Moshenka, 2017).

Here I focus on public outreach in terms of modes of communicating the prehistoric past, an aspect that is closely linked to theoretical developments in archaeology and involves various ideologies of pedagogy and museology (Grima, 2016; Merriman, 2004; Moshenka, 2017). In the Indian context, 19th century discourses were stimulated by the writings of R.B. Foote (1916) and his contemporaries such as V. Ball (Basak, 2009). Subsequently, H.D. Sankalia was a key figure generating an awareness of prehistory, not only through popular articles in local languages but also in the context of lectures in schools and for the village community during fieldwork, and in moving archaeology into the public domain in a systematic manner (Sankalia, 1978). This tradition is being continued by his colleagues and students, spreading across India (see Paddayya, 2018).

Museums have traditionally been at the forefront in creating displays on human evolution and prehistory, with the first prehistory site museum established at Poondi, Tamil Nadu, and with sections in most major Indian museums. Awareness creation in the field of prehistory is adopted by universities and institutes, through departmental museums, popular articles, and media coverage. In the digital age, this has been accelerated through online content and social media, where issues relating to the destruction of sites have also been highlighted. Further, the inclusion of prehistory in school textbooks, albeit with varied degrees of emphasis across India, has led to a basic awareness among students and teachers. Generally, presentation of facts is the norm, with ideas on cultural processes and other theoretical approaches being left to individual teachers (Henson, 2017).

Despite variability in media coverage of prehistoric sites/discoveries across India, easily accessible documentaries and other online content has led to a general awareness of prehistory at a broad level, although aspects of chronologies, cultural phases, species and confusion of co-existence with dinosaurs ('The Flintstones Fallacy') still loom large. In all these situations, however, interest in prehistory is swamped by the emotional connect with the Indus Valley Civilization or later periods, and is loaded with political and ideological ramifications. While awareness-creation has been the primary aim

of these engagements, this has rarely extended to issues relating to conservation or sustainable development (Pappu and Akhilesh, 2019; Pappu *et al.*, 2010). Unlike elsewhere, prehistory in India has rarely been involved in a destruction of myths relating to human evolution (Plutzer *et al.*, 2020), while construction of regional identities arising from ethnoarchaeological analogies have had a limited, albeit growing, impact. An awareness of the complexity of multiple migrations of differing species still remains rudimentary in the wider community. Of greater importance is the fact that traditional concepts on vast time scales shared by the community enables easy acceptance of concepts of deep time, Quaternary chronologies, and human evolution.

In the public outreach programs devised by our team at the Sharma Centre for Heritage Education (hereafter SCHE) in the city of Chennai, India, several factors were borne in mind. The very concept of defining the scope of the 'public' led to care in developing programs suited for mixed audiences in terms of age, language, educational levels, prior knowledge and socio-economic backgrounds. In programs focused on children and school teachers in urban and rural settings, care was taken in developing target-specific modules, and with inclusion of children with special needs. Presentation of facts was supplemented by encouraging critical appreciation of different theories and methodologies for investigating the past, complexities in human evolution, relationship between people and their environments, and major transitions such as domestication. Children and teachers dive deeply into aspects of the past through carefully structured activities, thereby building (as noted by Henson, 2017) emotional connections between their lives and the past. Pedagogies for children's education vary (see Henson, 2017); our purpose was to include hands-on activities aimed at exploring the full range of material culture, wherein the child can express his or her creativity in diverse media (art, craft, play, song, dance, drama, mathematical and scientific expression, prose and poetry). Questions of "why, how, when and where", remain predominant, moving beyond textbooks to asking questions in a transdisciplinary manner (EXARC: https://www.youtube.com/watch?v=0ZPtzV9NKOw). Variability arising from prior exposure to museums, books, online content and site visits can be factored into designing workshops, with pre-visit discussions with teachers. Themes are covered via audio-visual lectures, observations and discussion, followed by outdoor and indoor activities including methodologies or activities structured to gain insights into life in the past (e.g. mock trenches, stone tool manufacture and use, and the like). Interaction between children and experts facilitates knowledge exchange and exposure to ways in which archaeologists and other scientists work. School and family groups add to diversity including development of programs for bonding. On-site workshops during excavations, enables large-scale participation of children from rural areas, leading to development of pride in this aspect of their local heritage.

From awareness one moves to conservation, involving and balancing the needs of local stakeholders with academic desires. From creating boundaries such as fences, to generation of local involvement in preventing the destruction of sites, debates on how best to conserve these fragile places remains unresolved. The use of multiple strategies ranging from impact assessment studies based on fieldwork and remote sensing data (Pappu *et al.*, 2009, 2010) to devising plans for landscape-scale heritage management is one way of creating a database of some use to planning. In that context, matters can be narrowed down to site-specific plans for conservation, with recommendations ranging from complete conservation to urgent salvage based on an assessment of the scientific or educational importance of sites (see Pappu *et al.*, 2010, for details). This, in turn, introduces the issue of opening up sites for tourism, but does not always bode well given the fragile nature of most prehistoric landscapes and artefact-bearing sediments. In the Indian context, this becomes a question of modes of conservation that do not involve on-site mobility for purposes of tourism. The construction of museum buildings, roads, and other facilities at potential sites, as likewise maintaining open trenches would only serve to accelerate the destabilisation of artefact-bearing sediments. Replication of prehistoric sites in local or regional museums through models or via VR/AR technologies, may be a better solution for India. Numerous examples occur globally (e.g. Jeongok Prehistory museum, South Korea, Atapuerca complex, Spain) that can be emulated in issues relating to long-term research, sustainable conservation and cultural tourism. There is a need to place prehistory at the top of the spectrum of planning in the field of cultural economics in India.

This leads to the question of representations of prehistory in India in the form of books, museum displays, exhibitions or online content, based often on a mix of expertise with varied interpretations among organisers or agencies, including preconceptions of what the public may or may not relate to. For example, human-evolution and stone-tool displays may include accurate depictions of facts, stereotypical popular conceptions of hominins, and rare occasions with innovative ways of generating conversations between artefacts and observers. In this context, encouraging multiple perceptions of the past by diverse communities has not been a strategy in Indian prehistory, despite this being advocated for later cultural phases. True community engagement, as seen in the case of Keezhadi and related complexes in Tamil Nadu, is not typical of most prehistoric sites, with exceptions noted in the case of Bori, Maharashtra, and long-term heritage management strategies planned in the Bhimbetka site complex (Ota, 2006). This has effectively been implemented at many sites of national importance of later time periods where educating teachers and children have played an important role (N. Taher, personal communication). Traditional connections to prehistoric sites appear when dealing with the fringes of the Neolithic, where celts are reused in completely

different modern ritual contexts, and megaliths are sometimes encompassed into stories drawn from myths and epics. In such situations, ethical issues in cultural conservation, conflicts in ideologies, issues relating to modern or ancient DNA (Ávila-Arcos *et al.*, 2020), or excavation of burials with claimed ownership to existing communities are also rare in the Indian context. Despite problems, the issue of greater public involvement, including guidance for amateur non-professionals, is also important in terms of being able to generate modules for mass data collection, for stopping destruction of sites, and for promoting dialogue between archaeologists and the mostly unstructured community of amateur enthusiasts.

Prehistory has the unique perspective of bringing to our notice long-term evolutionary perspectives enabling us to situate human biology and behaviour in a vast canvas rising beyond narrow socio-political concerns and with a global appeal. The COVID-19 pandemic and shift to online media has been a game-changer, building bridges across the world, leading to new dimensions of academic and public interactions (Pappu and Akhilesh, 2020). This can only lead to positive outcomes for establishing a global stature for Indian prehistory.

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Shanti Pappu
Sharma Centre for Heritage Education &
Visiting Professor, Humanities and Social Sciences, Krea University
Email Id: sharmaheritage@gmail.com; shanti.pappu@krea.edu.in