

Neolithic Ashmounds of the Deccan, India: A Posthumanist Perspective

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“...However it [the ashmound tradition of the Deccan] may ultimately be found to relate to the cult of cattle throughout India, and however humble the theme may appear beside the grander flights of Indian religious thought, at least we may assert that what we have been able to reconstruct is something unique and hitherto undreamed of; and as such it adds a new and peculiarly Indian chapter to the history of human institutions” (Allchin 1963: 178).

Introduction

It is now four full decades since Andrew Sherratt (1981) coined the interesting concept of the ‘Secondary Products Revolution’. He developed it for highlighting how, proceeding from the use of cattle and sheep/goats primarily as meat-giving sources in the initial phase of the Neolithic in Eurasian areas, secondary products of these domesticates began to play a dominant role and, in fact, effected a revolutionary change in the later Neolithic stage. In particular, Sherratt drew attention to the role played by milk and wool in daily life and the use of cattle for traction in tillage and transport. This concept has been very helpful to researchers in understanding the developmental trajectories of various early agro-pastoral communities in the Old World. Sherratt (1981: 263) even felt persuaded to state

that “[t]he secondary products revolution marked the birth of the kinds of society characteristic of modern Eurasia.”

In this paper I intend to broaden the scope of the concept of secondary products and add cattle-dung to the list, which is a waste product resulting from animal-keeping. Taking a cue from posthumanist thought, I have recently hinted at the possibility of considering ashmounds representing burnt cow-dung formations as an agentive power that actively shaped the life-world of the Neolithic pastoralists of the Deccan region in India (Paddayya 2019: 120). In this paper I want to expatiate upon this observation. First of all, I will briefly introduce readers to the topic of ashmounds and the different views and opinions offered over a long period of time about their age and origin. I will then explore the possibility of bringing the whole theme within the fold of posthumanist conceptions of the very nature of archaeological record.

Ashmounds: Discoveries and Interpretations

Ashmounds are a distinctive group of archaeological sites confined to the southern part of the Deccan (fig.1). They occur in a concentration in the northern part of Karnataka, covering the districts of Gulbarga, Raichur, Bellary and Chitradurga and the adjacent Kurnool and Anantapur districts of Andhra Pradesh. This area is drained by the rivers Krishna and Tungabhadra. The sites consist of multiple layers of soft and hard (vitrified) forms of ashy deposit. At present we have knowledge of about 150 localities. At most of these localities the ash deposits no longer occur as regular mounds. They have been quarried away by locals and used for various purposes, with the result that the localities are now part of farmlands. We have only ten or twelve sites which still preserve their mound-like configuration. The most prominent amongst these sites are those at Kakkeri, Kamnatgi, Wandalli, Eachanal, Kupgal, Kudatini and Palavoy. These are oval or circular in plan with a diameter of 60 to 70 m and heights varying from five to ten metres. The volumes of ash deposit making up these

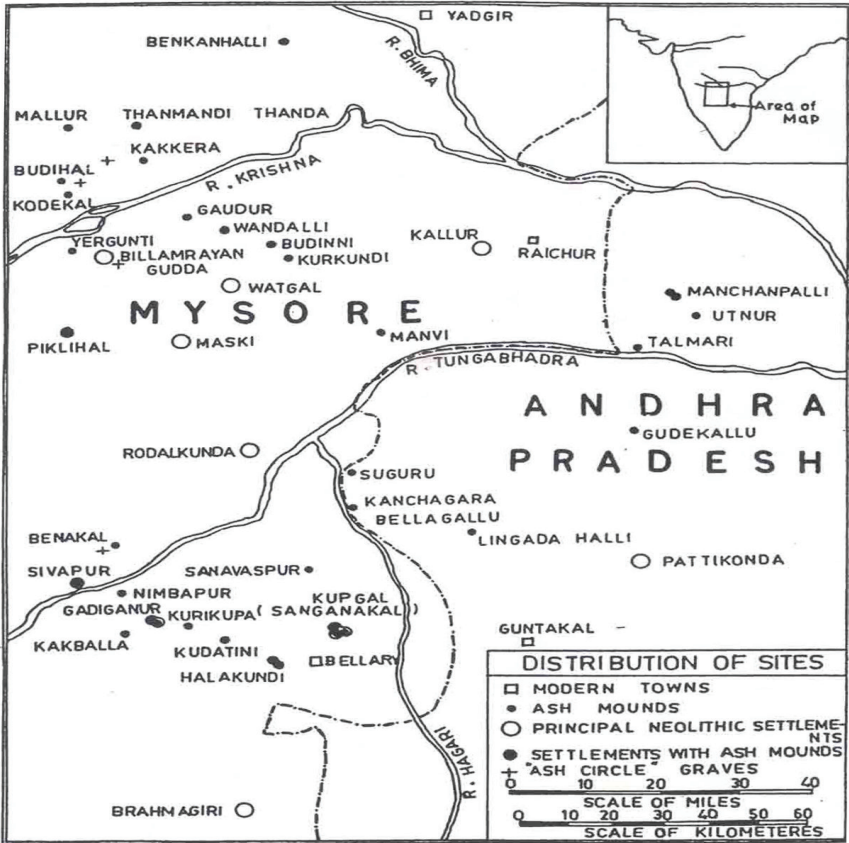


Fig.1. Map of Southern Deccan showing important ashmound sites (Paddayya 2019, modified after Allchin 1963: Fig.1).

mounds are impressive too. The Kudatini mound near Bellary town and the mound at Wandalli in Raichur area are estimated to contain five to six thousand cubic metres of deposit. The mounds consist of ten or more layers of deposit (figs.2-4).

As regards their cultural affiliation, ashmounds form the most striking aspect of the South Indian Neolithic culture, which is the best documented of the early agro-pastoral complexes of the Indian

subcontinent (Allchin 1960, 1963; Allchin and Allchin 1997). This culture flourished for about 1,500 years (from 2500 BC to 1000 BC). It was well adapted to the granite hill country of Southern Deccan. With limited scope for plant agriculture as imposed by the hilly nature of the terrain with poor soil cover, the Neolithic groups specialized in cattle pastoralism in the early phase. This is fully attested by the archaeological record in more than one way: the evidence of ashmounds themselves, the dominance of cattle bones in the faunal record from various sites, and the depiction of cattle as a common theme in the rock art of the region.

Detailed reviews are available about the discovery of ashmounds by various researchers and interpretations about their origin and age (Allchin 1963; Paddayya 2019), so a brief note will suffice as the background for our own study here. The initial discoveries were made in the opening years of the nineteenth century by Colonel Colin Mackenzie in the Bellary-Chitradurga area of Karnataka. Meadows



Fig.2. Engineer Lieut. E. Lawford's sketch of the ashmound (indicated by A) at Kudatini near Bellary, located in a narrow pass between hills of schistose rocks (Paddayya 2019, after Newbold 1843).



Fig.3. Section showing strata of ash deposits in the Kudatini mound (Paddayya 2019, after Allchin 1963: Plate 10).

Taylor found a few more sites in the middle of the century, and even cut a trench across one of the mounds near Shahpur. In the last quarter of the century, some new sites were added to the list by the geologist Robert Bruce Foote who also made the first scientific attempt to explain their origin. In the next century, many more sites were discovered in several parts of Southern Deccan by the staff of government departments and universities. Excavations were also conducted at half a dozen sites.

Struck by the ashy contents of these sites, which contrasted with known archaeological sites made up of human occupation deposits, a



Fig.4. Ashmound at Wandalli in Raichur District (Paddayya 2019, after Munn 1934).

variety of opinions and interpretations were put forward about their nature and origin. Initially these were treated as products of nature (volcanic ash, limestone slag, etc.). Folk traditions associated the sites with either cremations of mythological demons or spots where sacrifices were conducted by ancient *Rishis* or sages. Another set of interpretations ascribed the ash formations to mass cremations of soldiers killed in the wars of the medieval period. Finally, we have a set of views associating the ashes with industrial waste resulting from iron-smelting, gold- and glass-making, and brick- and pottery-making (e.g. Yazdani 1935–1936; Woolley 1940).

It was left to Bruce Foote to set aside these fanciful opinions one by one and put forward a totally different interpretation based on scientific grounds. During his geological surveys he not only discovered several more sites but was struck by their closeness to Neolithic settlements and by the Neolithic cultural material which he found in some of the mounds (Foote 1887). Moreover, the overwhelmingly pastoral

character of the rural way of life in the region and the high importance accorded to cattle in it led him to conclude that the ashes resulted from the burning of cow-dung. Foote derived scientific support for his view from chemical analyses of ash samples from Wandalli which vitrified grasses to be their main component (up to 53% SiO₂). This was confirmed by several later scientific studies (for details, see Allchin 1963: 80–86). Why burnings? Foote (1916) attributed these to chance and the carelessness of people.

Raymond Allchin's work forms a brilliant chapter in the long story of investigations on this topic. His monograph on this topic titled *The Neolithic Cattle-Keepers of South India: A Study of the Deccan Ashmounds* (1963) is in fact a landmark publication in the archaeology of post-Independence India. Proceeding from Foote's sound observations about the cow-dung nature and Neolithic age of these sites, Allchin raised the whole topic to the level of scientific inquiry in terms of problem identification, hypothesis formulation and testing. He viewed the Southern Neolithic culture as a perfect adaptation to the hilly terrain and semi-arid climate of Southern Deccan. This landscape approach rendered it easy for him to explain the heavy reliance of the culture on cattle pastoralism. He visualized two basic classes of Neolithic sites, viz. settlement sites and ashmounds, and further hypothesized that the latter were cattle-penning stations. He sought to test this hypothesis by taking up fresh field studies. His regional survey of about 30 major ashmounds in Southern Deccan and the cultural material obtained from them placed their Neolithic age beyond doubt. Likewise, his detailed excavations at the site of Utnur in the Mahbubnagar district of Telangana confirmed its character as a cattle-pen by producing evidence of multiple stages of wooden stockade preparations (fig.5), cattle occupation, dung accumulation and burning, and ash formation. Identification of cattle-hoof impressions served as additional proof (Allchin 1961).

Then the issue of the why of cow-dung burnings. Here Allchin moved away from Foote and maintained that the burnings were intentional and formed part of an ash-fire cult. It involved cattle fertility rites including driving the animals through a moderate fire of cow-dung

at the time of seasonal shifting of camps. Boivin (2008) believes that the flames rising from the burnings promoted sensory feelings for the pastoralists including singing and dancing. In an earlier essay (2004a), she interpreted the locational settings of the ashmounds at Kudatini and nearby sites in cosmological terms involving sunrise and sunset and inter-site visibility.

Allchin substantiated his interpretation of the ceremonial nature of cow-dung burnings by drawing upon ethnographic evidence of three kinds from the region: place names containing reference to *Budi* (the Dravidian word for ash), study of the pastoral groups and examination of pastoral elements in folk region. Allchin (1963: 178) concluded his entire study by stating that the ashmound tradition of the South Indian Neolithic “adds a new and peculiarly Indian chapter to the history of human institution”.

Allchin’s work was soon followed by some sub-regional investigations including small-scale excavation in different parts of Southern Deccan. Barring Rami Reddy’s (1978) excavation at Palavoy, which sought to revive the old iron-working theory, these new studies supported the cow-dung origin and Neolithic age of the sites and also broadly agreed with the ceremonial nature of the burning of cow-dung formations.

My own work on this topic commenced in the 1960s with a descriptive study of the ashmounds found in the Shorapur Doab (Paddayya 1973). With the advantage of employing processual perspectives in the investigation of Acheulean sites of the same area in the 1970s and 1980s, I returned to the topic of ashmounds in the 1990s. My fresh regional survey of all major sites in Southern Deccan brought to light clear evidence of Neolithic human occupation around the ashmounds. This led me to express doubts about Allchin’s division of sites into settlements and cattle-pens. Instead, I put forward the view that ashmounds were regular pastoral settlements (Paddayya 1993), of which nocturnal community animal-penning was just one component. In order to test this proposition, I undertook a horizontal excavation for seven seasons at Budihal in the Yadgir district of North



Fig.5. Row of postholes forming part of a cattle-pen stockade from Utnur excavation (Paddayya 2019, after Allchin 1961).

Karnataka (Paddayya 2019: 71–95). This exposed evidence of cattle-penning, cow-dung disposal and burning, and a human settlement area with various associated facilities including dwelling structures, stone-working areas, burials and a community animal butchering floor.

At the same time, I concurred with Allchin’s views about the ceremonial nature of cow-dung burnings. In fact, I went one step further and argued that the large size of some of the mounds imparted to them the trait of monumentality, which in turn enabled them to serve as nodal centres for periodic congregations of pastoral groups from other sites in the surrounding area. These congregations were occasions for community feasting, cattle fertility rites, and various socio-economic and religious transactions. These also promoted

feelings of regional cultural identity. I further stated that the various rites involving cattle and fire that are still being followed on certain festival occasions like *Pongal* or *Makara Sankranti*, as well as periodic *jatras* (religious gatherings) and cattle-fairs that are held in the region, are a direct legacy of the Neolithic period.

Cow-Dung as an Actant or Agentive Power

From the above account of ashmounds we note how a material item that was long treated variously as a natural product, ashes from human cremations or industrial waste has finally been proved to result from cow-dung accumulations of the Neolithic period which were burnt as part of community ceremonial activity. Certain things about this animal waste and its deposition and transformation into ash are striking. First, its patterned dumping at an earmarked spot adjacent to penning areas and the accumulation of large heaps! Intentional periodic burnings! Burnings associated with animal fertility rites! Ashmounds serving as monuments and as centres of periodic congregations of pastoral groups which witnessed societal transactions of various kinds! The promotion of regional cultural identity! All seemingly unreal and yet true. It is here that the recent ontological turn in archaeological theory comes to our aid, more particularly new conceptions of the materiality of the archaeological record.

Stated in a brief way, the ontological turn marks a silent revolution that took place in archaeology at the turn of this century. In my view it adds a new facet to the qualitative stage of self-critical self-consciousness recognized by David Clarke (1973) in the development of archaeological thought. Far from being a unitary trend, this new theoretical orientation is a set of mutually compatible perspectives, though each with an emphasis on its own interpretative agenda. One could identify four different perspectives, *viz.* new material archaeologies, speculative realism, P-Archaeology (Process Archaeology) and object-oriented philosophy—all influenced by recent developments in the use of phenomenological theory in both

the sciences and humanities (for useful reviews, see Gosden and Malafouris 2015; Ingold 2012; Johnson 2012; Thomas 2015). Two or three aspects of this ontological turn are striking. First, there is a shift of emphasis from the pure epistemological concerns of processual and interpretive archaeologies to the ontological domain where fundamental questions are raised about reality and the nature of being, which in turn call for revision in our conceptions of agency, change, causality, materiality and relations. Further, the ontological move seeks to free or unshackle archaeological interpretations from domination by the interpreting subject, i.e. archaeologists themselves. Instead, the interpreted materials and their attributes are now brought to the foreground. Hence this trend is also called posthumanist thought (Lucas 2012: 260–263).

This takes us to a third and, from our point of view, the most important proposition of the new revolution. This is about the new conceptions of the materiality of matter. Already a good number of writings have appeared on this theme (e.g. Alberti et al. 2011, 2013; Alberti and Bray 2009; Boivin 2008; DeMarras et al. 2004;; Lucas 2012). Matter is no longer viewed in terms of ‘brute materiality’. Rather it is said to be imbued with vibrancy and endowed with inner energies of its own. The inherent attributes and properties of a material item, when set in relationship with those of other items, empowers the item to emerge as a key player or, to use Latour’s (see Alberti and Bray 2009: 340) term, ‘actant’ in social dynamics. This goes beyond post-processual archaeology’s representationalist notion of material objects as symbols (e.g. Hodder 1982) and the earlier theories of agency which generally privileged the humans in the past in matters of interpretation (see review by Dobres and Robb 2000). Lucas (2012) elaborates upon these ideas of materiality and discusses them in relation to various entities constituting the archaeological record. He states that the whole task of materiality or materialization:

“...is not about matter at all but about its form and organization. What is materialized is not something which lies above or outside the material (i.e. ideas, beliefs) but simply always already inherent in the matter itself but not actualized” (Lucas 2012: 167).

Actualization takes place when materials enter into relationships with other components (the archaeologist included). Continuing his comments, Lucas writes:

“In this sense, objects always hold something in reserve; they are always both virtual and actual entities, simultaneously; ... *this is how novelty is possible. It is how new things can come into the world*” (Lucas 2012: 167, emphasis added).

Arguing in a similar vein, Jones (2004) states that post-processual archaeology failed to go beyond the outer form of objects and their potential for symbolification. He emphasizes that understanding of the inner properties of materials serves a two-fold purpose. First, it helps one to recognize how the attributes of materials are perceived and enrolled in the life processes of the human world. Second, it promotes a historical perspective. Jones further argues that the recognition of the materiality of objects calls for a complementary use of archaeometry and cultural analysis. He highlights how attributes such as colour, plasticity, malleability and durability play a dominant role in the enrolment of objects in the life-worlds of people.

We can now examine the case of cow-dung and its attributes in terms of these new conceptions of materiality. First, being a waste product of cattle-keeping which was the main occupation of Neolithic groups in Southern Deccan, its daily accumulation in a marked quantity arising from the community penning of animals was a conspicuous feature of the settlements. Its rapid accumulation necessitated a patterned way of waste disposal. Identification of one or more adjacent spots for dumping obviated the need for investing a large amount of time and effort in waste clearance. Mat-impressed pottery found at some of the Neolithic sites in the area (Paddayya 1973: Plate IX, No.1) proves that mat-making was practiced and, presumably, its corollary basketry too. Wicker-baskets would have facilitated the tasks of collection, carrying and dumping of the dung. Also, cow-dung's attributes of softness and plasticity would have been seen as facilitating factors in its collection by hand-picking and dumping.

Feelings of repulsion are normally associated with the excreta of living organisms. Human faeces arouse the strongest repulsive feelings. But cow-dung is one of the exceptions. Arising from its origin entirely from vegetal matter and the particularistic digestive chemistry of cattle, cow-dung has neither any offensive smell, nor carries in it any disease-causing bacterial organisms. It is the common-sense recognition of these attributes which allowed Neolithic groups to dump cow-dung close to their settlements. One may note here that even in present-day rural India cow-dung heaps are commonly juxtaposed to dwelling houses. Also, cow-dung is widely used for paving house floors and plastering mud-walls; this is in recognition of its germicidal properties. It is also used for worship and decorative purposes on festival occasions.

There is a set of soft attitudes associated with cow-dung. The feelings of closeness or bondedness which the pastoralists develop with their domestic stocks is well known. Allchin (1963) devoted an entire chapter to the elaborate practices of decoration and worship of cattle prevalent in the Deccan on the occasion of *Pongal*, *Diwali*, *Holi* and other festivals. These feelings would soon be transferred to their products, such as meat and milk. Cow-dung is another such item and is recognized as a life force because of its origin in vegetal matter which is part of the organic world. Its life-bearing properties account for its use as a resource material for cooking and farm manuring. Modern use of cow-dung to generate gas for domestic and other uses is an extension of the recognition of its inherent energy potential by Neolithic groups.

Cow-dung's attribute of easy combustibility derives from its origin in vegetal matter. In contrast to hard and leaping fires resulting from the burning of hardwoods, cow-dung burning creates soft and low fires. These fires are often of a smouldering type and continue for days. These considerations are important in explaining why there was no need for pastoralists to leave their settlements when cow-dung burnings were taking place in the adjacent dumping area.

Durability is another noteworthy attribute. While cow-dung left to itself soon disintegrates and forms part of soil, ash representing its burnt form has an element of durability. This is particularly so in the case of the vitrified variety, which has a stony form. The durability of ash formations, coupled with their continuous accumulation, leads to or promotes the elements of physicality and monumentality. This is particularly so in the case of mounds (e.g. Kudatini and Wandalli) whose full view is only possible with a raised head. Such landscape eminences soon accrue for themselves powers of attraction from far and wide and serve as hubs for periodic gatherings. Once established, the notion of monumentality continues for generations.

Abstracting from the foregoing observations, one could argue that cow-dung and its derivative ash, while they are not humanly created products in the way Palaeolithic handaxes and monuments like Stonehenge and the Taj Mahal are, nonetheless have an animacy and vibrancy of their own. Now the crucial question crops up: How were all these attributes of cow-dung actualized through repeated burnings and in the formation of a distinctive class of archaeological sites across the landscape? Far from being a sudden flash of an idea in somebody's mind, the matter was one of pastoralists' common-sense understanding of the processes operating in the natural world, and their manipulation of these processes to build community practices and institutions around them. Invoking the notion of necessary and sufficient causes (reminding one of Latour's (see Alberti and Bray 2009: 340) concept of 'Flat Ontology' where objects and subjects coalesce into 'hybrids'), it is possible to visualize that what really mattered in our case was the conjunction of the attribute of the combustibility of dried cow-dung and human intervention. Picking up clues thrown up by auto-combustion and chance fires, the Neolithic pastoralists would have soon recognized the usefulness of burnings because these effectively minimize space limits by dramatically reducing the volume of dung heaps. They would also have soon noticed the clean and hygienic appearance of burnt surfaces. Even now in rural India ashes from domestic hearth or firewood burnings

are sprinkled over penning areas to kill germs. An additional practical advantage of fires is that these ward off wild animals from settlements.

Once the multiple uses of these burnings or fire-spectacles at the practical level are understood and appreciated, it is only a short step to the recognition of these events as possible occasions for community gatherings and religious practices. There is considerable weight in Allchin's inference about the association of these burnings with cattle fertility rites that included driving the animals through a moderate fire of cow-dung. At a time when veterinary science was not known, this simple practice of leading cattle through moderate cow-dung fire would have helped to some extent in mitigating diseases caused by germs entering through the mouth or hooves. Not surprisingly, in many parts of the Deccan the practice of driving cattle through fire created from burning cow-dung or hay is still prevalent, albeit in a symbolic way, on certain festival occasions (fig.6). Once these burnings and associated ceremonies achieved a degree of regularity and the resultant ash accumulations gained a prominent size and shape, the element of monumentality was added and some of the sites emerged as centres for the periodic congregation of groups from sites in the surrounding areas. The imposing physicality of these mounds would have ensured the continuity of these congregational traditions for generations. These gatherings are the prototypes of the *jatras* and cattle-fairs which play a prominent role in the dynamics of the rural Deccan today. In short, this is the reconstructed story of how cow-dung formations and ashes derived from their burning significantly shaped the life-worlds (material and mental) of the Deccan's Neolithic communities.

Conclusion

Let me conclude by bringing this topic of Neolithic ashmounds in relation to ancient Indian thought. We must pay tribute to Allchin for drawing attention more than half a century ago to "The *mighty efficacy* which the Indian tradition ascribed to cow-dung" (Allchin

1963: x, emphasis added). He has already referred to it as one of the *Panchagavyas* or five valuable products of cow (ghee, milk, butter and urine being the other four). He has quoted in this regard one of the Upanishadic statements where five forms of Siva are associated with five divine cows. Ash derived from the dung of each cow has a name and properties of its own: gloriousness, devourer of all sins, brilliance, burns up all calamities, and protects from ghosts, sickness and other miseries of existence (Allchin 1963: x, xvi). What is relevant from our point of view is that the notion of matter as energy-bearing is already enshrined in ancient Indian thought. Siva's *Nataraja* dance is a metaphorical call to matter to wake up from its nocturnal inert state and energize space and time which are limitless (Coomaraswamy 1985 [1915]).

It seems possible to bring many other aspects of the Indian archaeological record and art within the purview of recent ontological developments. Gell has shown the way by interpreting *Darshan* or idol-seeing in a Hindu temple as an agency with societal bearings. He says:

“*Darshan* is thus very much of a two way affair. The gaze directed by the God towards the worshipper confers his blessing; conversely, the worshipper reaches out and touches the God. The result is union with the God, a merging of consciousness...” (Gell 1998: 117).

In fact, these elements of reciprocity and intersubjectivity in the relationship between the worshipper and the idol are already implied in Coomaraswamy's interpretation of the Buddha image (by implication all images in Indian religion) and its perception by the devotee. In a celebrated passage published 80 years ago, he wrote:

“In order to understand the nature of the Buddha image and its meaning for a Buddhist, we must, to begin with, reconstruct its environment. We must forget we are looking at ‘art’ in a museum and see the image in its place in a Buddhist church or part of a sculptured rock wall and, having seen it, receive it as an image of what we are ourselves potentially... We are to see, not the likeness made by hands but its transcendental



Fig.6. Kichchu Hayasu (Kannada, meaning ‘jump over fire’) ceremony at Siddhalingapura village near Mysore, showing cattle being led through moderate cow-dung fire on the occasion of the festival Makara Sankranti (after Paddayya 2019: Fig.5.1).

archetype, we are to take part in a communion... The image is one of Awakened; and for our understanding, who are still asleep. The objective methods of ‘science’ will not suffice; there can be no understanding without assimilation, to understand is to have been born again” (Coomaraswamy 1986 [1938]: 147–148).

More recently, the new conceptions of materiality have been put to use for interpreting the close association of red-coloured soils (*pili mitti*) with the goddess of wealth—Lakshmi—in rural Rajasthan (Bovin 2004b) and for explaining the role of iron ore and surface water bodies in the emerging socio-politics of the Iron Age society of Karnataka (Johansen and Bauer 2018).

Finally, I put to myself two simple queries. First, is it necessary to stretch too far the division of the world into humans and materials?

Here one is reminded of the body-mind and several other binaries which have plagued Western philosophy for a long time. There is much force in the middle path advocated by the Buddha. As concerns the various prevailing views about the topic of materiality, Lucas has correctly emphasized that:

“What really matters is perhaps not materiality but materialization, a process in which objects and people are made and unmade, in which they have no stable essence but are contextually and historically contingent” (Lucas 2012: 166).

Then my second query: Would the ontological revolution supplant the existing formalistic, processual and interpretive epistemological traditions in our discipline? Probably not. Otherwise, there is the danger of archaeology relapsing once again into an ‘undisciplined discipline’—this time into a web of story-tellings. All these approaches are complementary. Long ago Whewell reminded us of the accretive nature of knowledge in inductive sciences in very wise words:

“In the intellectual, as in the material, world, ...Nothing which was done earlier was useless or unessential, though it ceases to be conspicuous and primary” (Whewell 1857 [1837]: 8).

Acknowledgements

I am thankful to the editors for suggesting many stylistic and linguistic improvements to the text.

N.b. the author takes responsibility for all images included in this paper.

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