

Behind the frontline: local communities, national interests and the practice of  
Indian archaeology

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## **Abstract**

This study is concerned with change and continuity in the practice of Indian archaeology. Its characterization as a national tradition is examined in light of relations between local communities and the national government, and in terms of archaeological practices that developed in colonial India. The research employed geographic information systems and historical methods to highlight the importance of changes in the social and political organization of society for the study of the history of archaeology. It is argued that the questions archaeologists asked, the methods they employed and the evidence they deemed credible, served the interests of the colonial government, and that these understandings were reinterpreted as Indian or nationalistic ones. Moreover, in Independent India, archaeologists often served the social and political aims of the national government by justifying the displacement of local communities and by obscuring their interests in the preservation of cultural heritage and in the interpretation of archaeological data. In the Republic of India, a nationally-oriented framework has taken a caste-based view of prehistory. This perspective justified economic, social, cultural and political marginalization of aboriginal peoples. This view of the Indian past has excluded India's ethnic and linguistic minorities from social dynamics and social history. This, in turn, has influenced the potential and aims of Indian archaeology.

## **Précis**

Cette étude porte sur les changements et la continuité des pratiques de l'archéologie indienne. Le fait qu'elle soit considérée comme tradition nationale est examiné en fonction des relations entre les communautés locales et le gouvernement national, et en fonction des pratiques archéologiques développées à l'époque coloniale. Cette recherche a été menée en ayant recours au système d'information géographique ainsi qu'à des méthodes historiques afin de souligner l'importance, pour l'histoire de l'archéologie, de changements dans l'organisation sociale et politique de la société. On y comprend que les questions archéologiques posées, les méthodes employées, ainsi que les preuves jugées crédibles ont servi les intérêts du gouvernement colonial, et ont souvent été réinterprétées en tant qu'indiennes ou nationalistes. On y comprend aussi que, en Inde indépendante, les archéologues ont souvent servi les visées sociales et politiques du gouvernement national en justifiant le déplacement de communautés locales et en négligeant leurs intérêts dans la préservation du patrimoine culturel et dans l'interprétation de données archéologiques. Au sein de la République indienne, une approche orientée sur la nation a mené au développement d'une compréhension de la préhistoire basée sur les castes. Cette perspective a permis de justifier la marginalisation économique, sociale, culturelle et politique de peuples autochtones. Cette vision de l'histoire indienne a exclu les minorités ethniques et linguistiques indiennes des dynamiques sociales et de l'histoire sociale. Ceci a exercé une influence sur le potentiel ainsi que sur les visées de l'archéologie indienne.

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## Introduction

November 2000 – “We are being cheated of valuable heritage unearthed after 17 years of incessant labour”, an exasperated Ganga Bishan Sharma confessed to Pooja Thakur, a correspondent for the *Times of India*<sup>1</sup>. Sharma, anxious and frustrated, accused Union Territory officials<sup>2</sup> of “twisting” a proposition to loan four sandstone sculptures to the city Museum in Chandigarh. Fifteen years earlier, as an officer in the Punjab department of archaeology, Sharma had invited the Archaeological Survey of India, henceforth the Survey – the national department for archaeology and heritage legislation – to organize excavations in his community of Sanghol. Located 200 kilometres from the sensitive Pakistan-India frontline, Sanghol was one of several villages that the Maharaja of Patiala had ceded to the Government of India after Indian independence. Sharma had believed that the exhibition of four ‘duplicate’ sculptures at the city Museum would persuade its visitors to make the hour-long drive down to his community. A loan after all, had brought Sanghol international fame in 1985, when a recovered stone railing was displayed at the Festival of India in Washington, D.C. Still reeling in the wake of Prime Minister Indira Gandhi’s assassination at the hands of her Sikh bodyguards in 1984, securing the railing was a diplomatic coup<sup>3</sup> for the restless Indian delegation heading to the United States.

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<sup>1</sup> Pooja Thakur reported on this issue for the *Times of India*. Her articles are the source for direct quotes; see for instance “Villagers allege foul play in transfer of sculptures”.

<sup>2</sup> Chandigarh is a Union Territory in northern India and it is administered directly by the central government in New Delhi. The central government appoints Chandigarh’s Administrator who also serves as the Governor of Punjab. The current Administrator is Shivraj Patil (2010-); Lieutenant General J.F.R. Jacob was Administrator between 1999 and 2003.

<sup>3</sup> That the loan was uncertain at the time is suggested by its absence in the exhibition catalogue (Guha-Thakurta 2007: 647).

Now the situation had changed. Infuriated with Union Territory officials for what the community regarded as foul play, the Punjab department had stalled the transfer of the selected pieces, denouncing the Museum's disappointingly low insurance estimate for each sculpture. Not only had Museum officials offended the local community, they had selected twelve pieces, far more than the Punjab department had agreed to. Moreover, as some members of community alleged, the Museum had yet to offer the Sanghol site museum antiquities in exchange, and thus had heightened sensitivities within the community that it actually *was* being taken advantage of.

Although retired by this time, Sharma had called upon the Survey to stop the transfer of the pieces, almost guaranteeing that, in post-Babri Masjid India, the national press would get wind of yet another contestation over cultural heritage. In the Babri case, where a medieval mosque in the northern city of Ayodhya had been illegally torn down in 1992 by *kar sevaks* (Hindu volunteers), the Survey could not do right by the Indian middle class. Riots and the loss of human life in the wake of the demolition made Babri Masjid a public relations nightmare, a feast for press outlets, and the grease which, even two decades after the debacle, feeds fiery questions about the role of the Survey and the rights of minorities in a multi-ethnic, multi-lingual India.

The Chandigarh Museum did get the sculptures it had wanted, and the community's plans for a new, expanded museum in Sanghol have since accelerated. The community has set aside a portion of its lands for construction of the new museum. Neither the Punjab department nor the Survey has carried out further field studies at Sanghol. But the incident underscored growing

disagreement over the interpretation of archaeological data and the preservation of cultural heritage in India. It shed light on the deep interests of communities in local antiquities, their cultural heritage, and the tensions between them and state-oriented organizations.

### ***Approaches in the history and practice of archaeology***

Our view of the present state of things influences how we write history, and our understanding of the past shapes our knowledge and perceptions of the present. This examination overlaps with the history of science and the study of archaeology, as well as post-colonial studies, which developed following in the aftermath of the Second World War as changing geopolitical interests and alliances saw the concurrent creation of newly-non-aligned states and ‘supranational’ institutions and universal human rights (Cooper 2005: 231). These developments, in turn, influenced the practice of archaeology.

In the postwar world, archaeologists were employed in government and university departments in most countries, including ‘Third World’ states in the modern world-system (Chakrabarti 2003). Buoyed by anti-imperialism and nationalism, non-aligned states such as India saw rapid economic, social and political change throughout the 1950s. Foreign policy concerns, as well as maintenance of internal social and political stability, influenced how archaeology was practiced. Newly acquired territories gave national governments access to new resources. It was in this context that postwar national archaeologies

developed. Archaeological research in local communities grew at the same time as national governments invested in large-scale construction projects, which included land redistribution for mining and for building dams, power plants, airports and roads. Policy makers and scholars renewed or expanded colonial cultural protection laws, yet the relationship between the national government and local communities influenced how heritage was protected.

What makes the study of archaeology particularly interesting and challenging is that the discipline is at once interdisciplinary and sensitive to social and political factors (Trigger 2006). A key question is how the social context of archaeological practice influences the interpretation of archaeological data. Prehistoric archaeology grew at the heels of imperial restructuring in the mid-nineteenth century. Western European archaeologists, particularly French and British ones, often relied on ethnology more than on archaeology to understand the prehistoric past (Trigger 2006: 166). Scholars increasingly underestimated the Enlightenment values<sup>4</sup> of psychic unity of humans and the likelihood for independent innovation. They sought explanations for similarities and idiosyncrasies in cultural and historical factors. These understandings of human behaviour and the nature of things promoted racism (Trigger 2006: 167-170). Yet the relationship between these archaeological practices and those that developed

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<sup>4</sup> On this point, Cooper (2005: 6) remarks these concepts are often ‘taken out of history’ which obscures their ‘convoluted trajectory’. The ways that Europe came to be in relation to its colonies is at the heart of Cooper’s argument.

in former European colonies<sup>5</sup> is poorly understood (Díaz-Andreu García 2007: Preface).

The hierarchically-structured relationship between ‘metropole and colony’ (Cohn 1996) is assumed to have been unidirectional. ‘Colonial science’, under this model, is conceptualized in terms of the diffusion of science from Western Europe to specific places at particular times<sup>6</sup> (Basalla 1967). Yet unlike Western European science, which is seen as creative and progressive, colonial science is thought to be dependent on an external tradition and thus, these ‘fact-gathering’ practices are unlikely to develop or change (Basalla 1967: 613). This situation influences the third and final stage of the growth of science, which is the establishment of a ‘national’ or an independent scientific tradition (Basalla 1967: 617).

These essentialist views give the impression that science was unified, practiced without conflict – in an apparent social and political vacuum in the colonies – and was directed exclusively by the state. Yet, as the historian of science Mark Harrison (2005: 56) has pointed out, this underestimates scientific work financed by sponsors other than the state and corporations. Moreover, these views fail to shed light on the changing relationship between science and society.

Throughout the 1960s and 1970s, archaeologists grew increasingly aware of variations in the practice of archaeology. Some of them grew anxious over the

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<sup>5</sup> For Japanese imperialism and a non-European colony, see Pai (1998) in which she examines archaeological practices that developed between 1910 and 1945 during the Japanese occupation of Korea.

<sup>6</sup> This issue is hotly debated by historians and historians of science; see Pyenson (1993) and Palladino and Worboys (1993) in which they discuss imperialism and science prior to World War II.

aims and future of the discipline as a science<sup>7</sup> (Clarke 1973; Dunnell 1982). They believed that changes in archaeological practices and interpretation were best understood developmentally in a unilinear fashion (Clarke 1970: 27) and that regional styles of archaeology would eventually disappear. Scholars believed that growing disciplinary ‘self-consciousness’ was a (prerequisite and) stimulus through which archaeology would become “more vigorous and vital” (Clarke 1970: 28). They assumed that archaeologists had shared common problems and that these issues would be easily resolved when practitioners identified “archaeology as a discipline with its own special material, questions, problems, procedures, solutions, objectives and theoretical calculus” (ibid.). Thus in this model, a ‘transient’ archaeology would be replaced by an “elaborate analytical archaeology” which would “link the national archaeologies of the world with an explicit international methodology and theory” (Clarke 1970: 30). This internalist view of archaeology emphasized the progression of techniques of analysis and growing amounts of archaeological data.

In recent years, archaeologists, particularly those outside of Western Europe and North America, have questioned internalist views, and have promoted ‘externalist’ examinations of the history of their discipline (Trigger 1984; Bernal 1980; Chakrabarti 1981). Influenced by critiques of colonialism (Said 1978), scholars in former colonies increasingly challenge views that obscure the influence of social, political, and economic factors on archaeology (Chakrabarti

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<sup>7</sup> American anthropologist Robert C. Dunnell remarked that there was “less coherence and agreement on the nature, goals, and even techniques of analysis in archaeology today than was true twenty years ago” (1982: 1). See also British archaeologist David Clarke (1968) in *Analytical archaeology*.

1997; Moro Abadía 2006). They often highlight the relationship between imperial expansion and government-organized collection of data on ‘natives’, including local languages, mythology, physical anthropology, and antiquities (U. Singh 2004).

Efforts in ‘decolonization’ also examine the impact of colonialism on former colonies. Postcolonial critiques seek to elucidate the “cultural effects of colonization”, in addition to social “interactions and representations” of colonial societies (Patterson 2008: 21). Specifically, scholars explain contemporary archaeological practices as “inheritance” from colonial frameworks, and examine the “ways in which those apparatuses have persisted or been modified” (Gullapalli 2008: 36). Because colonial frameworks are thought to have continued after the end of colonial administration (Gullapalli 2008: 36), scholars examine the “power relations that govern the flow of ideas” and challenge “an incomplete and dominant First World paradigm” (Schmidt and Patterson 1995: 3).

Postcolonial approaches analyze colonizer-colonized dynamics, and aim to recover the voices of the ‘subaltern’ or non-elite, marginalized peoples (Gullapalli 2008: 40). Scholars thus critique the “colonial archive” – documents and sources – created “within unequal power dynamics” upon which histories are based (Gullapalli 2008: 39) and question the position of the individual(s) who collected, organized and analyzed the very objects that constitute the colonial archive (Gullapalli 2008: 41). They further shift attention to non-literary (read non-elite) media, such as material culture, “performances, regimes of domesticity and kinship, physical discipline and the construction of landscape” (Pels as cited in

Gullapalli 2008: 40) to examine contestation and negotiation in the practice of archaeology.

‘Community archaeology’ is loosely defined as collaborative archaeological field studies between Euro-American or Euro-Canadian scholars and aboriginal peoples in North America (Ferguson 1996). It grew from “criticism” (and “political activism”) throughout the 1960s and 1970s by the “indigenous populations in Canada, the United States, Mexico, and Central and South America” about the way in which “Americanist archaeology” was practiced (Ferguson 1996: 63-64).

Although the North American Graves Protection and Repatriation Act or NAGPRA, passed in 1990, gives “Native Americans property rights in grave goods and cultural patrimony” and repatriation rights for human remains, the preservation of cultural heritage has long been influenced by the relationship between indigenous communities and the federal government, as well as by foreign and economic policy in the United States (Ferguson 1996: 66). This includes federal support for cultural resource management. Federal legislation also regulates archaeological field studies through permits and it generally calls for prior “consent” from indigenous communities when field studies are carried out on federal and “Indian lands” (Ferguson 1996: 66).

Moreover, aboriginal peoples increasingly challenge the view that archaeologists offer a “privileged view of the past” (Ferguson 1996: 72) and they reject perspectives that overlook the value of oral traditions. Indigenous scholars argue that “social and cultural practices which are still alive” help to “interpret better the central features of the social, economic, and religious-political



organization of antiquity” (Condori 1996: 49). They explain that material culture is far from “inert or dead”; rather, archaeological material is thought of as the “source of their identity” and sites have “link[s] with a dignified and autonomous past” (Condori 1996: 49). Some aboriginal peoples employ these methods to reclaim their histories from non-aboriginal scholars.

In recent years, some North American archaeologists working in non-Western contexts have promoted “community-based” archaeology (Rizvi 2008: 120) as a way to “dismantl[e] research-based power structures”. These approaches overlap with the promotion of “heritage tourism” including opening local museums (Rizvi 2008: 121). Such efforts are thought to challenge established structures by “put[ting] money into the pockets of local communities rather than multinational corporations” (Rizvi 2008: 121). Ironically, these approaches sometimes obscure the interests of local communities who think of material remains as part of their living traditions and emphasize their rights in the preservation of cultural heritage, and in the interpretation of archaeological data (Condori 1996).

In the face of an increasing incidence of confrontations between local interest groups and state-oriented organizations, scholars frequently examine the role of political ideology on the practice of archaeology (Ratnagar 2004). Selvakumar (2010: 477) remarks rightly that archaeology “cannot be equated with any of the activities that lead to the [fulfillment] of the fundamental needs of humans”. Yet, the fact that there are disagreements between local communities and the national government over cultural heritage like at Ayodhya (Rao and Reddy 2001), and that governments seek to influence the interpretations of the past, demonstrates that archaeology has relevance in society.

Efforts to better understand the influence of political factors in archaeological research are concurrent with scholarly interest in the growth of nationalism in Western Europe (Kohl and Fawcett 1995). To better understand this complex ideology, archaeologists cross between disciplinary boundaries and draw upon concepts in colonial studies, literary studies, and the history and sociology of science (Díaz-Andreu García 2007). Yet these approaches in ‘multivocality’ sometimes present a teleological account in which archaeologists in the nineteenth century were “an imagined community of scholars” who “behave[d] fraternally to other members of the community” (Díaz-Andreu García 2007: 3). At the same time, ‘native’ archaeologists are thought to have been “colonized subjects” who “mimick[ed] the colonizers” (Díaz-Andreu García 2007: 9). These essentialist views obscure competition between archaeologists and emphasize homogeneity in the practice of archaeology. This influences our understanding of change and continuity in post-colonial or national archaeologies.

Social and historical studies illustrate the influence of social, political and cultural factors on progress in the interpretation of archaeological data (Ikawa-Smith 1982; Tong 1995). They highlight how specific interpretations of archaeological data are encouraged by state-oriented institutions at particular times (Ikawa-Smith 2011), and how values and beliefs influence research interests and the answers that scholars are willing to accept (Trigger 1980).

Contextual studies of the practice of science (Kuhn 1970) suggest that data and facts are often products of social and political interests of researchers (Wylie 1992). Thus, studies that shed light on aspects of social behaviour often emphasize the role of individuals and the institutions which shaped archaeological

practices (Murray 2002). They often examine efforts of policy makers and scholars in heritage legislation and in training ‘natives’ in field collection of archaeological data (Ray 2008).

In the Indian context, these studies focus on Europeans employed by the colonial Government of India (Lahiri 2006; Pappu 2008) and East India Company employees like William Jones (Kennedy 1995) and Colin Mackenzie (Paddayya 2010). Ironically, these historical accounts often romanticize knowledge producers and overlook changes in the social and political organization of colonial India that influenced the practice of archaeology. They often assume a simple, homogenous and boundless pre-colonial and Crown-administered India.

At the same time, other scholars often dismiss tensions between knowledge producers as local activism, or attribute these conflicts to a lack of social and political awareness among archaeologists (Boivin 2005). Yet neither explanation deepens our understanding of the practice of archaeology, and its changing relationship to the society in which it is practiced. The significance of the present research is in delving behind the sometimes sensitive relations between local communities and state-oriented institutions and to investigate the influence of that relationship on the practice of archaeology.

### ***Methods and sources***

This thesis employs geographic information systems and historical methods to better understand the history and practice of Indian archaeology. Archaeologists

often employ geographic information systems, better known as GIS, yet historians and historians of science are often less familiar with these spatially-explicit computational methods (Owens 2008). At the same time, archaeologists are exhibiting great interest in the history of their discipline, and they employ historical methods to gain a deeper understanding of the influence of economic, social and political factors on the practice of archaeology (Christenson 1989; Schnapp 2002; Van Reybrouck 2002; Means 2011). Historians of science are often well-acquainted with historical approaches including oral history and archival research, yet archaeologists interested in the history of archaeology sometimes underestimate the value of these methods (Jeter 1989).

This research brings together GIS and historical methods to highlight the importance of spatial issues in the study of the history of archaeology. The thesis introduces a time-sensitive GIS methodology that assists scholars in better understanding changes in the social and political organization of the society in which archaeology is practiced, as well as long-range trends in the practice of archaeology. This framework provides a context for the examination of the changing relationship between local communities, where archaeological field studies often take place, and national governments.

To many observers, GIS is a digital replacement for traditional cartographic methods. Yet scholars interested in GIS often remark that unlike cartography, where a map is the intended final creation, these methods promote visualization as a first step in research (Robinson et al. 2011). In doing so, researchers create a space to ask how we know what we know, and shed light on what we do not

know. These epistemic issues are at the heart of the GIS methodology employed in this research.

Most archaeologists who employ GIS often remark on its database capabilities, and they champion GIS as a tool for data storage and management (Allen et al. 1990). Some scholars often compile spatial attributes of archaeological sites in large databases and they sometimes assume that these digital archives are static and unchanging (McCoy and Lageford 2009). They also presume sometimes that methods for the collection of data do not have a relationship with available tools and technologies, and they often underestimate the relationship between the synthesis and the collection of archaeological data. This view influences the potential and aims of archaeology. In presuming that the accumulation of archaeological data characterizes the discipline, scholars undervalue the influence of social, political and economic factors on the practice of archaeology. This perspective obscures intellectual interests of archaeologists at particular times, variability in the methods they employ and new lines of research that open up for investigation.

A key contribution of this thesis is its time-sensitive GIS methodology that has the capability to present, by way of visualizations such as graphs, maps and animation, when and where different knowledge producers carried out archaeological field investigations. Like most computational databases, GIS does not handle time well (MacEachren and DiBiase 1991). Scholars who are aware of this limitation, and who are interested in change over time, often employ graphs and animations in their research (Peterson 1995; Johnson 1999). This is

significant because when and where archaeology is practiced must be understood in relation to changes in its society's social and political organization.

Social tensions and conflict between local communities and the national government is often heightened during times of rapid change. Their sensitive relations often mark changing access to rural communities and resources. These are important factors that influence the practice of archaeology. Careful examination of historical documents offers insight on how, when and where changes in social and political organization take place. Yet identification of relevant collections is perhaps the most crucial dimension in archival research. Since archives are themselves a product of the society in which they were created, they are influenced by their social, political, cultural and historical circumstances (Cox and Wallace 2002). Collections in depositories often differ in content matter, as well as historical coverage.

Knowing that the British Crown ended administration of its Indian possessions in 1947, we cannot expect to locate, in depositories in the United Kingdom, historical documents relevant to recent or post-1947 Indian internal and foreign affairs. Yet the same does not hold for documents on the dissolution of the East India Company in the mid-nineteenth century. We can anticipate that the National Archives of India in New Delhi has collections that pertain to internal and foreign affairs of the colonial, as well as the post-1947, independent Government of India. These collections include declassified government documents, as well as those that recently became available in the wake of India's *The Right to Information Act* (2005), which has eased constraints on access to

government documents. These documents shed light on Indian internal and foreign policy concerns.

Up until the creation of the Republic of India in 1950, one-time Crown administrated Indian Provinces co-existed and maintained foreign relations with Native States. These States often maintained their own administrative offices and archives. The great advantage of these archival collections is that they offer perspective on changing relations between Native States and Indian Provinces during the early twentieth century. In the wake of the creation of East and West Pakistan, and independent India in 1947, relations between Native States and Indian Provinces influenced Indian internal and foreign policy.

With the aim to better understand these relations and their influence on the practice of archaeology, I examined historical documents and maps at the Punjab State Archives in Patiala and Chandigarh. The Punjab archives house rich collections from administrative offices of the Patiala State, and the Patiala and East Punjab States Union, often called PEPSU. The unification of the latter with the northern state of Punjab in 1956 marked the cessation of Patiala as an administrative capital and, thus, limited the historical extent of documents at the Patiala depositories.

At the same time, these processes influence not only archives, but the collection of archaeological data, and its interpretation. How else might we understand changing access to multifarious and often vast, museums and depositories in which curators and archivists preserve records of archaeologists, their archaeological investigations, and indeed ‘material culture’ collected during field excavations and surveys.

To many observers, archaeologists study ‘material remains’, including stone and metal tools, bones, pottery, seeds, pollen, and even coins and inscriptions (U. Singh 2008). This, most often, is just one part of archaeological data that are collected in the field. Where might we find records that tell us which archaeological team carried out the field study? What methods and tools did the investigating team employ? Because artefacts are best understood in their archaeological context, survey and excavation reports, maps and photographs, along with the artefacts themselves, play a crucial role in the interpretation of archaeological data (Daniel 1981: 11-12). Together with publications, these records shed light on research aims, and form source material for the study of the history of archaeology.

That most archaeological field studies are conducted not in cities, but in marginalized rural communities, demonstrates the highly structured nature of social groups. Each archaeological team’s ability to carry out investigations is closely related to its access to these marginalized communities and resources. Because access to specific places changes at particular times, and because knowledge is produced in local communities, archaeological field studies are a unique class of historical data which shed light on the aims of research and the worldview of the researchers.

Archaeological publications also are an important source of historical data. They highlight the values of the larger community, as well as the archaeologist’s self-interest and understanding of theoretical developments in the discipline (Trigger 2006: 4; 17-26). Careful examination of publications gives insight on the archaeological team’s research aims, investigations, methods and public outreach.



A diachronic study of these contributions is a starting point for a better understanding of longstanding questions and emergent themes in Indian archaeology.

In addition, newspapers and other popular journals are a valuable source for examining public outreach. They offer insight on public reception of the latest breakthroughs, discoveries and information on archaeological projects. Because the public is often both the sponsor of archaeological research and the audience to which archaeologists speak, popular journals are a sensitive medium for disseminating the interpretations of archaeological data. With these aims, this research examined newspaper and magazine articles published in English and Hindi, in India, between 1920 and 1990. These records are available at the Nehru Memorial Museum and Library in New Delhi.

More often than their colleagues in the other historical and social sciences, archaeologists employ digital tools and technologies. That scholarly journals often seek visualizations, including photographs, maps, and graphs, speaks to the kinds of evidence which a sceptical audience deems acceptable. These data shed light on the archaeologist's methods and knowledge claims. Our understanding of archaeological research is deepened by careful study of this often overlooked data.

Although archaeologists often share field and laboratory methods, their records are often the source of greatest variability. This is because the questions archaeologists ask and the evidence they deem acceptable is influenced by their social milieu. In the wake of Prime Minister Indira Gandhi's assassination in the mid-1980s, Sanghol, a community in southeastern Punjab, collaborated with the

Punjab Department of Cultural Affairs, Archaeology and Museums and the Archaeological Survey of India or the Survey – the national department for archaeology and heritage legislation – during archaeological field studies.

Team members divided archaeological data between the community in Sanghol, the Punjab department in Chandigarh and the Survey in New Delhi. Although excavations ended in 1990, the Survey, which provided the major part of the funds for the field study, has published only short excavation summaries in *Indian Archaeology – a Review* (the Survey's journal). Until the Survey publishes its complete report, archaeological data stored in its offices are not available to scholars for examination. At the same time, the Punjab department, which also has not produced a final report, makes available its collections to scholars. This situation presents significant challenges for scholars interested in the practice of archaeology.

As archaeologist Maria Braden (2006) points out, local interest and land ownership influences the collection of material remains and how they are curated. What does a field collection and its records, divided between three knowledge producers, tell us about the practice of Indian archaeology? How do we understand the influence of social and political factors on the interpretation of archaeological data collected in Sanghol?

Archaeologists interested in the history of their discipline increasingly employ oral history to create a record of well-known events and the role of known persons in these events (Jeter 1989: 167). Yet oral testimonies also shed light on narrators' worldviews and give insight on how social and political factors influenced their ideas (Doel 2003: 357). With the aim to better understand how conflict influenced

interpretation of archaeological data, this research examined oral narratives of archaeologists who excavated Sanghol between 1984 and 1990. This widens the scope of investigation and deepens our understanding of the history of Indian archaeology.

This thesis aims to bring together local and national narratives of Indian archaeology. The GIS approach creates a framework in which to examine the influence of social and political factors on the practice of archaeology. This offers insight on the strengths and weaknesses of archaeology as a science.

### ***Review of the history of Indian archaeology***

The writing of the history of Indian archaeology is younger than the ‘doing of archaeology’. The first histories, written in English, by British administrators, were what the historians of science Peter Bowler and Iwan R. Morus (2005: 2) call “whig history”<sup>8</sup> or “conventional stories” about new innovations that scientists “tidy up”. These narratives, as Bowler and Morus (2005: 2) suggest, oversimplify controversies, and “present a clear-cut image of heroes” who promote new ideas, and the “villains” who oppose them.

In the Indian context, James Gibbs, the Governor-General of India presented to the Society of Arts, his “History of archaeology in India” in 1885. Gibbs remarked on the importance of government involvement in the preservation of

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<sup>8</sup> “Whig” or whiggish is debated by historians and historians and philosophers of science. Ernst Mayr’s (1990) “When is Historiography whiggish?” gives insight on ‘whig interpretation’ and its usage by scholars. This point touches on the larger issue of explaining changes in scientific theory, and if these are similar to those seen in succeeding governments. A related issue is ‘presentism’ in which histories are written with a “consideration of the present in studies of the past” (Mayr 1990: 302). Oscar Moro Abadía (2008) offers perspective on ‘presentism’ with an analysis of Hélène Metzger’s works. He asks how historians can make themselves contemporaries of the scientists they study, if historians are “inevitably influenced by their present” (2008: 195).

cultural heritage, and drew attention to the initiatives that the colonial Government had taken to prevent the “desecration” of monuments, and to aid the decipherment of inscriptions (1885: 563). He reviewed the collection of coins, inscriptions, and ‘prehistoric remains’ in the Crown’s northern and southern territories (Gibbs 1885: 558). Gibbs remarked that the study of inscriptions in particular would help in the “fixing of dates and the names of rulers in ancient days” and this in turn would fill “many of the lacunae existing in early Indian history” (Gibbs 1885: 561).

What made Gibbs’ narrative different was its geopolitical definition of India. Whereas other works had offered regional perspectives on scholarly research, such as Colin Mackenzie’s collection in southern India, or Alexander Cunningham’s survey in northern India, Gibbs presented these efforts within a wider context of the “Indian Empire” – the territories that the Crown now administered (1885: 560). Moreover, Gibbs viewed archaeology as closely related to the study of ancient India and highlighted the importance of knowing the “Hindoo history” of India (1885: 561). In doing so, Gibbs drew freely from the culture-historical approach which a growing number of Western-educated Indian historians employed in the late nineteenth century (Dutt 1889). Furthermore, these perspectives emphasized the role of ‘enlightened’ European individuals and institutions in Indian archaeology and generally underestimated the interests of Indians in their past.

Influenced by anti-imperialism and by nationalism, some Indian scholars challenged these views and colonial interpretations of the ancient Indian past. These efforts were thought to have value in the face of concerns over the Indian

Union, and claims that its unity was what the historian Ramachandra Guha (2007: 19) has called “a puzzle” for (Western) academics and journalists. He argues that “from the time the [Indian National] Congress was formed [in 1885] right up to when India was made free [in 1947] – and divided – there were sceptics who thought that Indian nationalism was not a natural phenomenon” (Guha 2007: 14).

This included some British policy makers who had remarked, India had “no national essence, no glue to bind the people and take them purposively forward” such as in countries in Western Europe (Guha 2007: 14). Views of India (Western and Indian) then, according to R. Guha (2007: 21) often were (and continue to be) coloured by a fear of India’s “imminent dissolution” and resignation over its complications, its diversity and its poverty.

In recent years Indian scholarship in the historical sciences has reflected these concerns and the historiography of Indian archaeology is sensitive to these trends. The history of Indian archaeology is generally thought of in terms of ‘colonial’ or pre-Independence, and post-1947 and is seen in works such as Sourindranath Roy (1961) and Dilip Chakrabarti’s (1988) *A history of Indian archaeology from the beginning to 1947*, which is the most comprehensive study of pre-independence Indian archaeology to date, as well his (2003) *Archaeology in the Third World: a history of Indian archaeology since 1947*.

Influenced by the critique of colonialism, the challenge to colonial histories of Indian archaeology operates on three themes; firstly, the role of ‘natives’ in Indian archaeology; second, the influence of government in archaeological research; and third, the place of archaeology in understandings of the ancient Indian past. These themes are often examined in terms of the collection of archaeological data and

preservation of cultural heritage, and less so when it comes to the interpretation of archaeological data.

Archaeologists interested in the history of their discipline view “natives” in terms of a colonizer-colonized dynamic, and are thought of as synonymous with “indigenous scholars” or Indians (U. Singh 2004: 292). Natives are also sometimes differentiated as Indian scholars in Crown-administered Provinces and Presidencies, and those in the “princely” or Native States (Sengupta and Gangopadhyay 2009). According to Indian historian R. Guha (2007: 35) the latter were administered by “the Maharajas” and bringing these “large” territories into the Indian Union posed considerable challenges for Congress leaders who took over administration of India in 1947. The relationship between Native States and Indian Provinces and Presidencies is a complex issue and its influence on the practice of archaeology is poorly understood by Western and Indian scholars alike.

In light of questions over Indian unity, archaeologists interested in the history of Indian archaeology sometimes undervalue conflict and competition between archaeological traditions and tend to highlight fraternal relations between Indian scholars in colonial India, which are seen in works such as Himanshu P. Ray (2008). Moreover, in some of these works, the Survey is viewed as a monolithic and unchanging entity. Works such as Nayanjot Lahiri (2006) which examine the recovery of the Indus Valley civilization by Survey archaeologists in the 1920s offer a sociological perspective on the state financed organization and suggest greater disagreement and tension between scholars than has been accepted.

There are very few biographies of Indian archaeologists. Biographical works by archaeologists discuss European scholars, in particular those who served in the Survey. For example, Abu Imam (1961) examined Alexander Cunningham (1814-1893)'s archaeological work as an East India Company field engineer and as the first archaeological surveyor for the Crown. Upinder Singh (2004) discussed the collection of archaeological data by British scholars in colonial India, including Cunningham's assistants, James D. Belgar and A. C. L. Carlleyle. She also noted the scholarly contributions of three Indian scholars, Ram Raz, P. C. Mukharji and Rajendralala Mitra to the study of art and architecture. Singh remarks on Mukharji's work as having been "independent" of the Archaeological Survey (he was first employed by the Public Works Department) (2004: 317) and characterizes him as a "diligent and methodical archaeological investigator" (Singh 2004: 322). In the same vein, Virchand Dharamsey (2004) sheds light on Bhagvanlal Indraji (1839-1888)'s work on Indian epigraphy and numismatics. Dharamsey (2004: 80) calls Indraji "the first Indian archaeologist".

In her study of the Survey, Nayanjot Lahiri (1997) examined John Hubert Marshall's appointment as Director General of Archaeology, and Himanshu P. Ray (2008) shed light on Mortimer Wheeler's tenure (1944-1948) in the terminal years of Crown administration. Shanti Pappu (2008) examined the collection of stone artefacts and recording of prehistoric sites by the geologist Robert Bruce Foote in the late nineteenth and early twentieth centuries, whereas K. Paddayya (2010) gave insight on Colin Mackenzie's research in southern India. Ironically, there are no full length biographies for Rakhaldas Banerji and Daya Ram Sahni who excavated the Indus sites, Mohenjodaro and Harappa in the 1920s, both of

whom were Marshall's contemporaries. Non-Survey Indian archaeologists, such as Hasmukh D. Sankalia<sup>9</sup>, and Bendapudi Subbarao, who developed archaeological programmes at Indian university departments in the 1940s and 1950s also await biographies.

The critique of colonialism has encouraged Indian scholars to examine institutions, such as the Survey, which was created by the colonial Government of India. Some archaeologists have argued that this organization monopolized (and continues to monopolize) Indian archaeology (Ray 2008: 246-247). Alternatively, Upinder Singh (2004: 291) suggested that "archaeological research and the conservation of historical monuments [in the late nineteenth century] was not the monopoly of the British Government of India and European scholars". While state-directed research sheds light on financial motives and conflicts of interest in research, these issues are best understood in view of foreign policy concerns of the colonial Government. Closer examination of how these factors influenced local practices in terms of where and when archaeologists carried out field studies, and the ways in which they preserved cultural heritage during the late nineteenth and early twentieth centuries is critical for a deeper understanding of the 'impact' of colonial governance.

The relationship of archaeology with understandings of the Indian past is an important theme in the historiography of Indian archaeology. There are competing views on the place of archaeology in relation to Indian history, and in Indian society. At the heart of the issue is the value of what archaeologist K. Paddayya

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<sup>9</sup> Sankalia wrote his autobiography, *Born for archaeology* (1978) and as far as I am aware, he is the only Indian archaeologist to have done so.



(1995: 111) calls “indigenous epistemological traditions” in the interpretation of archaeological data. He suggests that archaeology is a “European innovation” (1995: 111) and that the interpretation of material remains is best done in light of Sanskrit texts such as the *Rg Veda* and *Puranas* (Paddayya 1995: 113; 138). This view assigns greater epistemic value to texts than to material remains.

Alternatively, Dilip Chakrabarti (1982: 339) has remarked that archaeology in India developed as “an adjunct to ancient historical studies”. Ancient historical studies generally included the examination of numismatics, epigraphy and monuments to develop a chronology from Alexander’s invasion onwards. Chakrabarti (1982: 339) argued instead that that written sources on ancient India are “severely limited in quantity and suffer from the additional handicaps of ambiguity, chronological uncertainty and limited geographical applicability”. Thus for some Indian scholars, the study of material remains is closely aligned to historical studies of ancient India.

Some Indian archaeologists overlook archaeological practices as a product of specific economic, social and political conditions and instead draw attention to class and ethnic biases of individual researchers, as is seen in works such as Selvakumar (2010). Finally, some histories of Indian archaeology present a chronology of the accumulation of archaeological data. The focus of some of these works is on the contributions of archaeologists to organizational structure of Indian archaeology, including legislation for the preservation of antiquities, archaeological sites and monuments.

In his history Gibbs (1885) reviewed the systematic recording of monuments and the collection of coins and inscriptions, as well as translations of texts in

Indian languages. From the sixteenth century onwards, European explorers and travellers had documented monuments and caves along the Indian coastline. Later documentation, although not all, was initiated by East India Company employees, such as William Jones in the late eighteenth and early nineteenth century. These scholarly interests culminated in the creation of the Asiatic Society in 1784. British scholars grew interested in the Indian past when they became aware that Sanskrit and the modern languages of northern India were related to European ones. It is no surprise then that many British scholars viewed the Indian past in relation to ancient Greece, and in terms of Alexander's expedition. This view explained change as a result of migration and highlighted the role of creative and dynamic groups in bringing innovations into the northwest of India. These methods justified colonialism and asserted the moral and cultural superiority of Europeans.

In the wake of colonial restructuring in the mid-nineteenth century, the British Crown took over administration of East India Company territories, and it was amid these rapid social and political changes that the first archaeological survey was commissioned by the colonial Government of India in 1861. In the first survey, Colonel Alexander Cunningham was to produce a "detailed and accurate account of the archaeological remains of Upper India" (Chakrabarti 1988: 225). Some British administrators believed that the "natives of India take no interest in [preservation of monuments], and, as a general rule, no native will repair the tombs of his forefathers" (Gibbs 1885: 563). This suggested that the preservation of cultural heritage was the responsibility of the colonial Government of India, rather than that of local communities.

Throughout the late nineteenth and early twentieth century, the colonial government faced pressing geopolitical concerns, particularly in its north western territories with Afghanistan, where the Crown had engaged in armed conflict with the Amir's armies (U. Singh 2004: 18-19). These sensitivities often kept the Crown's attention on its northern, rather than southern territories. Amidst these tensions, the colonial Government invested in large-scale development projects, such as mining, and building railroads, dams and irrigation canals.

In British-administered Punjab<sup>10</sup>, which was closest to Afghan territories, for example, the colonial Government constructed an extensive network of irrigation canals (Siddiqui 1986) and this in turn increased the predictability of water availability for year-round agriculture. Archaeologist Himanshu P. Ray (2010: 199) remarks that by 1875, Punjab was important because "the Indian army drew a third of its recruits from the region" and that the "per capita output of all its crops increased by nearly 45% between 1891 and 1921". These rapid geopolitical, economic and social changes also meant that British perspectives on the Indian past often presented a north-centric narrative.

It was in this context that the focus of the Survey changed from recording and collection or "antiquarianism" (U. Singh 2004: 1) to "protection and conservation" (U. Singh 2004: xvii). Because government-financed projects often resulted in the destruction of monuments and archaeological sites, and because of growing interest in preserving Indian heritage, British policy makers promoted

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<sup>10</sup> Ray (2010: 199) defines "British Punjab" as "the five rivers, viz., the Sutlej, Beas, Ravi, Chenab and Jhelum" and remarks on its "strategic importance" as a "buffer from the threat of the expanding Russian power in Central Asia". In 1947, most of these territories, particularly west of the Indus River, ceded to West Pakistan.

cultural heritage legislation to protect some monuments. The historian of Indian archaeology, Upinder Singh (2004: 302-304), has remarked that government interest in preserving ancient objects and monuments was often met with local suspicion and raised questions about ownership of artefacts and sites. At the same time, the protective measures encouraged the accumulation of large amounts of archaeological data and fostered archaeological inquiry (Chakrabarti 1988: 121-123).

Moreover, some British scholars thought that the “great national work” [the Archaeological Survey], “required no vindication” as the “historical results which were obtained from that survey” offered “practical instruction for use in the present day” (Gibbs 1885: 566). This view is best understood in the context of growing Indian nationalism in the late nineteenth century, which culminated in the creation of the Indian National Congress, as well as competition and cooperation between British-administered Indian territories and Native States.

The opening years of the twentieth century were marked by the reorganization of the Crown’s Indian possessions, and its relationship with Native States. The colonial Government of India also reorganized the Archaeological Survey and reoriented it by appointing John Marshall as Director General of Archaeology. Marshall renewed and expanded on pre-existing legislation for the preservation of cultural heritage in British-administered territories. It was during his tenure (1902-1928) that Rakhal Das Banerji and Daya Ram Sahni surveyed, and excavated the Indus sites of Mohenjodaro and Harappa.

In his *The story of Indian archaeology, 1784-1947*<sup>11</sup>, Sourindranath Roy (1961) presented a commissioned history of Indian archaeology from early explorers' journals, to corporate financed institutions, such as the Asiatic Society, and then government-sponsored Survey. It was amongst the first histories of Indian archaeology by an Indian scholar. Written to mark the centenary of the first archaeological survey, or "first assumption by Government, in December 1861, of their moral responsibilities in respect to archaeological monuments in India", Roy's narrative examined the growth of the Survey and did not include scholars or institutions in the Native States (1961: i-ii). Nor did he shed light on the interpretation of archaeological data. Roy (1961: 13-14) examined antiquaries as "closet archaeologists" and drew attention to their efforts in "providing a starting point from which future investigation of ancient Indian geography could proceed".

In his journal article and prequel to the *Story*, Roy (1953: 5) remarked on the interdisciplinary nature of archaeology and suggested that scholars such as William Jones had a "reliance on man's literary remains than on the material vestiges left by him". Roy (1953: 8) argued that for 'closet archaeologists' such as Alexander Cunningham, fieldwork was a means to "obtain plans of old buildings, new art-treasures, coins and epigraphic records" and these collections were made to fill museums rather than to engage in research. For Roy, Cunningham's excavations were little more than "prospecting" through surface digging and few

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<sup>11</sup> This is a different work than N. P. Chakravarti's (1949) "The story of Indian archaeology", also published by the Survey. I discuss the publication in more detail in Chapter 4.

or no “deep excavations” according to stratigraphical principles (1953: 18). This view sheds light on the characterization of Indian archaeology in postwar India.

Another work on the history of Indian archaeology was published in the Survey’s *Ancient India* in 1953 to commemorate fifty years of the Survey “as a Central organization” and to review its “achievements” including, “justification for its existence, the position it has attained in the cultural life of the country and the recognition it has won in the international sphere” (Ghosh 1953a: 1). Then Director-General Amalananda Ghosh (1953b) wrote on “Fifty-years of the Archaeological Survey of India”.

For Ghosh, the Survey did not work ‘alone’. Rather, he suggested that in prehistoric research, the preservation of monuments, museums and epigraphy, universities, other government departments (like the Geological Survey of India), Native States and “outside workers” had made important contributions (Ghosh 1953a: 2). Moreover, he remarked that the Survey’s relations with these organizations had “been one of perfect understanding and co-operation” (Ghosh 1953a: 2).

Ghosh examined the preservation of cultural heritage, survey and excavation and epigraphy as the main activities of the Survey during John Marshall’s tenure (1902-1928) as Director General of Archaeology (1953b: 30). He remarked on the policy of the Government of India to hire superintendents from England rather than locally and the desire of some policy makers to encourage local hiring through reservation for Indians (Ghosh 1953b: 35; 37). In 1921, the Survey consisted of twenty-three full time staff, including the position of Director General, and positions for epigraphy, archaeological chemist, the Indian museum,

and superintendents for offices outside Calcutta (Ghosh 1953b: 37). Ghosh did not discuss how many Indians were hired for these jobs<sup>12</sup> or how the proportion (and job descriptions) of Europeans to Indian employees changed during Marshall's tenure, or when Daya Ram Sahni and K. N. Dikshit took over directorship of the Survey.

Hasmukh D. Sankalia's (1962) *Indian archaeology today* also provides a review of Indian archaeology in view of its 'centenary'. Originally presented as lectures to students of ancient Indian history, culture and archaeology at Indian universities, the compilation presented "discoveries" by colleagues in several parts of India, and noted cooperation between Survey archaeologists, professors at Indian universities and directors at state departments of archaeology (Sankalia 1962: 2). These developments underscored a rapidly growing archaeological community following India's independence and the changing relationship between centre and state governments in the Republic.

Sankalia's review is notable as it aimed to present "a continuous history of man's past in India" (1962: 7) and considered Indian prehistory and ancient India in an historical continuum. He argued that scholars had "presumed (though wrongly) that Indian history and culture began with Asoka, and was, thus, not older than the third century before Christ" (1962: 5). Rather, as Sankalia reasoned, if "India boasted of a civilization some 5000 years ago, then naturally it should have a beginning" (1962: 6). This perspective challenged conventional views about the origins of civilization in the Indian context.

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<sup>12</sup> We know from excavations at Mohenjodaro and Harappa that at least two Indians, Rakhaldas Banerji and Daya Ram Sahni, were employed at the Survey as Superintendents.

Moreover, Sankalia offered a model of increasing social complexity throughout the Republic of India, from the perspective of northern India. It was northern India, explained Sankalia, which historians know most about and it was in north where ancient India flourished while other parts such as “Assam, Orissa, Andhra, Madras, Mysore and Kerala” (or eastern and southern India) and “Northern Gujarat and Western Rajputana” were still “emerging from the last stages of the Stone Age” (Sankalia 1962: 29). The rest of India, on the other hand, had “attained a higher – urban stage of civilization – in the earlier phase of the protohistoric period, *but later lost it*” (1962: 29, emphasis original). For Sankalia the ‘loss’ of civilization addressed the uncertain relationship between the Indus Valley civilization and the Ganges Valley civilization of ancient India. This culture-area approach suggested the relationship between the study of archaeology and historical studies of ancient India in postwar India.

Ideas of cultural continuity and ideals of fairness and equality were influential in the critiques of colonialism that emerged in the Indian context. In his volume on the beginnings of Indian archaeology, Dilip Chakrabarti (1988) critically examined the “European attitude to Indian architecture and sculpture” and the study of ancient India prior to the creation of the Asiatic Society in the late eighteenth century. Elsewhere, he argued that an “elaborate racist framework” that conflated “race, language and culture” influenced the study of ancient India (Chakrabarti 1997: Preface). This ‘colonial’ framework, in which the West assumed “superiority” over modern Indians (1997: 1), according to Chakrabarti still finds widespread support amongst “Western Indologists” and their “Indian counterparts” (1997: Preface).



At the heart of Chakrabarti's examination of the "sociopolitics of archaeology" is that "a new orientation" is necessary in the study of ancient India, and Western ideas that have "denied all originality to Indian experience" will no longer do (1997: 3). These unequal relationships are seen in many parts of the Third World (Chakrabarti 2003). He argues that the history of the colonized was written to "relegate them in various ways to the static backwaters of human development" and this in turn justified colonialism (Chakrabarti 1997: 43). To that end, Chakrabarti proposes a "grassroots" approach to the ancient Indian past which has a "non-sectarian and multilineal perspective" to "understand the history of the subcontinent in its own terms" (1997: 53). These views challenge established practices and draw attention to social and political factors that influence the interpretation of archaeological data.

### ***Organization of the dissertation***

The thesis is composed of an introduction, four stand-alone chapters (written as distinct intellectual contributions intended for publication) and an overall conclusion<sup>13</sup>. There is no single narrative. The four chapters address change and continuity in the practice of Indian archaeology through four case studies which are interlinked. I take an historical perspective to show how specific themes developed in relation to Indian society, and how this relationship, in turn, influenced the practice of Indian archaeology. Each chapter has its own literature,

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<sup>13</sup> The Faculty of Arts at McGill University has recently introduced manuscript or article style doctoral dissertations. An advantage offered by this organizational style is the ability to turn chapters into publishable book chapters or journal articles with relative ease.

supporting data and analysis. Thus, each chapter can be read individually, or together as a whole. An early draft of Chapter Three has already been published as a book chapter, and a previous draft of Chapter Two has been accepted for publication as a chapter in an edited volume.

My aim in employing this organizational method was to present Indian archaeology to both specialists and non-specialists. My decision was influenced in part by my assessment that very few studies of Indian archaeology exist that are accessible to scholars who have neither a background in India studies, nor expertise in anthropology and archaeology. At the same time, I wanted to promote our understanding of the practice of archaeology and, thus, the thesis aims to reach specialists in archaeology, and a growing number of scholars interested in the history of archaeology. The thesis then is as broad as it is deep.

Chapter One, “In Babri’s shadow: change and continuity in the practice of Indian archaeology”, offers an overview of recent trends two decades after the demolition of Babri Masjid, a medieval mosque in the northern city of Ayodhya, and the loss of human life in its wake. In 1992, the mosque was torn down by *kar sevaks*, or Hindu volunteers, who believed that there lay, beneath the standing mosque, the remains of an ancient temple. Since then, growing numbers of interest groups have claimed ownership of the grounds where the mosque once stood, and they have filed legal suites with the Allahabad High Court. The ownership of the grounds remains contested.

The key question in this chapter is how state-oriented views of Indian archaeology influence scholarly dialogue on the interpretation of archaeological data. I show how the established state-oriented framework obscures the interest of

local communities in the preservation of cultural heritage, and minimizes complexity in Indian archaeology. In obscuring local interest in archaeology and heritage management, a state-oriented archaeology promotes a homogenous view of the Indian past. By re-conceptualizing the relationship between local communities and state-oriented archaeological projects, I demonstrate that ideas about cultural continuity have influenced the practice of Indian archaeology. These views often emphasize cultural achievements of Hindus and obscure and minimize those of all other social groups. Yet India's ethnic and linguistic minorities are increasingly demanding their social and political rights. This in turn influences the practice of Indian archaeology.

Through graphs and maps I illustrate when and where different knowledge producers carried out archaeological field studies. The data suggest that the view of Indian archaeology as a homogenous and monolithic practice is misleading. Universities and state departments of archaeology carry out a greater proportion of archaeological work than the national department for archaeology and heritage legislation, the Survey. Indian archaeology is neither evenly distributed nor uniformly practiced over time.

The second chapter, "Cultural continuity, identity and archaeological practice in the Indian context" questions essentialist models of language, race and caste in Indian archaeology. I show how an assumption of cultural continuity between contemporary and prehistoric societies influences the aims and potential of Indian archaeology. In this historical framework, interpretations of prehistory assume a perfect correspondence between language, biology, and material culture. Material

culture is attributed to ethnic and linguistic groups. This conflation implies a simple and unchanging society.

At the same time, the presumption of cultural continuity in contemporary Indian society effectively excludes all non-Hindus from social dynamics and social history. In this simplistic society, internal dynamics are absent, and external processes necessarily explain change. The past, then, is believed to resemble a present in which local elites are culturally, biologically, and spatially separate and discrete from non-elites. This presents a fractured view of society. That in turn impedes our understanding of theoretical developments in Indian archaeology.

Chapter Three, “Before Creation: the study of the Indus Valley civilization in Indian archaeology”, presents the colonial history of Indian archaeology and shows how geo-political concerns and competing colonial and nationalist interests influenced understandings of the Indus Valley civilization before the creation of Independent India in 1947.

Through the study of the Indus Valley civilization, I demonstrate in this chapter how assumptions about cultural continuity between contemporary and prehistoric societies influenced interpretations of Indus sites and how these methods often served social and political aims. Before Independence, British scholars interpreted the civilization as an offshoot of the Sumerian one at Ur. They assumed that the Indian past was best explained by the migration of Indo-Europeans who brought creativity and dynamism into India. These views were reinterpreted as Indian or nationalistic ones. Indian scholars believed they had recovered in the Indus Valley, the Vedic origins of Hindu civilization. This has implications for our understanding of colonial and national science. Contrary to

conventional thinking, scholars actively interpreted archaeological data in ways that helped social groups achieve their goals at particular times. In the Indian scenario, British scholars emphasized migration of creative and dynamic groups as a means to justify colonialism and to assert their moral and cultural superiority over ‘natives’. Amid nationalist movements in colonial India, Indian scholars rejected views of the Indian past that obscured local creativity and dynamism. Moreover, this nationalistic view served the social and political aims of Indians who sought independence from the British Crown.

The final chapter, “Why does Sanghol matter? Political crisis and national archaeology in postwar India”, examines the collection and interpretation of archaeological data in terms of changing relations between a local community and state-oriented institutions and archaeological practices that developed in colonial India. Located 200 kilometres from the Pakistan-India frontline, Sanghol, a local community in the northern state of Punjab was the scene of collaborative field investigations between 1985 and 1990. I demonstrate how interpretations of the archaeological site changed amid rapid economic, social and political change.

Through the mid-1960s and 1970s, the national or central government had invested in intensive agriculture and the ‘Green Revolution’. This had produced favourable yields in many places in India, including Punjab. As the Indian middle class grew aware of rapidly widening inequality, its faith in technology as the sole source of social progress waned. It questioned the kinds of social problems that technology could resolve. At the same time, the Indian middle class became anxious that economic development had not wiped out poverty or *gharibi hatao* as Indira Gandhi had campaigned. These frustrations saw many Indians calling for

Indira Gandhi's resignation. Fearing a collapse of the national government, the President of India declared a state of emergency on June 26, 1975. The social and political unrest encouraged some scholars to question traditional views of the Indian past and the foreign origins of innovations. Some archaeologists turned more attention to social and political factors that influenced ancient Indian society. Because many Indian archaeologists believed the ancient Hindus were farmers, and because they thought in terms of recovering cultural achievements of their ancestors, some Indian archaeologists overlooked internal dynamics of change. These views were challenged by India's ethnic and linguistic minorities.

The thesis draws attention to the influence of changing economic, social and political conditions on the practice of Indian archaeology. It asks how perceptions of the present state of Indian archaeology and understandings of its relationship with society influence the questions archaeologists ask, the methods they employ and the answers they deem acceptable. In doing so, the thesis raises questions about the relevance of the history of archaeology to archaeological research.

## ***References***

- Allen, Kathleen M. S., Stanton W. Green, and Ezra B. W. Zubrow. eds. 1990. *Interpreting space: GIS and archaeology*. New York: Taylor & Francis.
- Basalla, George. 1967. The Spread of Western Science. *Science*, New Series 156 (3775): 611-622.
- Bernal, Ignacio. 1980. *A history of Mexican archaeology: the vanished civilizations of Middle America*. New York: Thames and Hudson.
- Boivin, Nicole. 2005. Orientalism, ideology and identity: examining caste in South Asian archaeology. *Journal of Social Archaeology* 5 (2): 225-252.
- Bowler, Peter J. and Iwan Rhys Morus. 2005. *Making Modern Science: A Historical Survey*. Chicago: University of Chicago Press.
- Braden, Maria. 2006. Trafficking in Treasures. In *Archaeological Ethics*. Karen D. Vitelli and Chip Colwell-Chanthaphonh, eds., pp. 27-33. Lanham: Altamira Press.
- Chakrabarti, Dilip K. 1981. Indian archaeology: the first phase, 1794-1861. In *Towards a history of archaeology: being the papers read at the first Conference on the History of Archaeology in Aarhus, 29 August - 2 September 1978*. Daniel Glyn, ed. pp. 169-185. London: Thames and Hudson.
- . 1982. The development of archaeology in the Indian subcontinent. *World Archaeology* 13 (3): 326-344.
- . 1988. *A History of Indian archaeology: from the beginning to 1947*. New Delhi: Munshiram Manoharlal Publishers Pvt. Ltd.

- . 1997. *Colonial Indology: sociopolitics of the ancient Indian past*. New Delhi: Munshiram Manoharlal Publications.
- . 2003. *Archaeology in the Third World: A History of Indian Archaeology since 1947*. New Delhi: D. K. Printworld Private Limited.
- Chakravarti, N. P. 1949a. The story of Indian archaeology. In *Archaeology in India*. N. P. Chakravarti, ed. pp. 1-15. New Delhi: Ministry of Education.
- Christenson, Andrew L. ed. 1989. *Tracing Archaeology's past: the Historiography of Archaeology*. Carbondale: Southern Illinois University Press.
- Clarke, David L. 1968. *Analytical archaeology*. London: Methuen.
- . 1970. Reply to the comments on analytical archaeology. *Norwegian Archaeological Review* 3 (1): 25-34.
- . 1973. Archaeology: the loss of innocence. *Antiquity* 47: 6-18.
- Cohn, Bernard S. 1996. *Colonialism and its forms of knowledge: the British in India*. Princeton: Princeton University Press.
- Condori, Carlos Mamami. History and prehistory in Bolivia: what about the Indians? (translated by Olivia Harris). In *Conflict in the archaeology of living traditions*. Robert Layton, ed. pp. 46-60. New York: Routledge.
- Cooper, Frederick. 2005. *Colonialism in question: theory, knowledge, history*. Berkeley: University of California Press.
- Cox, Richard J. and David A. Wallace, eds. 2002. *Archives and the Public Good: Accountability and Records in Modern Society*. Westport, Connecticut: Quorum.



- Daniel, Glyn. 1981. Introduction: the necessity for an historical approach to Archaeology. In *Towards a history of archaeology: being the papers read at the first Conference on the History of Archaeology in Aarhus, 29 August - 2 September 1978*. Daniel Glyn, ed. pp. 9-13. London: Thames and Hudson.
- Dharamsey, Virchand K. 2004. Bhagwanlal Indraji and the beginnings of Indian archaeology. In *Archaeology as history in early South Asia*. Himanshu P. Ray and Carla M. Sinopoli, eds., pp. 80-97. New Delhi: Indian Council of Historical Research and Aryan Books International.
- Díaz-Andreu García, Margarita. 2007. *A world history of nineteenth-century archaeology: nationalism, colonialism, and the past*. New York: Oxford University Press.
- Doel, Ronald E. 2003. Oral History of American Science: A Forty Year Review. *History of Science* 41: 349-378.
- Dunnell, Robert C. 1982. The Harvey Lecture Series - Science, social science, and common sense: the agonizing dilemma of modern archaeology. *Journal of Anthropological Research* 38 (1): 1-25.
- Dutt, Romesh C. 1889. *A History of Civilization in Ancient India, Based on Sanscrit Literature*. 3 vols. Calcutta-London:Thacker, Spink and Co.; Trübner and Co.
- Ferguson, T. J. 1996. Native Americans and the practice of archaeology. *Annual Review of Anthropology* 25: 63-79.
- Ghosh, Amalananda. 1953a. Notes. *Ancient India* 9: 1-3.
- . 1953b. Fifty years of the Archaeological Survey of India. *Ancient India* 9: 29-52.

- Gibbs, James. 1885. History of archaeology in India. *Journal of the Society of Arts* 34: 555-568.
- Guha, Ramachandra. 2007. *India after Gandhi: the history of the world's largest democracy*. London: Pan Books (e-book MOBI format).
- Guha-Thakurta, Tapati. 2007. 'Our gods, their museums': the contrary careers of India's art objects. *Art History* 30 (4): 628-657.
- Gullapalli, Praveena. 2008. Heterogeneous encounters: colonial histories and archaeological experiences. In *Archaeology and the postcolonial critique*. Matthew Liebmann and Uzma Z. Rizvi, eds., pp. 35-52. Lanham: AltaMira Press.
- Harrison, Mark. 2005. Science and the British Empire. *Isis* 96 (1): 56-63.
- Ikawa-Smith, Fumiko. 1982. Co-traditions in Japanese archaeology. *World Archaeology* 13 (3): 296-309.
- . 2011. Practice of archaeology in contemporary Japan. In *Comparative Archaeologies: a sociological view of the science of the past*. Ludomir R. Lozny, ed. pp. 675-705. New York: Springer Verlag.
- Imam, Abu. 1966. *Sir Alexander Cunningham and the beginnings of Indian archaeology*. Dacca: Asiatic Society of Pakistan.
- Jeter, Marvin D. 1989. Methods of relating historical collections of artifacts and associated records to known sites and current research. In *Tracing archaeology's past: the historiography of archaeology*. Andrew L. Christenson, ed., pp. 169-178. Carbondale: Southern Illinois University Press.
- Johnson, Ian. 1999. Mapping the fourth dimension: the TimeMap project. In *Archaeology in the Age of the Internet*. British Archaeological Reports

- International Series 750. L. Dingwall, S. Exon, V. Gaffney, S. Laflin, and M. van Leusen, eds., pp. 21. Oxford: Archaeopress.
- Kennedy, Kenneth R. 1995. The legacy of Sir William Jones: Natural history, anthropology, archaeology. In *Objects of Enquiry: The Life, Contributions and Influence of Sir William Jones*. Gerrad Cannon, ed., pp. 116-128. New York: New York University Press.
- Kuhn, Thomas S. 1970. *The structure of scientific revolutions*. Chicago: University of Chicago Press.
- Lahiri, Nayanjot. 1997. John Marshall's appointment as Director-General of the Archaeological Survey of India: a survey of the papers pertaining to his selection. *South Asian Studies* 13 (1): 127-139.
- . 2006. *Finding Forgotten Cities: how the Indus civilization was discovered*. New York: Seagull Books.
- MacEachren, Alan M. and D. W. DiBiase. 1991. Animated maps of aggregate data: conceptual and practical problems. *Cartography and Geographic Information Systems* 18(4): 221-229.
- Mayr, Ernst. 1990. When is Historiography Whiggish? *Journal of the History of Ideas* 51 (2): 301-309.
- McCoy, Mark D. and Thegn N. Ladefoged. 2009. New developments in the use of spatial technology in archaeology. *Journal of Archaeological Research* 17: 263-295.
- Means, Bernard. 2011. On the development of a GIS for New Deal Archaeology. *Bulletin of the History of Archaeology* 21 (1): 59-61.

- Moro Abadía, Oscar. 2006. The history of archaeology as a 'colonial discourse'. *Bulletin of the History of Archaeology* 16 (2): 4-17.
- . 2008. Beyond the Whig interpretation of history: lessons on 'presentism' from Hélène Metzger. *Studies in History and Philosophy of Science, Part A* 39: 194-201.
- Murray, Tim. 2002. Epilogue: why the history of archaeology matters. *Antiquity* 76: 234-238.
- Owens, Jack. 2008. What can GIS offer world history. *History Compass*: exchanges.<http://exchanges.history-compass.com/2008/11/03/debate-what-can-gis-offer-world-history/> (accessed March 2012).
- Paddayya, K. 1995. Theoretical perspectives in Indian archaeology: an historical review. In *Theory in Archaeology: a world perspective*. Peter J. Ucko, ed. pp. 109-147. New York: Routledge.
- . 2009. Colonel Colin Mackenzie and the discovery of the Sanchi stupa. In *Archaeology in India: individuals, ideas and institutions*. Gautum Sengupta and Kaushik Gangopadhyay, eds., pp. 19-44. New Delhi: Munishiram Manoharlal Publishers Pvt. Ltd.
- Pai, Hyung I. 1998. The colonial origins of Korea's collected past. In *Nationalism and the construction of Korean identity*. Hyung I. Pai and Timothy R. Tangherlini, eds., pp. 13-32. Berkeley: The Regents of the University of California.
- Palladino, Paulo and Michael Worboys. 1993. Science and imperialism. *Isis* 84 (1): 91-102.

- Pappu, Shanti. 2008. Prehistoric antiquities and personal lives: the untold story of Robert Bruce Foote. *Man and Environment* 33: 30-50.
- Patterson, Thomas C. 2008. A brief history of postcolonial theory and implications for archaeology. In *Archaeology and the postcolonial critique*. Matthew Liebmann and Uzma Z. Rizvi, eds., pp. 21-34. Lanham: AltaMira Press.
- Peterson, Michael P. 1995. *Interactive and animated cartography*. Englewood Cliffs: Prentice Hall.
- Pyenson, Lewis. 1993. Cultural imperialism and exact sciences revisited. *Isis* 84 (1): 103-108.
- Rao, Nandini and C. Rammanohar Reddy. 2001. Ayodhya, the print media and communalism. In *Destruction and Conservation of Cultural Property*. Robert Layton, Peter G. Stone and Julian Thomas, eds., pp. 139-156. New York: Routledge.
- Ratnagar, Shereen. 2004. Archaeology at the heart of a political confrontation. *Current Anthropology* 45 (2): 239-259.
- Ray, Himanshu P. 2008. *Colonial Archaeology in South Asia: the legacy of Sir Mortimer Wheeler*. New York: Oxford University Press.
- . 2010. Water management and archaeology of the Haryana-Punjab plains. In *Sanghol and the Archaeology of Punjab*. Himanshu P. Ray, ed. pp. 198-215. New Delhi: Aryan Books International.
- Rizvi, Uzma Z. Decolonizing methodologies as strategies of practice: operationalizing the postcolonial critique in the archaeology of Rajasthan. In

- Archaeology and the postcolonial critique*. Matthew Liebmann and Uzma Z. Rizvi, eds., pp. 109-127. Lanham: AltaMira Press.
- Robinson, Anthony C. and Alan M. MacEachren. 2011. Designing a web-based learning portal for geographic visualization and analysis in public health. *Health Informatics Journal* 17(3): 191-208.
- Roy, Sourindranath. 1953. Indian archaeology from Jones to Marshall (1784-1902). *Ancient India* 9: 4-28.
- . 1961. *The story of Indian archaeology, 1784-1947*. New Delhi: Archaeological Survey of India.
- Said, Edward W. 1978. *Orientalism*. New York: Pantheon Books.
- Sankalia, Hasmukh D. 1962. *Indian archaeology today*. Bombay: Asia Publishing House.
- . 1978. *Born for archaeology*. New Delhi: B. R. Publication Corporation.
- Schmidt, Peter R. and Thomas C. Patterson. 1995. Introduction: from constructing to making alternative histories. In *Making Alternative Histories: the practice of Archaeology and History in non-Western settings*. Peter R. Schmidt and Thomas C. Patterson, eds. pp. 1-24. Santa Fe: School of American Research Press.
- Schnapp, Alain. 2002. Between antiquarians and archaeologists – continuities and ruptures. *Antiquity* 76: 134-140.
- Selvakumar, V. 2010. The use and relevance of archaeology in the post-modern world: views from India. *World Archaeology* 42 (3): 468-480.
- Sengupta, Gautum and Kaushik Gangopadhyay. 2009. Introduction. In *Archaeology in India: individuals, ideas and institutions*. Gautum Sengupta

- and Kaushik Gangopadhyay, eds., pp. xiii-xix. New Delhi: Munishiram Manoharlal Publishers Pvt. Ltd.
- Siddiqui, Iqtidar H. 1986. Water works and irrigation system in India during Pre-Mughal times. *Journal of the Economic and Social History of the Orient* 29 (1): 52-77.
- Singh, Upinder. 2004. *The discovery of ancient India: early archaeologists and the beginnings of archaeology*. New Delhi: Permanent Black.
- . 2008. *A history of ancient and early medieval India: from the Stone Age to the 12th century*. Upper Saddle River: Pearson Education.
- Thakur, Pooja. 2000. "Villagers allege foul play in transfer of sculptures". *The Times of India* 26 Nov 2000.
- The Right to Information Act*. 2005. Government of India. Retrieved from <http://righttoinformation.gov.in/> (January 2012).
- Tong, Enzheng. 1995. Thirty years of Chinese archaeology (1949-1979). In *Nationalism, Politics and the Practice of Archaeology*. Philip L. Kohl and Clare Fawcett, eds. pp. 177-197. Cambridge: Cambridge University Press.
- Trigger, Bruce G. 1980. Archaeology and the image of the American Indian. *American Antiquity* 45 (4): 662-676.
- . 1984. Alternative archaeologies: nationalist, colonialist, imperialist. *Man* 19 (3): 355-370.
- . 2006. *A history of archaeological thought*. 2<sup>nd</sup> edition. Cambridge: Cambridge University Press.
- Van Reybrouck, David. 2002. Boule's error: on the social context of scientific knowledge. *Antiquity* 76: 158-164.

Wylie, Alison. 1992. The interplay of evidential constraints and political interests:  
recent archaeological research on gender. *American Antiquity* 57 (1): 15-35.



## Chapter 1:

### **In Babri's shadow: change and continuity in the practice of Indian archaeology**

On December 6, 1992, thousands of *kar sevaks*, or Hindu volunteers, converged at the Babri Masjid, a medieval mosque in the northern city of Ayodhya. The volunteers, young and old, from Ayodhya and nearby communities, came armed with one mission: to tear down the mosque. This was not the first time so many had assembled there. As a result of pre-existing tensions over the ownership of the mosque, security officials had cordoned off the grounds. Numerous lawsuits had been filed by local interest groups, each claiming ownership of the mosque and its grounds. These barriers were meant to protect the mosque from the increasingly agitated members of the community, who believed that there lay, beneath the standing mosque, the remains of an ancient temple. The belief that a glorious Hindu past, a cultural continuity, had been hidden or denied by invaders ran deep in the birth land of Hinduism.

By the end of that cool December day, *kar sevaks* had brought down the mosque. Riots in the wake of the demolition resulted in the loss of human life in Ayodhya, and elsewhere in India. Following this civil unrest, the central government took possession of the grounds on which the mosque stood. Amid these heightened tensions, local organizers of the World Archaeological Congress to be held in New Delhi, raised the ante by announcing that the meetings would be 'strictly academic' and that they would 'keep politics out' (Golson 1995). The

Allahabad High Court was assigned the challenge of establishing ownership of the grounds. It called upon the expertise of the Archaeological Survey of India – which I will call the Survey hereafter – the national department for archaeology and heritage management. Since the demolition of the mosque, growing numbers of interest groups have claimed ownership of the grounds, leading some archaeologists to call for “proper archaeological investigation of this large and fortified city site” (Chakrabarti 2003a: 580).

The year 2012 marks twenty years since the infamous demolition of Babri Masjid, and the loss of human life in its wake. Most scholars interested in archaeology often agree that its practice has changed. Some Western archaeologists have remarked that since the 1990s, Indian archaeology, specifically its research program, has dramatically altered (Johansen 2003: 193). They argue that these changes are a result of an abandonment of disciplinary “conservatism” and “normative” views of culture (Johansen 2003: 200). Yet this view does not explain how or why the practice of Indian archaeology changed, and what this means for archaeology’s relationship with Indian society.

In Babri’s shadow, scholars interested in Indian archaeology often scrutinize the use of archaeology by the national government for political purposes<sup>1</sup> (Ratnagar 1994; Coningham and Lewler 2000), including identity building (Bernbeck and Pollock 1996). In her examination of the ‘prehistory’ of the conflict in Ayodhya, influential archaeologist Shereen Ratnagar (2004) delves into the relationship between local communities and East India Company

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<sup>1</sup> But see Johnson-Roeher (2008: 507) on “deep animosity” and communal violence as a “colonial legacy”.

administrators. She describes how the Babri Masjid gained local notoriety amid colonial restructuring in the mid-nineteenth century, and then in newly-independent, post-1947 India (Ratnagar 2004: 240). That the mosque was scene to previous contestation speaks to the local community's interest in ownership of the grounds. In this context, Ratnagar draws attention to the relationship between local oral accounts, and history. While these views shed light on corporation- and state-financed research, they do not explain why local communities are interested in archaeology.

In this chapter, I discuss change and continuity in the practice of Indian archaeology and what this means for ethnic and linguistic minorities in India. I argue that the established state-oriented framework obscures, and minimizes, complexity in Indian archaeology. These issues influence our understanding of the collection and interpretation of archaeological data. How and why does a local issue, like the ownership of the grounds of the Babri Masjid, become a national one? What is the role of archaeology in Indian society? What is the relationship between state-oriented and local archaeological projects in India? And finally, what does re-conceptualizing local interest in archaeology mean for our understanding of its practice in contemporary India?

I demonstrate how time-sensitive geographic information systems, better known as GIS, aids and complements historical methods for a deeper understanding of archaeology's changing relationship with Indian society. The GIS methodology assists scholars in better understanding changes in the social and political organization of the society in which archaeology is practiced, as well as long range trends in the practice of archaeology. This framework provides

context for an examination of the changing relationship between local communities – where archaeological field studies often take place – and national governments. I present by way of visualizations as graphs and maps, when and where different institutions carried out archaeological field studies. This allows us to visualize archaeological investigations carried out by multiple knowledge producers. This is significant because when and where archaeology is practiced must be understood in relation to changes in its own society's social and political organization.

A state-oriented view of Indian archaeology influences scholarly dialogue on the interpretation of archaeological data. In presuming a monolithic and state-oriented archaeology, the same assumptions are accepted in the interpretation of archaeological data. The nationally-oriented framework takes a caste-based view of prehistory. In this historical framework, Indian archaeology often assumes cultural continuity between contemporary and prehistoric societies. Archaeologists often think in terms of simple and idyllic prehistoric past, such that territoriality and political activities emerged with the practice of large-scale agriculture. More than other sciences, Indian archaeologists rely on ethnography and often attribute material remains to specific linguistic and ethnic groups. In this hierarchical scheme, internal dynamics are overlooked as explanations for change. These views influence the potential and aims of Indian archaeology.

## *Characterizing the practice of Indian archaeology*

Up until the late 1990s, with the exception for a thirty-four-month period in the late 1970s when the Janata Party<sup>2</sup> formed a coalition government, the position of prime minister of India has been occupied by a member of the Indian National Congress. Unflattering light was cast upon the Government of India by the international community for its aggressive economic policies in the development of hydroelectric dams on the Narmada River and the displacement of ‘tribal’<sup>3</sup> peoples (Patel 1995). India’s well-publicized nuclear tests renewed alarm over imminent armed conflict with Pakistan (Weiner 1998; Abraham 1998). The tests drew swift condemnation in the form of economic sanctions (Bennet 1998). These developments are best understood in a milieu of rapid economic, social and political change.

A few years shy of its fiftieth year of independence from the British Crown, India saw growing political uncertainty as a result of the assassination of former prime minister Rajiv Gandhi in 1991. It came less than a decade after his mother

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<sup>2</sup> Morarji Desai and Jayaprakash Narayan, both one-time Congress members, created the Janata Party in the wake of Indira Gandhi’s declaration of emergency in 1975. The political organization dissolved in the early 1980s. Members of the Janata Party created the Janata Dal, the Bharatiya Janta Party, and the Samajwadi Janata Party. Each organization formed national governments for less than 12 months each, until 1999, when the National Democratic Alliance or NDA led by the Bharatiya Janata Party formed government. The coalition NDA completed a five-year term in 2004. The United Progressive Alliance, led by the Congress has formed a coalition government since 2004. Prime Minister Manmohan Singh is currently serving a second term.

<sup>3</sup> Discussion on Narmada is extensive, and ranges from development studies and social movements (Amte 1990; A. Gandhi 2003) to the role of non-governmental organizations (Fisher 1997), political ecology (Wood 1993) and indigenous studies. A. Patel (1995) discusses reluctance amongst India’s scholars and policy makers to identify ‘tribals’ as ‘indigenous’ in terms of its meaning in the North American context. Bêteille (1998) provides context for this tension. Weaver (2001) uses ‘Native’ and ‘indigenous’ for “descendants of the original inhabitants of North America”. On the relationship between archaeology and indigenous people, see Watkins (2001). But see Brush (1996: 4) for a different perspective where he defines indigenous knowledge as the “systematic information that remains in the informal sector, usually unwritten and preserved in oral tradition rather than texts”.

and then Prime Minister, Indira Gandhi, was assassinated by her Sikh bodyguards (Gupta chapter 4). Most scholars often believe that Mrs. Gandhi's assassination in 1984 was a reaction to her support for an unpopular mission in the northern state of Punjab, where some Punjabi-speaking Sikhs had waged intense competition for sovereignty. Social and political tensions in northern India intensified in the wake of Operation Bluestar, during which Indian security forces stormed the Golden Temple<sup>4</sup>, an historic *gurdwara* and its grounds in Amritsar. On the temple grounds, Indian forces engaged in armed conflict with some members of the Khalsa, who demanded an autonomous state of Khalistan. This social and political uncertainty was made more volatile by social unrest following the loss of human life in Ayodhya. The political instability influenced the role of archaeology and its practice in India.

The Survey came under intense domestic scrutiny following the mosque's razing and violence in northern India. Prior to the demolition, members of the Vishwa Hindu Parishad or World Hindu Council, had announced interest in constructing a temple at Ayodhya, which they considered the birthplace of Rama<sup>5</sup>. In light of these developments, local interest groups had formed the All India Babri Masjid Action Committee to protect the mosque, and to assist its

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<sup>4</sup> Also known as Harmandir Sahib, the *gurdwara* was rebuilt in the mid- and late 1700s, following armed conflict between the Afghan Durrani and Mughal armies. It was in this context that the Sarbat Khalsa or assembly organized and the *gurdwara* grew as a place for local social and political life.

<sup>5</sup> Hindus in northern India often think of Rama as an incarnation of Vishnu, from the Vaishnava tradition and a member of the Hindu trinity. Indian archaeologists influenced by Hindu nationalism believe that compiled accounts in the Sanskrit text *Ramayana*, narrate the life of Rama (Lal 2001). Some archaeologists, who are interested in historical geography, consider Ayodhya, Mathura and Varanasi sacred places because the Sanskrit texts refer to them. They think of the three places as *tirth* or places for pilgrimage (Eck 1981; Rao and Reddy 2001). Some scholars often associate Ayodhya with the *Ramayana*, and they often refer to the former as 'Ramjanmabhoomi'. For more on 'Ramjanmabhoomi' see S. Srivastava (1994: 42).

restoration (*Times of India* 1990). Because the Survey had remained relatively silent on its role in Ayodhya in the wake of the mosque's demolition, and because Braj Basi Lal (B. B. Lal), former Survey director-general, and lead organizer for the 'Archaeology of the *Ramayana* sites'<sup>6</sup> project was now to preside over an international conference<sup>7</sup>, it seemed to many observers that Indian archaeology was complacent with Hindu nationalists, if not running the entire neo-Hindu<sup>8</sup> nationalist lobby.

Indian archaeologist Nandani Rao, for example, questioned the composition of the organizing committee of the upcoming World Archaeological Congress, and raised concern on B. B Lal and Swarajya Prakash Gupta<sup>9</sup> (S. P. Gupta)'s involvement in the international meetings (Khan 1994a: 10). Shereen Ratnagar, and well known Indian historians, such as Romilla Thapar and Irfan Habib drew attention to Lal and Gupta's political motivations<sup>10</sup> and their role in promoting the idea that an ancient temple lay beneath the standing mosque (Khan 1994b). These views implicated B. B. Lal, and by extension, the Survey for its complacency.

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<sup>6</sup> Varma and Menon (2010: 63) remark that this was a "national project". Ayodhya was one of the sites that Lal investigated; others included Srngaverapura, Bharadvaja Ashram, Nandigram and Chitrakoot. Varma and Menon (2010: 63) also note that one report (Srngaverapura) has been published.

<sup>7</sup> Sakina Yusuf Khan, a correspondent for the *Times of India*, reported on the World Archaeological Congress, for example, "Cloud over archaeological congress" (1994a). Khan interviewed archaeologist Nandani Rao.

<sup>8</sup> The influence of Hindu nationalism in Indian society is not new. I use 'neo' to signal this complex issue in post-1947 India and its relationship to Hindu nationalists in colonial India.

<sup>9</sup> To the best of my knowledge, S. P. Gupta was not a Survey archaeologist. He was director of the Indian Archaeological Society at the time, and up until his death in 2007. Indian historians and archaeologists created the Society in the late 1960s to further the aims of Indian archaeology. I discuss the organization and its publications in Chapter 4.

<sup>10</sup> Lal and Gupta's relationship to the Vishwa Hindu Parishad is unclear. Bernbeck and Pollock (1996: S139) suggest S. P. Gupta was an "archaeologist known for his close associations with an extremist Hindu paramilitary organization, the Rashtriya Swayamsevak Sangh" or RSS. They do not cite additional sources on this point. Varma and Menon (2010: 63) note that Lal published an article on Ayodhya with photographic evidence in *Manthan*, a journal published by the RSS. I discuss B. B. Lal's views on Indian archaeology in Chapter 4.

The World Archaeological Congress or WAC, held in New Delhi in 1994, experienced public outrage directed at some Indian archaeologists. WAC is a non-governmental, international organization that promotes scholarly exchange, and specifically, discussion of the goals, and ethics of archaeology. Local organizers on behalf of the Survey had announced that the meetings would be “strictly academic” and that they would “keep politics out” of the Congress<sup>11</sup>. In response, Nandani Rao (1995: 1728) asked how WAC made decisions regarding grants for “right” participants, drawing attention to the political aims of the international organization.

Indian organizers had specified that they would not allow discussion on the demolition of the Babri Masjid (Golson 1995: 52). The decision to deny panel discussion on Ayodhya at the scholarly meetings added to speculations that (Survey) archaeologists were in on the plot and that they clearly had resources to sway the discipline. The President of WAC, Jack Golson, later noted that something had “gone wrong at the third Congress” (1995). He explained that during preparations for the meeting a few representatives had become aware of the demolition, but even fewer understood the issues (Golson 1995: 52).

To critics, all of these developments seemed to point to a monolithic practice of Indian archaeology. It was in this context that on-going public debate within

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<sup>11</sup> Golson pointed out ‘disagreement’ amongst members of the organizing committee on this blanket statement (1995: 52). He noted that the Survey would allow “strongly worded though non-specific resolutions about the partisan use of archaeological evidence and destruction of monuments” but no such statement or discussion on Ayodhya (ibid). Sarah Colley pointed out that participants received daily coverage from local media and that conference attendees were ‘bombarded with propaganda’ on Ayodhya (1995: 17). Some scholars characterized the conflict as between ‘science’ and ‘popular belief’ (Guha-Thakurta 1997: 13-17).



India intensified over the role of the state-financed Survey in Indian archaeology<sup>12</sup>.

Some researchers argue that the practice of Indian archaeology is homogenous and lacks significance. As recently as 2008, Himanshu P. Ray stated that Indian archaeology is a “monopoly” of the Government of India and argued that the field is in a “dismal” state (246-247). Dilip K. Chakrabarti, Professor of Archaeology at the University of Cambridge, characterized Indian archaeology as the domain of the government, universities and state departments of archaeology. Yet he has argued that other than the Survey, there are few institutions interested in safeguarding Indian heritage, and has remarked that there is “an insignificance of archaeology” (Chakrabarti 2003b: 208). These views of Indian archaeology are sometimes accepted by Western researchers.

In 2006, Carla Sinopoli asserted that Indian archaeology was a “marginal intellectual pursuit” whose role, as a result of the conflict in Ayodhya, shifted “to a central player in debates about India’s past and the nature and future of the contemporary Indian state” (2006: 327). These views influence our understanding of events like the demolition of the Babri Masjid.

Scholars often draw attention to the political uses of Indian archaeology, and often cite the role of *Hindutva* or neo-Hindu nationalists in the demolition of Babri Masjid (S. Guha 2005). But what is the influence of values and beliefs on the *interpretation* of archaeological data?

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<sup>12</sup> The role of the Survey in the WAC meetings is unclear. Khan (1994a) reported that the Survey had distanced itself from the upcoming meetings, and that the Ministry of Culture had signed off on a grant for Rs 30 lakhs (roughly 100,000 USD) for the meetings. Khan notes that Indian archaeologist Makkan Lal insisted that the meetings were sponsored by the Survey.

Although Indian scholars do not explicitly say so, Indian archaeology assumes cultural continuity between contemporary and prehistoric societies and some archaeologists think in terms of recovering territories of historical groups (Dhavalikar 2006). Where few or no historical records exist, influential scholars consider archaeology a source of history for subaltern or marginalized communities (Ray and Sinopoli 2004: 1). Archaeological data, then, as Selvakumar (2010: 474) argues, assists communities in claiming “traditional rights” over lands.

Some Indian scholars (S. P. Gupta and Ramachandran 1976), influenced by Hindu nationalism, believe that the Vedas are a static archive of traditions, and that modern Hindu traditions in northern India are descended from them. They believe the narrative accounts in the *Mahabharata*<sup>13</sup> and *Ramayana* belong to ‘the people’. Scholars argue that these texts accurately document the progress of Hindu civilization in northern India (Lal 2001). Because these accounts refer to place names, and because some scholars believe that there has been little or no change in tradition, the texts are thought to be an accurate and static record of historical territories. Thus, all that needs to be known to understand social and political organization is the present location of specific places referred to in the Sanskrit texts (Lal 2002). These methods are used to strengthen claims of Hindus

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<sup>13</sup> Indian scholars consider the Sanskrit texts, *Mahabharata* and *Ramayana*, epics. Both narratives are popular and especially so in northern India. Scholars who study these texts generally agree that they do not contain sufficient details on the social, political and historical context of their creation, and scholars do not have secure dates for the texts. Scholars of pre-modern India study the internal coherence of these philosophies and they remark that the texts had multiple authors (Nicholson 2010). They generally accept that the epics are recent relative to the earliest Vedic text, the *Rg Veda*. Some Indian archaeologists (Lal 1953) have attempted to date through material culture selected accounts from the epics. See Patil (1976) for discussion on ‘myth and reality’ in the epics.

over lands they are occupying. These views influence the practice of Indian archaeology.

In presuming a homogenous and static society, archaeologists attribute material culture to specific ethnic and linguistic groups. These groups are thought to be discrete, exclusionary and unchanging<sup>14</sup>. At the same time, monolithic Hindu practices excludes all non-Hindus from society and social dynamics, as will be discussed more fully in Chapter 2. Ethnic and linguistic minorities in contemporary Indian society then are thought to occupy traditional Hindu territories. All that needs to be known is the stratigraphic relationship between Hindu material culture and that of ‘Other’ historical groups, and as will be explained in chapter 3, these views predate the demolition of the Babri Masjid.

### ***Organization of the archaeological community***

A few weeks prior to the start of the XIXth Commonwealth Games in New Delhi in 2010, the Allahabad High Court released its decision on the ownership of the grounds where Babri Masjid once stood. Its ruling addressed legal suits filed several years prior to the demolition of the mosque. In the course of its proceedings, the Court had brought to stand members from the community in Ayodhya, local interest groups and specialists in history and closely related disciplines, including the Survey. During their deliberations, the Court evaluated as evidence written history, oral history and archaeological data. The Court’s

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<sup>14</sup> In *India after Gandhi*, Indian historian Ramachandra Guha (2007: 479) explains that “to the Indian nationalist, continuity was merely a euphemism for stagnation” and that rural India, more so than cities, was “pervaded by an air of timelessness”. This view of the Indian present influenced the interpretation of the Indian past. I discuss this impact in Chapter 2.

verdict called for the division of the grounds between contesting claimants, and this decision was immediately appealed to the Supreme Court of India. As a result of these appeals, the Supreme Court has stayed the order of the Allahabad High Court, and ownership of the grounds remains contested.

Public interest in India's past is manifest in continued financial support to understand who Indians are and where they came from. The Survey, funded by the central government, aims to be the custodian of Indian heritage, yet universities and departments in state governments are actively engaged in archaeological work as well. Figure 1 illustrates archaeological investigations conducted each year between 1993 and 2000 by the Survey, universities and state departments. Archaeology receives modest funding. For the 1992 fiscal year, the Ministry of Culture committed a total amount of 440.9 million Rupees (roughly 15.4 million US dollars in 1993). In 2009, the budget called for 4.2 billion Rupees, equivalent to 89.2 million US dollars (Ministry of Culture 2010). The Ministry of Culture, the University Grants Commission, the National Institute for Ocean Technology<sup>15</sup>, and state governments are four domestic sources of funding for archaeologists.

There are competing interpretations of funding for archaeologists. D. K. Chakrabarti (2010: 76) has remarked that there is "no dearth of money" for archaeological research. Archaeologist V. Selvakumar has pointed out that funding for arts and culture accounted for roughly 0.1% of India's annual budget

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<sup>15</sup> The archaeology department at MSU Baroda received Rs 300,000 from the National Institute of Ocean Technology for the "Archaeological survey around the Gulf of Khambhat (Cambay) region of Gujarat" project. Indian archaeologist V.H. Sonawane led the project ([http://www.msubaroda.ac.in/researchprojects/deptvirtualresearch.php?fdept\\_code=2](http://www.msubaroda.ac.in/researchprojects/deptvirtualresearch.php?fdept_code=2), assessed June 2012).

in 2007 (2010: 470). He argues, instead, that employment opportunities for students of archaeology and history are on the decline (Selvakumar 2010: 470). At the same time, he suggests that the Survey receives up to half of the budgeted funding for arts and cultural activities. Ashish Chadha (2010: 228) has suggested a lower figure at 30% of the budget for the Ministry of Culture in 2005. Yet this does not clarify how the Survey spends its funding, nor does it shed light on the Survey's relationship with other archaeology departments.

The available data suggest greater work by universities and state departments of archaeology than by the Survey. Furthermore, the evidence suggests collaborative work between knowledge producers.

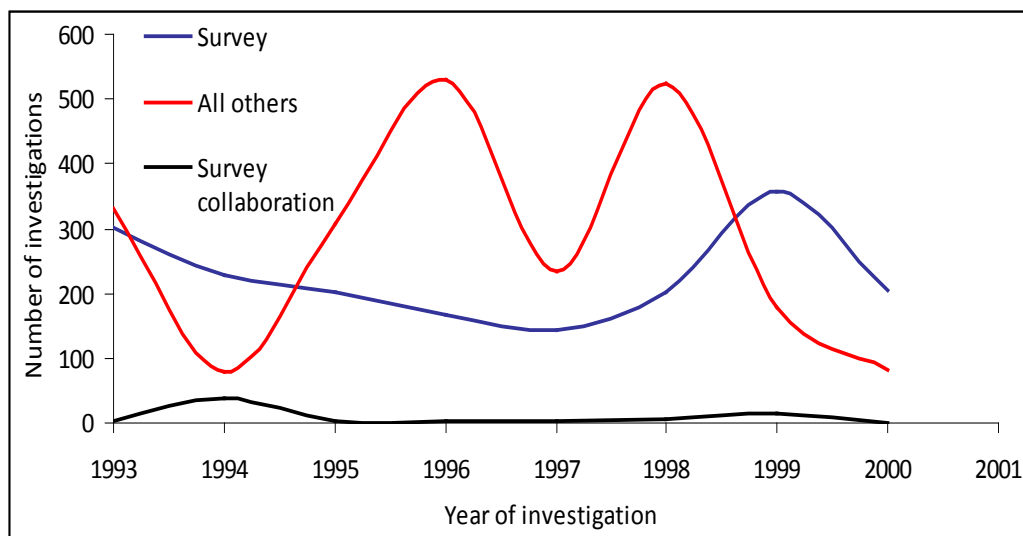


Figure 1: Graph illustrating archaeological investigations (survey and excavation) from 1993 to 2000 conducted by the Survey (blue), all others, including universities and state departments (red), and the Survey's collaborations (black). Data collated from *Indian Archaeology - a Review* for the years 1993 through 2000.

In their assessment of Indian archaeology, Chattopadhyaya et al. (2002: Appendix) remarked that the Survey is the “primary” institution that organizes “methodical explorations and excavations regularly”. Figure 2 visualizes field investigations from 1993 to 2000 by the Survey and all other knowledge

producers, as well as their collaborations. The data is compiled from the Survey's annual publication, *Indian Archaeology – a Review* for each respective year. The journal publishes edited summaries of field reports that are submitted by archaeologists. The reports document data collection each calendar year. In many places, particularly in northern India, field investigations are increasingly carried out not by the Survey, but by universities and state departments. This collection of archaeological data often takes place amid large construction projects which are financed by the central government, as will be discussed more fully later.

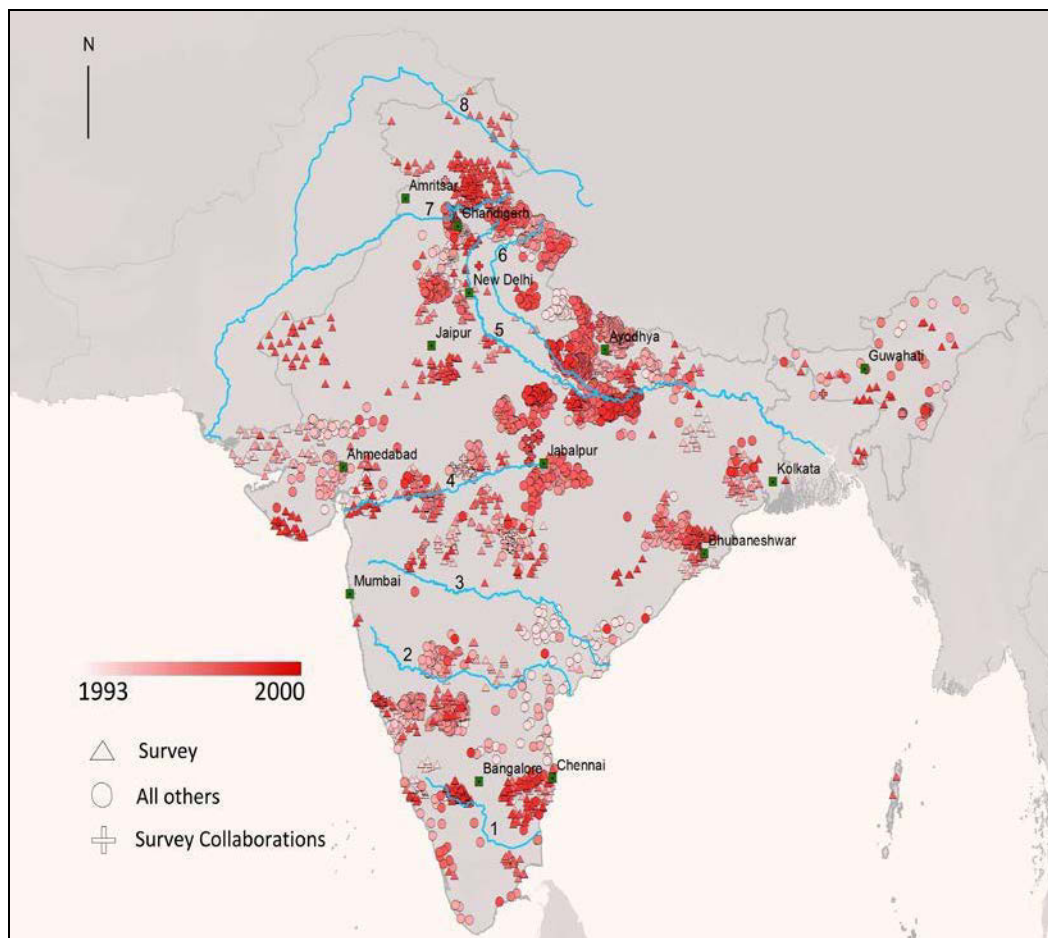


Figure 2: Map illustrating field investigations by multiple knowledge producers. Rivers are blue lines numbered from south to north: [1] Kaveri; [2] Krishna; [3] Godavari; [4] Narmada; [5] Yamuna; [6] Ganges; [7] Sutlej; and [8] Indus. Knowledge producers are indicated by symbols - the Survey (triangles), all others (circles) and the Survey's collaborations (crosses). The colour of each symbol represents the year of investigation

from light to dark on red scale - 1993 in light red to 2000 in dark red. Compiled from annual reports *Indian archaeology - a Review* published by the Survey, for the years 1993 through 2000.

The map shows that Indian archaeology is neither evenly distributed, nor uniformly practiced over time. Between 1993 and 2000, the proportion of archaeological investigations in territories north of the Narmada River [4] was greater than that carried out south of the river. The greatest concentration is along the upper Ganges River [6] and at its confluence with the Yamuna River [5]. In these territories, multiple knowledge producers carry out field studies. Non-Survey-led investigations are in greater proportion than those led by the Survey. At the same time, we see very few and sporadic investigations along the lower Ganges River and in India's eastern-most territories.

We can see that archaeological field studies along India's northern and western frontline with Pakistan is conducted almost exclusively by the Survey. This is especially the case in territories north of the Sutlej River [7]. It is surprising, then, that universities and a state department carried out archaeological investigations in the sensitive northern territories along the India-China border. The Survey is active in territories south of the Narmada River. This is particularly evident in the southern-most territories between the Kaveri [1] and Krishna [2] Rivers. The Survey often carries out field investigations along the Indian coastline. They most often collaborate with their counterparts on archaeological investigations in India's interior territories.

At the same time, the proportion and concentrated nature of archaeological investigations carried out by universities and state departments in some parts of

India suggests that they too, along with the Survey, organize ‘methodical’ field studies. This is true for knowledge producers in both northern and southern India. Some archaeological teams exhibit more dispersed investigations. This fieldwork, like the clustered ones, must be understood in context of their social, political, and historical circumstances, as well as in relationship with prior archaeological research in those territories.

The view of Indian archaeology as a homogenous and monolithic practice is misleading. It is unlikely that knowledge producers without prior expertise organized archaeological investigations in the years immediately following the demolition of the Babri Masjid in Ayodhya. At its extreme, archaeology is thought synonymous with the Survey, and is credited with the “dismal” state of the discipline (Ray 2008: 246-247). Yet this does not explain how and why knowledge producers other than the Survey collect archaeological data and continue to do so.

Archaeologists are indeed employed by the Survey and by state departments of archaeology. They are considered civil servants and all state departments have full-time staff. In state departments, archaeologists are often employed locally and from within their own state (Uttar Pradesh Public Service Commission 2012; Tamil Nadu Public Service Commission 2012). Because the language of administrative and social life in many states is neither exclusively Hindi nor English, linguistic skills likely influence hiring practices. These constraints may be eased at the Survey, which employs archaeologists for its offices in New Delhi, and twenty-four regional offices or ‘circles’ across India.



Precise figures on the number of Indian archaeologists and the ratio of men and women practitioners are not available<sup>16</sup>. Chadha (2010: 228) remarks that the Survey employs “several thousand workers” throughout India. He does not specify how many of these ‘workers’ are archaeologists. In 2009, the Punjab department had seven staff archaeologists and six the following year, a result of retirement without hiring. None of the Punjab archaeologists were women. Women employed at the department served as office assistants and secretaries, administrative assistants, librarians, managers and the financial director.

Estimating a low of two and an upper number of eight archaeologists employed in each of India’s twenty-eight states (and assuming that every state has a department of archaeology), the Survey’s twenty-four regional offices<sup>17</sup>, and twenty-eight Indian universities and research institutes<sup>18</sup>, we approximate that the minimum number of archaeologists is 160. A higher, although not the maximum, estimate is a community of 640 Indian archaeologists. These figures do not adequately reflect archaeologists-in-training and this measure underestimates annual variations. This method also obscures retired archaeologists, who no longer carry out field excavations, but contribute to the social life of their former departments and continue to publish.

At the archaeology and ancient history department in Maharaja Sayajirao University, Baroda, in Vadodara, Gujarat, the ratio of male to female teaching and research staff is 4:3. This is slightly higher than the gender distribution at the

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<sup>16</sup> I am not aware of this data being collected by the Survey or by any other organization in India.

<sup>17</sup> I have not included archaeologists at the Survey’s office in New Delhi.

<sup>18</sup> Between 1993 and 2000, 25 university departments and 3 research institutes carried out fieldwork. There are likely more university departments with active archaeologists and these figures are best seen as “no less than”.

archaeology department at Banaras Hindu University in Varanasi, Uttar Pradesh. According to their departmental website, eleven of the twenty-seven teaching and research staff are women (Banaras Hindu University, 2012). Departments such as those in the University of Madras and the University of Kerala do not provide sufficient data on teaching staff to ascertain gender ratios. There is considerable scope for research on gender and hiring policies in archaeology departments in the Indian context.

Archaeologists supervise excavations, and also have managerial or administrative roles in their departments related to the preservation of archaeological data and recordkeeping. Some are responsible for the publication of archaeological reports, although this is often the responsibility of the director or the person who organizes excavations. The director employs as labourers (men and women), from the local community for digging at a site and artefact cleaning. They are usually employed for the duration of the excavation. Permanent department staff are responsible for section and plan drawings, photography, and tasks that require technical skills. This is often referred to as ‘administrative’ or in the case of the Survey, ‘official’ archaeology (Panja 2002).

Yet Indian archaeology is not an exclusively government activity. Chakrabarti (2003b) points out that since the late 1940s, universities and state departments of archaeology have carried out archaeological research. Many Indian archaeologists are often housed in departments of Ancient History and Culture. Publically-financed universities, including Deccan College Postgraduate and Research Institute, Pune in the western state of Maharashtra and Allahabad University and Banaras Hindu University in northern India are home to major teaching and

research departments of archaeology. Patrons of Deccan College recognized the value of archaeology in pre-Independent India with the creation of the first professorship in Proto- and Ancient Indian History in 1939 (Panja 2002: 5). H. D. Sankalia held the position in Deccan College's Department of History up until 1968. Maharaja Sayajirao University of Baroda in Vadodara, Gujarat receives both public and private funding. The university has offered training in archaeology since 1950. At Calcutta University in Kolkata, in the eastern state of West Bengal, archaeologists trained in the Department of Ancient History until 1960, when the university created a department for archaeology. Karnatak University in Dharwad, in the southern state of Karnataka, has trained archaeologists and art historians since 1962. All of these departments carry out archaeological field studies.

Chakrabarti raises concerns about access to archaeological data once it is recovered (2003b: 161). As with the Survey, state departments and universities control access to their archaeological collections. In her examination of excavations at Sanghol in the northern state of Punjab, archaeologist H. P. Ray (2010: 2) remarked that because the Survey's final report had yet to be published, its papers and excavation notebooks, as well as artefacts collected by Survey archaeologists, remain inaccessible to non-Survey researchers. The Survey collaborated with the Punjab department of archaeology and the local community during excavations between 1985 and 1990. The archaeological collection, thus, is shared between the three major collaborators<sup>19</sup>. This practice influences our

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<sup>19</sup> See also Saraswat (1997); Saraswat and Pokharia (1997); Pokharia and Saraswat (1998, 1999) for an assessment of 'plant economy' at Sanghol. The articles discuss the analysis of carbonized

understanding of archaeological records and collections, and the composition of an archaeological collection as a whole.

Indian archaeologists are increasingly aware that their records exhibit variability<sup>20</sup>. There are growing efforts by state-funded organizations to digitize museum collections<sup>21</sup> and to make these digital records available to state departments and to the larger community. This has implications for methods in data sharing, particularly where collaborative excavations are organized between two or three knowledge producers. The Survey has guidelines for the export of materials, soils and other collections when foreign teams are involved. There is no explicit scholarly discussion on how state departments, universities, and the Survey share their collected data.

Some scholars have raised concern about ‘administrative’ and ‘academic’ archaeology (Basak 2007). They sometimes give the impression that the two are isolated from, and operate independently, of each other. Yet these two approaches overlap. It is unlikely a coincidence that ‘administrative archaeology’ or state-financed efforts expanded in postwar India, as the government invested in large construction projects, such as building dams, power plants, airports, roads and

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botanical material collected at the site between 1988 and 1990. K.S. Saraswat, since retired, was a researcher at the Birbal Sahni Institute of Palaeobotany, Lucknow and he collected paleobotanical data at Sanghol.

<sup>20</sup> Participants at the Indo-US Science Technology Forum in 2006 discussed ‘data standards’ and distributed Survey recording sheets. The discussion suggested that there are many recording practices and participants expressed desire for compatible, if not common records. The Forum was held at the Maharaja Sayajirao University, Baroda, in Vadodara, Gujarat, and included archaeologists from universities, state departments, and the Survey, as well as researchers from abroad. Ratnagar (2004: 244) might be hinting at these data sharing issues when she remarks that “the person who has found the latest collection of seals or burials cannot be given the last word on the subject”.

<sup>21</sup> I was in Sanghol and in Chandigarh between 2009 and 2010, when representatives from the Indira Gandhi National Centre for the Arts or IGNCA visited to photograph and record collections housed at the local museum. For more on the larger project, see [http://ignca.nic.in/ndb\\_0001.htm](http://ignca.nic.in/ndb_0001.htm), accessed January 2012.

interstate highways and factories. Archaeologists in universities were impacted by these changes. The national government promoted archaeology programmes by providing funding for these departments, and for excavations. University graduates increasingly filled growing administrative positions in the Survey and in state departments. These departments often emphasized the collection of archaeological data and the preservation of cultural heritage.

There are competing views on relations between administrative and academic archaeologists in India. Panja (2002: 2) suggests that academic archaeologists were “always” dissatisfied with the Survey and its role in Indian archaeology. Chakrabarti (2003b: 70) argues that because of its interests in archaeological science, including chemistry, botany and zoology, the Survey provided a foundation for training Indian archaeologists in these fields. Alternatively, Basak (2007: 337) suggests that there exists a ‘sphere’ other than administrative and academic archaeology and points to a “vast body of local, vernacular initiatives”. Yet these views do not explain the interest of administrative archaeologists in archaeological research, or the methods that these archaeological teams employ.

Administrative archaeologists cross over to academic positions<sup>22</sup>. Sometimes state departments are very active in archaeological research. The Directorate of Archaeology in the northern state of Uttar Pradesh, led by Rakesh Tewari, organizes archaeological field studies in that state. In 2006, the Directorate hosted an international conference, ‘First farmers in a global perspective’, which attracted specialists from leading teaching and research institutions within India

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<sup>22</sup> In 2009, Survey archaeologist Alok Tripathi took over as head of the Department of History at Assam University in Silchar, in the northeastern Indian state of Assam.

and from abroad<sup>23</sup> (Tewari et al. 2008a). Tewari and his department published the conference proceedings in a special issue of *Pragdhara*, their in-house bilingual (Hindi and English) journal.

The proceedings suggest research interests and views of Indian archaeologists when it comes to their place in a major research tradition. For over a century, the identity of Indo-Europeans has been a focus for prehistoric research in Europe and Asia. Influential scholars believe that the linguistic signal corresponds with an archaeological and a genetic one (Ammerman and Cavalli-Sforza 1984; Bellwood 2008: 332-333). In the Indian context, some archaeologists believe that social and political complexity began with the practice of large-scale agriculture. They often consider prehistory, or the time before the *Rg Veda*, as simple, idyllic and monolithic (Pant 2008: 7).

Indian archaeology holds caste as an organizing principle (Misra 2001). Caste is defined as endogamous, hereditary and hierarchically organized (Majumdar 1998). Because scholars believe that caste is synonymous with Hindus<sup>24</sup> – and because this ideology, more than others, is believed to have characterized Indian society – the examination of culture contact between aboriginal peoples and caste society is of greatest interest for some scholars and policy makers (Walimbe 2007). I discuss these research trends in a later section of the chapter.

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<sup>23</sup> Presenters included Professors Tang Linghua, Yo-Ichiro Sato and Ishikawa, Drs. Toshiki Osada, Rathnasiri Premathilake, J. F. Jarrige, C. Jarrige, Dorian Fuller, Harriet V. Hunt, and Steven Weber. Officers from the Survey included R.S. Bisht and B.R. Mani (Tewari et al. 2008a).

<sup>24</sup> On religion and identity, R. Guha (2007: 26) notes that the “vast majority of the billion-plus Indians are Hindus” and that in addition to the “second largest population of Muslims in the world”, there are “substantial communities of Christians, Sikhs, Buddhists, and Jains”. To these we might add aboriginal peoples and what Heitzman and Worden (1995) call “tribal religions”.

At the same time, most Indian scholars increasingly reject external origins of agriculture, and its spread from a single source in West Asia (Pant 2008). They argue instead that food production originated in multiple places, and they often cite recent investigations in East Asia that establish the antiquity of rice cultivation there (Agrawal 2001: 19). It is in this framework that Indian archaeologists argue for independent origins of agriculture within India, and specifically in the Ganges Valley (Tewari et al. 2008b). This internalist view encourages archaeologists to reject explanations that see innovations developed elsewhere being brought into India by dynamic and creative groups. Yet many Indian archaeologists reject neither migration as an explanation for change, nor the premise of the migratory framework. Rather, when archaeological data points to development over time, and to a more complex prehistoric past, archaeologists often attribute material culture to creative and dynamic groups (Jayaswal 2008).

In her examination of the transition to food-producing economies in the Ganges Valley, archaeologist Vidula Jayaswal<sup>25</sup> argues that there existed two ‘branches’ of the Mesolithic population<sup>26</sup>. She explains that whereas one branch “evolved” new technologies and agricultural practices, the other “resisted change” (2008: 325). The group that did not develop technologies, she argues, “preferred to survive in isolation” and continued to hunt and gather (Jayaswal 2008: 325). The two ‘cultures’ “drifted” from each other sometime in the past. At the same time, Jayaswal points out evidence for “borrowed elements of the Chalcolithic

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<sup>25</sup> Vidula Jayaswal is Professor at Banaras Hindu University, specializing in prehistory. She is a member on the Executive Committee for the Anthropological Survey of India, and she serves as a government nominee on committees for the Survey.

<sup>26</sup> Mesolithic is an archaeological term that is sometimes used to describe pre-agricultural societies in the Holocene. Holocene is an interglacial period dating from the present to 12 000 years ago.

and Iron Age cultures” (2008: 326). This implies that group identity was clearly defined, exclusionary and essentialist. So how do we identify the group that resisted change?

Jayaswal proposes that because of their “cultural conservatism”, the resisters are often found in “geographically isolated areas” where they hunt and practice animal husbandry (2008: 325-326). Surprisingly, Jayaswal does not shed light on dwellings, seasonal or otherwise, for this culture. The progressive group, however – to whom the material record for successive archaeological periods is attributed – is easily identified by archaeologists because of their “village like settlement” (Jayaswal 2008: 325-326). This view of prehistory emphasizes cultural continuity between contemporary and prehistoric societies.

Although Jayaswal does not say so, Indian prehistory often include studies of ‘tribals’ or aboriginal peoples and their interaction with ‘Hindu society’ (Allchin 1966). Some Indian archaeologists often think in terms of recovering cultural achievements of their ancestors. They often hold the Hindu culture constant to delineate traditions of ‘Others’. They often consider aboriginal peoples, ‘fossil cultures’ that give insight on remote human history. These ethnocentric views celebrate the progress of Hindus while emphasizing the lack of creativity amongst aboriginal peoples.

In his opening address to the conference, archaeologist P. C. Pant remarked that in Paisra, – a village in Bihar – the Government of India gave Kodas opportunities to “improve their lot” (2008: 7). He noted that in the wake of independence in 1947, the government gave these hunter-gatherers “land, equipments, and other facilities for agriculture” (Pant 2008: 7). Despite this



investment, Pant observes that the Kodas continued to harvest forest resources and he suggests that their mixed economy does not “qualify” them as farmers. Pant likens this situation to prehistoric cultures in the Ganges Valley, which prior to a cultivation-based economy, “remained almost static without showing any observable signs of development for about four thousand years or so” (Pant 2008: 7). These methods serve social and political aims.

It is unlikely a coincidence that these views are promoted at a time when ethnic and linguistic minorities in India increasingly demand their social and political rights. The study of archaeological material is often cast into an historical framework in which relations between aboriginal peoples and caste society take precedence over concerns of ethnic and linguistic minorities. It is in this context that archaeologist Shereen Ratnagar (2004: 244; emphasis original) remarks that prehistoric societies are different than contemporary ones, and proposes, “[s]hould archaeology not also nudge us into enquiries about *other* peoples, “other” because they were living in times and conditions quite different from our own?”

### ***Preservation of cultural heritage***

Dilip Chakrabarti has criticized heritage management in India. He argues that other than the Survey, there are few institutions interested in safe-guarding Indian heritage and in public outreach. Chakrabarti has observed that understandings of the Indian past are dominated by the study of texts. He has claimed that there is an “insignificance of archaeology” (2003b: 208). Yet the conflict at Ayodhya,

sustained interest in the ownership of the Babri Masjid grounds and efforts to resolve this issue through archaeological excavations (Varma and Menon 2010), cast doubt on this contention. Moreover, this raises a larger issue on the relationship between Indian history and Indian archaeology.

In their thought-provoking article, historical archaeologists Supriya Varma and Jaya Menon (2010: 61) examine “the way archaeology has been perceived and used to resolve [the Babri Masjid] dispute”. They remark that “[i]t is so ingrained a perception at the popular level as well as among a number of archaeologists and historians in India that the role of archaeology is only to find proof for what is written in the texts or prevails as oral traditions” (2010: 70). Moreover, Varma and Menon (2010: 71) argue that this “uncritical use” of textual sources “marks the kind of historical archaeology” (establishing cultural sequence) that the Survey practices. The “lack of reflectivity” is compounded by what Varma and Menon (2010: 71) call a “serious absence of academic engagement and training” within the Survey. Yet this does not explain why non-Survey archaeologists employ culture-historical methods, nor does this shed light on how beliefs and values influence Indian archaeology.

Archaeological activities in India are reported in both print and digital popular journals. Public interest in archaeology is often encouraged by spectacular archaeological recoveries, particularly those that date to the Indus Valley civilization. Nayanjot Lahiri (2006: 3) has remarked that the Indus Valley civilization is a source for “popular perceptions of India’s ancient past”. For example, an Indus period site at Dholavira in Kacchh, Gujarat, on the edge of a salt marsh, draws visitors despite its remote location. Located on the Rann of

Kutch highway, and roughly thirty kilometers from the Pakistan-India international border, the journey to Dholavira takes almost a full day of travel from Rajkot or from Ahmedabad<sup>27</sup> (Khuen 2004).

The Survey-managed site has large structures, including what excavators called a “citadel”, “stadium”, reservoirs, fortifications, and a network for water management (Survey 2011). Investigated by Survey joint director-general Ravindra Singh Bisht<sup>28</sup>, since the late 1980s, the site covers an area about 100 hectares, which measures roughly ten American football fields<sup>29</sup> placed end to end. Dholavira was home to what excavators described as a “sign board” with Indus script. In the southern state of Tamil Nadu, archaeologists working at the prehistoric site of Attirampakkam draw public attention to the remote human past (Pappu and Akhilesh 2005). There, archaeologists direct their efforts at encouraging young people, urban and rural, to learn about prehistory as “an important aspect in the cultural heritage of Tamil Nadu” (Pappu and Akhilesh 2005: 140). They highlight how rapid development has impacted archaeological sites that have no monuments and large structures for archaeologists to preserve.

Indian archaeologists consider their field investigations ‘community-based’ because they are carried out in villages, and because they often employ local residents. North American community archaeology is characterized by

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<sup>27</sup> Khuen remarks that the journey takes almost two days but he does not say where he and his team travelled from. However, Rajkot and Ahmedabad are two major cities in Saurashtra with facilities for travel to Dholavira and they are within one day’s drive. Because of Dholavira’s proximity to the Pakistan-India border, visitors are expected to get a special permit before travelling to the archaeological site.

<sup>28</sup> Bisht has since retired and maintains an office at Purana Quila in New Delhi.

<sup>29</sup> One side of an American football field is 100 m.

archaeological field studies done with aboriginal peoples in their communities<sup>30</sup> (McGuire 1992; Dongoske et al. 2000). In the latter part of 2000, when the local community in Sanghol, Punjab found itself in disagreement with a city Museum over ownership of stone sculptures, local archaeologist Ganga Bishan Sharma called on the Survey to intervene (Thakur 2000). In that politically sensitive confrontation, the Survey supported community efforts to conserve local antiquities. This suggests that local communities often are very interested in archaeology and in managing their cultural heritage.

‘Hands-on experience’ and educational programs in archaeology created for young people is a relatively new concept in Indian archaeology (Pappu et al. 1999). At the Sharma Children’s Museum in Sholinganallore in Tamil Nadu, archaeology is presented through art, handicrafts, and material culture, and is addressed directly to children. Pappu organized field trips to nearby sites to show how they are excavated and how archaeologists collect artefacts (1999: 92). This is in contrast with publications addressed to non-professionals to tell them about archaeological activities. Indian archaeologists often publish their findings in popular journals, including newspapers, and they have done so since the early twentieth century, as will be discussed in chapter 3.

Created in the mid-1980s, and financed by the Charles Wallace Trust, the Indian National Trust for Art and Cultural Heritage, or INTACH, is a heritage conservancy organization with chapters in over a hundred Indian cities, as well as

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<sup>30</sup> There is no consensus on community archaeology, although it often entails a partnership or collaboration between Euro-American or Canadian researchers with aboriginal peoples. This may include the creation of a local museum, local employment, and collaboration in terms of either the collection and, or, less often, the interpretation of archaeological data. See Murray (2011) on indigenous and community archaeology. For historical context, see Trigger (1980).

overseas chapters. The organization promotes the preservation of heritage, focusing where the Survey and other governmental organizations do not provide services (INTACH 2012). The Trust often supports the development of heritage policy and documentation of heritage sites. They place emphasis on art and architectural preservation. Concurrent with the Commonwealth Games in 2010, the Trust organized ‘Delhi: a living heritage’, an exhibition to showcase urban change in New Delhi and to draw attention to the city’s built environment as its cultural heritage. Local chapters, with the support of guides, often university graduates themselves, organize heritage tours within their cities. These public outreach efforts promote community investment in local monuments. They also highlight a growing tendency towards ‘practical’ economic reasons to study Indian heritage (Selvakumar 2010).

These developments underscore efforts by local interest groups to manage monuments and preserve their heritage. In her assessment of the Survey’s legislation in colonial India, archaeologist Himanshu P. Ray (2008: 2-3) remarked that the *Ancient Monuments Preservation Act, 1904*, “changed the nature of archaeological sites, and religious architecture”. The Survey’s practices were often at odds with preexisting ones in local communities, such that the Survey’s efforts were often met with suspicion and raised questions about ownership of monuments (U. Singh 2004: 302-304). It is no coincidence then, that in the face of growing Hindu nationalism in India, ethnic and linguistic minorities increasingly turn to the nation’s judiciary to protect their civil liberties.

### ***Recent trends in the practice of Indian archaeology***

A state-oriented view assumes geopolitical homogeneity and self-containment. These views obscure complexity in the history and practice of Indian archaeology (Ray 2008). Inattention to archaeological traditions in colonial settings has very serious implications on our understanding of theoretical developments in archaeology. In light of public concerns over the role of archaeology in Indian society, Indian archaeology has been growing increasingly self-conscious. That in turn has stirred production of methodological studies that aim to examine the foundations of archaeology.

Indian archaeologists are increasingly interested in the history of their discipline and they question colonial interpretations of the Indian past (Chattopadhyaya 2006). They argue that the Vedas are composite texts of oral accounts and that these works do not present traditions during a particular time (Chattopadhyaya 2006: 10). Some archaeologists seek “indigenous”<sup>31</sup> historical traditions in the *Puranas* to understand the Indian past (Paddayya 1995). At the same time, these views underestimate the influence of beliefs and values on the practice of Indian archaeology.

Because some scholars believe that caste has characterized Indian society, and because they associate Hinduism with caste, some archaeologists seek to understand relations between caste society and aboriginal peoples (Misra 2001). In his examination of the “colonization of India”, archaeologist V. N. Misra

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<sup>31</sup> Paddayya’s ‘indigenous’ is different than that employed by Ajay Pratap (2009) in his study of ‘tribals’ in the ‘archaeology of subaltern’. See chapter 4 where I discuss the *Puranas* and the relationship of these texts with Indian archaeology.

(2001) presents a synthesis of archaeological and geological data to verify the accuracy of Sanskrit texts. He examines changes in the density of ancient settlements in the Indus Valley and argues that they are best understood in terms of the *Rg Veda* and later epics, *Mahabharata* and *Ramayana*. This approach obscures changes in the population size, structure and distribution of past societies.

Misra (2001: 504) remarks that the Ghaggar-Hakra River in northern India is “actually the bed of the ancient river Saraswati” and that the *Rg Veda* refers to this since-dried channel. The later Sanskrit texts, Misra (2001: 504) contends, describe the river as “having disappeared underground” and this result is “consistent with the post-Harappan archaeological history of the region”. By attesting the accuracy of the narratives, Misra implies cultural continuity between modern Hindu traditions in northern India and ancient societies. These methods assume that the Sanskrit texts are state archives and assign greater epistemic value to textual sources than to archaeological and geological sources. These views influence the aims and potential of Indian archaeology.

*Indian archaeology in retrospect* in four volumes, edited by Settar and Korisettar (2002), examined the state of prehistoric studies and the study of ancient India. Reviews of the volumes are readily available in *Asian Perspectives* (2003), and in *Antiquity* (Coningham 2002). Indian archaeologists often take pride in their discipline and in their use of the English-language. That the *Retrospect* volumes are well-received by English-speaking researchers demonstrates the strong professional relationships that Indian archaeologists have developed with their Western counterparts.

A few years later, in *Archaeology in India*, Sengupta and Gangopadhyay (2009: xiv) addressed the relationship between colonizers and the colonized by shedding light on what the editors call “indigenous traditions and local aspirations”. They argue that historical accounts of Indian archaeology often characterize it as an “initiative” of the state-financed Survey, in which European scholars and policy makers are championed as “heroes”, and where their Indian counterparts are presented as “recipients” or “villains” (2009: xiii). Thus, the volume aims to highlight the role of individuals, ideas and institutions “largely outside the official scheme of things” (Sengupta and Gangopadhyay 2009: xiii).

Yet with the exception of M.C. Joshi’s “Reminiscences of an official archaeologist” (2009), few contributing authors discuss recent archaeology or ‘indigenous traditions’. Chapters in this volume present archaeological data collection and the organizational structure of archaeology in former Crown-administered Provinces and Presidencies (Rajan 2009; Choudhary 2009) and in Native States (Darsana 2009; K.P. Rao 2009; Mukhopadhyay 2009; Sonawane 2009) prior to Indian independence in 1947. These accounts seek to demonstrate that the Survey was not sole keeper of the Indian past. The challenge facing these scholars is to explain how and why some archaeological practices continued, whereas others changed in post-colonial India. A deeper understanding of the influence of local traditions and aspirations, as well as changing social and political relations with the colonial Government of India is needed to give insight on the complexity that Sengupta and Gangopadhyay seek for Indian archaeology.

During the last decade, researchers have chronicled the archaeology of ancient civilizations, influential archaeologists and institutions in India. Several books are



written for the general public and provide an introduction to Indian archaeology. These include Gregory L. Possehl's *The Indus Civilization: a contemporary perspective* (2002), Nayanjot Lahiri's *Finding forgotten cities* (2006a), and Upinder Singh's *The discovery of ancient India* (2004). These works draw attention to leading archaeologists in the late nineteenth and early twentieth century. Each evokes the romantic image of archaeologists as discoverers and elaborates on their contribution in the collection of archaeological data and to the organizational structure of Indian archaeology.

In *Indus Civilization*, Possehl (2002: 20) remarks on the “pure archaeological adventure” of excavating the ancient cities at Mohenjodaro and Harappa in 1920s India. Similarly, Lahiri's (2006a) volume chronicles leading scholars who identified and excavated the sites, including Survey officers Rakhaldas Banerji and Daya Ram Sahni, and their director, John Marshall. She draws attention to the professional relationships between these excavators and their efforts in the collection of archaeological data. These works overlook the social and political factors that influence the collection and interpretation of archaeological data. They sometimes assume a simple, homogenous and boundless society. For example, in her examination of Robert Bruce Foote, a government-employed geologist who surveyed parts of southern India in the late 1800s and early 1900s (and identified prehistoric stone tools), Pappu (2008: 30) remarks that Foote “belonged to a time when boundaries did not limit a scholar's interest in the world around him”. Yet this does not explain why many colonial excavators limited their field studies to Crown-administered territories, or why prehistoric research matters to Indian society.

In the same vein, some scholars have proposed the ‘archaeology of the subaltern’ (Pratap 2009). They contend that ‘indigenous’ in the North American and Australian contexts is often thought of in terms of pre-contact autochthonous peoples (Béteille 1998: 189-190). This characterization, Pratap (2009: 72) argues, is simplistic and does not reflect the Indian scenario, where, “tribal and non-tribal has existed from thousands of years B.C.E. and continues to do till today”. Because Indian archaeologists often believe that caste is the social ideology that has most influenced Indian society, and it is a local<sup>32</sup>, rather than foreign, development, they think of ‘tribal’ peoples as those who were classified as ‘Scheduled Tribes’ or ‘Scheduled Castes’ in Crown-administered India (Pratap 2009: 74).

These developments are concurrent with growing interest in the ‘archaeology of religions’. In the Indian context, some scholars believe that ‘tribal’ peoples who were hunting and gathering groups, have been “continuously absorbed” into Hindu caste society (Chakrabarti 2000: 668). The archaeology of Hinduism, then, aims to understand and reconstruct its practices in specific places at particular times, through the study of material remains.

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<sup>32</sup> This view rejects the migration of Aryans into the northwest of India. Pratap argues that Indo-Aryan speakers were indigenous to the Ganges Valley (2009: 74). Pratap does not reject migration as an explanation for change. He remarks “the Indian subcontinent presents a palimpsest of (mostly) arrival of different peoples from much earlier on than in the case of the New World..... demographically speaking, the Indian landscape is peopled at different times by different peoples. All of whom culturally and biologically assimilate into the demographic melting-pot called India” (ibid.). But see Chakrabarti (2000: 668) on tribal role in the Indian epics and tribal areas in ‘secondary state process up until the Mughal period’.

Some scholars think of water as central to ritual purity in Indic<sup>33</sup> traditions, and they archaeologically identify water tanks, temples, sites of sacrifice, folk shrines and domestic figurines (Lahiri and Bacus 2004). In the wake of Babri Masjid's demolition, some archaeologists suggest "syncretism" between different traditions and postulate "multi-religious associations" for specific places or 'sacred space' (Lahiri and Bacus 2004: 321-322).

At the same time, some Indian archaeologists are increasingly interested in site distribution analysis. Indian archaeologists familiar with historical geography compile large databases of archaeological field sites (Kumar 2009). Some archaeologists who employ this method believe that archaeological material is a static record of historical groups (Lal 2001)<sup>34</sup>. They think in terms of recovering territories of historical groups and correlate these territories with Sanskrit texts, for example, M. K. Dhavalikar (2006: 25) remarks that in the first half of the second millennium B. C., the Late Harappan culture was the only one which "spread here [the Sapta-Sindhu or Indus-Saraswati region]" and "it therefore necessarily follows that if at all there were any people whom we meet in the *RigVeda*, they could only be the Late Harappans and none else".

Some archaeologists observe that the distribution of archaeological sites "conforms" to contemporary administrative territories (Chakrabarti 1999). They

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<sup>33</sup> Ray (2008) describes Hindu, Buddhist and Jaina traditions as Indic. On this point see Chatterjee (1995) where he explains this view in terms of the origins of these traditions in a territorially bound India.

<sup>34</sup> This method is distinct from settlement archaeology. Archaeologists interested in settlement archaeology sometimes refer to Gordon Willey's *Prehistoric settlement patterns in Viru Valley, Peru* (1953). In this publication Willey significantly examined and explained change in the distribution prehistoric settlements. He emphasized the anonymity of prehistoric human groups and investigated settlements as groups of sites in a larger region. He argued that ecological and economic considerations alone did not explain the range of variability in settlement patterns.

contend that their archaeological fieldwork thus recovers “nascent political units” (Chakrabarti 1999: 260). They sometimes assume that new field investigations are directly compatible with data collected by previous researchers who employed different methods. In effect, the method disengages the collection of archaeological data from its social and political context. This view builds on scholarly interests in historical geography and political history.

Recent works on the history of Indian archaeology examine archaeological literature published in English. Several benefit from unpublished documents in depositories in India and in Britain (Paddayya 2009). Most often available in the English language, examination of these sources is made possible by greater access to archives and the Government of India’s *The Right to Information Act*<sup>35</sup> (2005). Some Indian scholars such as Upinder Singh (2004) and Himanshu Ray (2008) suggest that the history of Indian archaeology often has emphasized intellectual developments in northern India.

K. Rajan (2009: 197) suggests that the biases in coverage of archaeological traditions may be explained by the relative inaccessibility of publications in Dravidian-languages, including Tamil, Kannada, Telugu, and Malayalam. He remarks that there are very few historiographical works on archaeology in the southern Indian states, including Tamil Nadu. He contends that linguistic skills have influenced the writing of history of archaeology, such that innovations in southern India, where Dravidian languages are most often spoken, are sometimes

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<sup>35</sup> Individual states eased restrictions on access to their documents before the central government. Tamil Nadu did so in 1997, Rajasthan and Karnataka in 2000, the Union Territory of Delhi in 2001, Maharashtra and Assam in 2002, and Madhya Pradesh in 2003. The Government of India *Right to Information Act* (2005) currently excludes the state of Jammu and Kashmir. The latter state has its own *Jammu and Kashmir Right to Information (Amendment) Act* (2009).

overlooked. In his assessment of the potential for natural science research in Indian archaeology, geoarchaeologist George R. Rapp (1983) observed a tendency in university departments to preferentially hire their own graduates. Rapp speculated that the practice of academic inbreeding was likely a result of “language differences” in India (1983: 5). How and to what degree language influences the practice of Indian archaeology has yet to be assessed.

Some Indian archaeologists are increasingly interested in gender relations when it comes to the practice of archaeology. In an interview for the popular news journal *Indian Express*, professor and geologist at Anna University in Chennai, Hema Achyuthan remarks that women are discouraged from pursuing careers in archaeology as a result of discrimination (Lakshmy 2010). She points to challenges she faced during field studies early in her career. In his report for the Ford Foundation, George Rapp (1983: 14) recommended affirmative action to increase the number of women archaeologists in leadership positions. How have views about the role of women in Indian society influenced their careers in archaeology, and how have these factors influenced the practice of archaeology? These issues are sometimes overlooked in discussions about Indian archaeology.

In her examination of “global archaeologies”, Nayanjot Lahiri (2006b: 9) remarked that “multi-disciplinary” research and studies which require “huge resources” are implausible in Third World contexts, such as India. She contends that “conventional field programmes”, such as those promoted by culture-historical approaches, have served India well and continue to do so (Lahiri 2006b: 9). The aim of archaeology, she suggests, is to question “skewed” frameworks on the weight of a growing database. This places priority on the collection of data,

and relegates to a secondary position the synthesis and interpretation of archaeological data.

Lahiri's characterization of culture-history assumes that it is a monolithic practice. This essentialist view sees a homogenous "cornerstone of Indian archaeological research" defending itself from a foreign or Western criticism in the form of 'New Archaeology' (2006b: 9). That culture-historical methods are practiced in many places in the world, including the 'First World' suggests that its characterization as exclusively 'Indian' is misleading.

This view presumes that methods employed to collect data have neither a relationship with the available tools and technologies at a particular time, nor is there a reciprocal relationship between synthesis and data collection. This is significant since Lahiri (2006b: 4) contends that Indian archaeology has a "markedly different development trajectory" as a result of its origins in colonial governance. Yet this has to be proved, not assumed.

At the same time, Indian archaeologists are growing interested in the most remote period of human history. They remark on the long chronology of hominin occupation in India (Lahiri 2006b: 10). Paleoanthropologist Parth R. Chauhan (2006: 1-2) remarks that scholars are most interested in the "nature and timing of various dispersal events from East Africa into other parts of the Old World", including India. Some Western scholars draw attention to biological complexity in the Indian context (Petraglia and Allchin 2007). They often assume a clear correlation between the archaeological record and genetic signal (Boivin 2007). These views are often reinterpreted by Indian scholars.

For many Indian scholars, aboriginal peoples are synonymous with ‘fossil cultures’ (Pant 2006). For example, in his examination of the study of human origins in India, Parth Chauhan (2006: 4) argues that South Asia is “unique” in that it offers “the opportunity to study many tribal communities, whose patterns of artefact production and land use are partly applicable to the paleolithic archaeological record”. Chauhan does not elaborate on theoretical issues in employing ethnographic methods to understand the archaeological record.

Indian anthropologists sometimes study human skeletal material to identify population movements in prehistory, and emphasize pre-agricultural and agricultural populations in the archaeological record (Walimbe 2007: 299). In this historical framework, anthropologists often presume cultural continuity between contemporary and prehistoric societies. Social groups are assumed to be discrete and isolated. For example, Walimbe (2007: 310) argues that while the “Indus and Deccan farming and herding communities” have common origins with “Indian Mesolithic hunter-gatherers”, there was “no substantial” gene flow between the Indus and Deccan communities. At the same time, he contends that the “Indus population gradually evolved from hunting and gathering societies and rudimentary farming groups” and that variations in “cultural attainment” between communities are best explained by “local ecology” (2007: 310). These views influence the study of material remains.

When archaeological data points to development over time, and to a more complex past, some scholars attribute material culture to dynamic and creative groups. Prehistory is made to conform to Indian history. This view of the Indian past is illustrated in Figure 3.

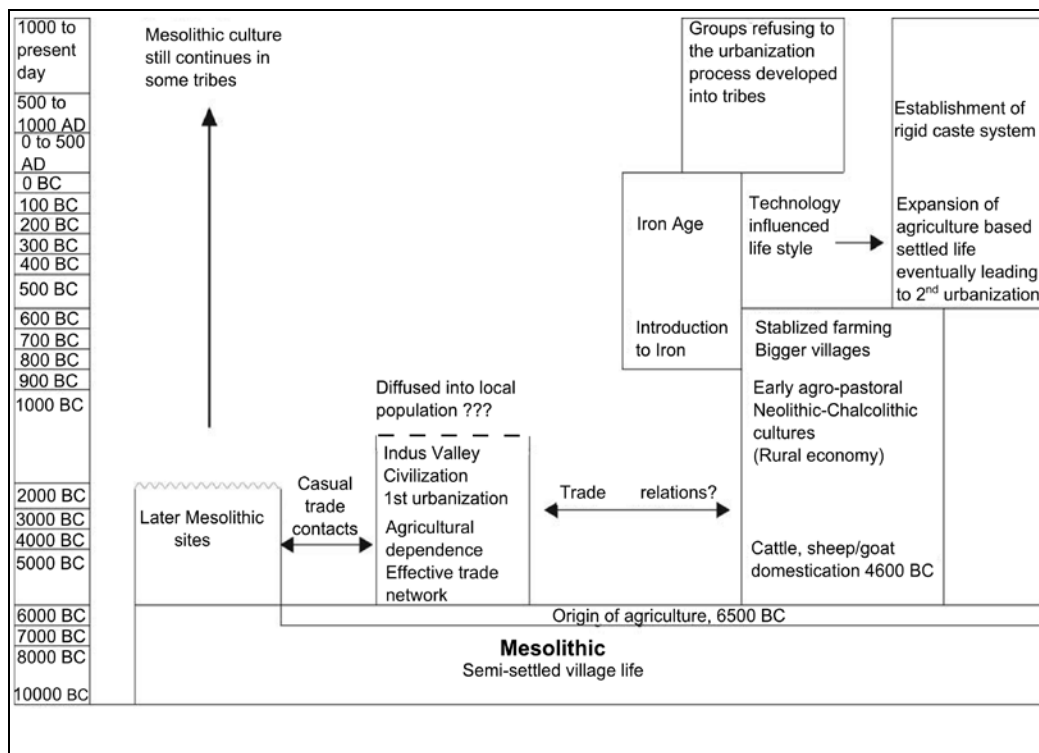


Figure 3. This chart illustrates “cultural evolutionary trends” based on skeletal biology; from S. R. Walimbe, “Population movements in the Indian subcontinent during the protohistoric period: physical anthropological assessment”, 2007: 311 (adapted with enlarged fonts).

The figure shows influential anthropologist S. R. Walimbe’s<sup>36</sup> assessment of Indian cultural history. He highlights the origins of agriculture in India, and the differentiation of social groups. He points to cultural continuity of the “Mesolithic culture” on the extreme left of the visualization, and to the “development of tribes”. At the same time, we see that there are no notable developments between present day and 1000 A.D. The co-occurrence of Mesolithic culture and “urban” society is explained as peaceful cooperation and accommodation for all. These

<sup>36</sup> S. R. Walimbe is Associate Professor at Deccan College Postgraduate and Research Institute, and Head of the Department of Anthropology at the University of Pune. Both institutes are located in Pune, Maharashtra. Walimbe serves a member on the Research Advisory Board for the Maharashtra Association of Anthropological Sciences. He specializes in the study of human skeletal remains, including ancient DNA extraction and analysis.



methods justify social, economic, cultural, and political marginalization of aboriginal peoples. This simplistic, state-oriented view often excludes ethnic and linguistic minorities from social dynamics. These issues highlight concerns of India's ethnic and linguistic minorities when it comes to their social and political liberties.

### ***Indian archaeology in a globalized world***

Dilip K. Chakrabarti's *Archaeology in the Third World: a history of Indian archaeology since 1947* (2003) frames Indian archaeology within a larger world system. He raises caution on a widening gap between 'First World' and often post-colonial, 'Third World' archaeologists. He notes the use of costly tools and technologies in archaeological analysis and he notes the inaccessibility of these methods for growing members of the Third World, including India. Yet this does not explain why some Indian archaeologists readily employ techniques from the natural sciences (Pappu et al. 2010).

India has available its own satellites, and they are often employed in terrestrial and marine research. Most scholars employ imagery collected by sensors on the Indian Remote Sensing satellites, better known as IRS. Part of its growing space programme, India's Space Research Organization first deployed IRS satellites in 1988<sup>37</sup>. These satellites often carry multiple sensors designed to collect imagery

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<sup>37</sup> The Department of Space deployed the experimental satellites, Bhaskara 1 and 2 in 1979 and 1981. The Soviet Kosmos-3M launched both the Bhaskara satellites. In 1994, India launched IRS-P2 using the locally developed Polar Satellite Launch Vehicle. The Bhaskara earth-observation satellites carried television cameras and radiometers ([http://space.skyrocket.de/doc\\_sdat/bhaskara-1.htm](http://space.skyrocket.de/doc_sdat/bhaskara-1.htm); accessed Jan 2012). Second generation satellites include the IRS-1C and -1D,

on different spectral wavelengths, as well as at different spatial resolutions and swath widths<sup>38</sup>.

Indian archaeologists, who collaborate with state-financed institutions, increasingly employ remote sensing technologies in the study of landscapes and prehistory (Pappu et al. 2010). These approaches pose the challenge of validation or ‘ground-truthing’ in terms of the accuracy of image classification and the identification of specific terrestrial materials of interest. At the same time, researchers do not yet have a good understanding of the properties of terrestrial materials, or their relationship with the local environment, or how this relationship produces the signal at the satellite sensors.

In their study, Pappu et al. employ imagery collected on PAN and LISS-III sensors, as well as IKONOS<sup>39</sup> to correlate specific geological formations and the distribution of archaeological sites. They use GIS techniques to show the co-occurrence of prehistoric sites with sources of raw material for the manufacture of stone tools. The researchers create a model to predict the location of unknown archaeological sites. Similarly, Rajani and Rajawat (2011) employ remote sensing techniques to identify the spatial properties of paleochannels. They, like Pappu et al. (2010), correlate the distribution of archaeological sites with specific terrestrial

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RESOURCESAT-1 and -2, CARTOSAT-1 and -2, OCEANSAT-1, and -2 and RISAT-1 (<http://bhuvan.nrsc.gov.in/bhuvan/content/irs-satellites>, accessed Jan 2012).

<sup>38</sup> LISS-III collects data at a relatively high spatial resolution of 23.5 metres (70.5 metres on shortwave infra-red or SWIR) and a swath of 142 kilometres (148 kilometres on SWIR). The most recent IRS satellite, RESOURCESAT-1 carries the AWiFS or Advanced Wide Field Sensor, which collects data at a spatial resolution of 56 metres, and covers a 370 kilometre swath. Researchers at the Indian Space Research Organization have replaced the PAN, otherwise known as panchromatic, camera with the multi-spectral LISS-IV, which has a high spatial resolution at 5.8 metres and a narrow swath at 23 kilometres. See Johnson (2008) for a comparison between AWiFS and LISS-III data.

<sup>39</sup> The Lockheed Martin-designed IKONOS sensor collects data at resolutions of 0.80 metres on the panchromatic and 3.2 metres on the multispectral. The National Aeronautics and Space Administration (NASA) launched IKONOS into space on the Athena-2 in 1999.

features. Most often, archaeologists employ satellite imagery much in the same way as they do aerial photography.

Moreover, Indian scholars are increasingly developing tools and techniques from the natural sciences, including geochemical analysis (Tripathi et al. 2010), and genetic and molecular analysis (N. Singh et al. 2011). These tools are accessed by scholars who work on state-financed projects or in collaboration with state-oriented institutions. For example, Sila Tripathi and his colleagues (2010) examined the geochemical composition of stone anchors recovered from India's western coastline. The study was carried out as part of archaeological research at the National Institute of Oceanography, located in Goa, India. The researchers had the benefit of x-ray fluorescence (XRF) and spectroscopy analysis at the national institution (Tripathi et al. 2010: 2008).

Indian archaeologists increasingly seek the source of innovations inside India. They are most interested in the origins of plant and animal domestication, and technological studies, especially iron-working, metallurgy and writing. In the past, many archaeologists accepted that innovations were developed elsewhere and brought into India by dynamic and creative groups. These views are no longer accepted by most Indian archaeologists. Yet this does not mean that Indian archaeologists reject (internal) migration as an explanation for change, or the premise of the migrationist framework.

Many Indian archaeologists have an international outlook which encourages them to undertake scholarly exchange with Western counterparts, as well as Asian ones, as is seen in the 'First farmers' conference in 2006, which attracted both Indian and foreign participants. The present generation of archaeologists

continues to seek professional development abroad, such as Ajay Pratap, Associate Professor at Banaras Hindu University, who received his doctorate in archaeology from Oxford University in the United Kingdom in 2003 (Pratap 2003) and Upinder Singh, Professor at the Department of History in Delhi University who graduated from McGill University in Canada. Established Indian archaeologists in teaching and research institutions also take advantage of academic opportunities, such as visiting fellowships funded by the Commonwealth Scholarship Commission in the United Kingdom<sup>40</sup>.

Indian archaeologists continue to build on interests that overlap with major research traditions, yet they are increasingly developing models that emphasize local origins for innovations. Indian archaeology maintains an ‘India-centric’ research focus; yet the themes they investigate and methods they employ are greater in diversity than most scholars believe. There are also greater numbers of archaeological teams carrying out field studies and collecting archaeological data than many scholars have suggested. These efforts underscore the interest of local communities in archaeology and in the preservation of their heritage. It is precisely because of local interest, that Indian archaeology sometimes finds itself at odds with local communities.

At the same time, a state-oriented view influences prehistoric research. Indian historians have had a long-standing interest in caste relations. Most Indian archaeologists, like many Indian historians, assume cultural continuity between contemporary and prehistoric societies. They assume that territoriality and

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<sup>40</sup> Ajay Pratap, for example was shortlisted for an interview for the competitive fellowship in 2011 (<http://www.ugc.ac.in/more/humanitiescandidatelistasf.pdf>, assessed June 2012).

political activities emerged with large-scale agriculture, such that the prehistoric past was simple and idyllic. They often think in terms of biological continuity and see caste as a uniquely Indian phenomenon (Misra 2001: 526). Prehistory then is often made to conform to Indian history. These views promote a caste-based study of skeletal remains. Some Indian anthropologists assume group endogamy when it comes to aboriginal peoples and caste society, and they often seek stable markers in the archaeological and genetic signal to identify aboriginal from caste. In this way, to many observers, Indian archaeology appears to have changed very little from its colonial past.

Amid rapid social, economic and political change, the historical framework celebrates cultural achievements of Hindus while minimizing and obscuring all other social groups. In effect, these methods exclude non-Hindus from society and social dynamics. These views justify social, economic, political and cultural marginalization of aboriginal peoples. The study of Indian prehistory is promoted at the same time that India's ethnic and linguistic minorities increasingly demand their social and political liberties. This presents a fractured view of Indian society. It is in this context that Chakrabarti (2003: 208) observes that "different kinds of past are in the process of being created" and explains that "competing claims and destruction are to some extent inevitable".

## ***Conclusion***

The demolition of the Babri Masjid at the hands of *kar sevaks*, and the loss of human life in its wake, provides an opportunity to examine the relationship

between archaeology and Indian society. I examined the established state-oriented framework, and shed light on how perceptions of this homogeneity influence our understanding of Indian archaeology. By re-conceptualizing the relationship between local communities and state-oriented archaeological projects, I showed how ideas about cultural continuity have influenced the practice of Indian archaeology. These views often emphasize cultural achievements of Hindus and obscure and minimize all other social groups. Yet India's ethnic and linguistic minorities are increasingly demanding their social and political rights.

It is precisely amid these tensions that Indian archaeology has grown increasingly self-conscious, and has sought the foundations of archaeology. Indian archaeologists are increasingly interested in the history of archaeology. They question colonial interpretations of the Indian past. They often look to Sanskrit texts for historical traditions to better understand Indian society. Because Indian scholars and policy makers often believe that Hinduism is synonymous with caste, and because they believe that this ideology, more than others, has characterized Indian society, archaeologists often seek to understand relations between caste society and aboriginal peoples. These views influence the aims and potential of Indian archaeology.

The nationally-oriented framework takes a caste-based view of prehistory. In this historical framework, Indian archaeology assumes cultural continuity between contemporary and prehistoric societies. Archaeologists think in terms of a simple and idyllic prehistoric past, such that territoriality and political activities emerged with large-scale agriculture. They attribute material culture to specific ethnic and linguistic groups. In this hierarchical scheme, internal dynamics are

overlooked as explanations for change. Prehistory then is made to conform to Indian history. These methods serve social and political aims.

In assuming a static and unchanging prehistoric past, scholars and policy makers justify social, economic, political and cultural marginalization of aboriginal peoples. It is unlikely a coincidence that these views are promoted at the same time that the government has invested in large construction projects. These projects often entail displacement of local communities. This is the source of tension between local communities and national governments. In obscuring local interest in archaeology and heritage management, a state-oriented Indian archaeology promotes a homogenous view of the Indian past.

## ***References***

- Abraham, Itty. 1998. *The making of the Indian atomic bomb: science, secrecy and the postcolonial state*. New York: Zed Books.
- Agrawal, D. P. 2001. The Idea of India and its heritage: the millennial challenge. *Man and Environment* 26 (1): 15-22.
- Allchin, Bridget. 1966. *The Stone-tipped arrow: Late Stone-Age hunters of the tropical old world*. New York: Barnes & Noble.
- Ammerman, Albert J., and Luigi L. Cavalli-Sforza. 1984. *The Neolithic Transition and the Genetics of Populations in Europe*. Princeton: Princeton University Press.
- Amte, Baba 1990. Narmada Project: The Case against and an Alternative Perspective. *Economic and Political Weekly* 25 (16): 811-818.
- Archaeological Survey of India. 2002a. *Indian archaeology - a review 1995-1996*. New Delhi: Archaeological Survey of India.
- . 2002b. *Indian archaeology - a review 1996-1997*. New Delhi: Archaeological Survey of India.
- . 2003. *Indian archaeology - a review 1997-1998*. New Delhi: Archaeological Survey of India.
- . 2004. *Indian archaeology - a review 1998-1999*. New Delhi: Archaeological Survey of India.
- . 2005. *Indian archaeology - a review 1999-2000*. New Delhi: Archaeological Survey of India.



- . 2006. *Indian archaeology - a review 2000-2001*. New Delhi: Archaeological Survey of India.
- . 2011. Excavations: 2000-2005 - Gujarat. New Delhi: Archaeological Survey of India. Retrieved from [http://asi.nic.in/asi\\_exca\\_2005\\_gujarat.asp](http://asi.nic.in/asi_exca_2005_gujarat.asp) (December 2011).
- Banaras Hindu University. 2012. Department of Ancient Indian History, Culture and Archaeology, Teaching Staff. Retrieved from <http://bhu.ac.in/aihc/faculti.htm> (June 2012).
- Basak, Bishnupriya. 2007. In Pursuit of the Past: The Development of an 'Official' and 'Academic' Archaeology in Bengal. *Studies in History* 23 (2): 311-339.
- Bellwood, Peter. 2008. Understanding the Neolithic in northern India. *Pragdhara* 18: 331-346.
- Bennet, James. 1998. "Clinton calls tests a "terrible mistake" and announces sanctions against India". *New York Times* May 14, A13.
- Bernbeck, R. and S. Pollock. 1996. Ayodhya, Archaeology, and Identity. *Current Anthropology* 37(1): S138-S142.
- Béteille, Andre. 1998. The Idea of Indigenous People. *Current Anthropology* 39 (2): 187-192.
- Bisht, Ranvir S., C. Dorje and A. Banerji, eds. 2000. *Indian archaeology - a review 1993-1994*. New Delhi: Archaeological Survey of India.
- Boivin, Nicole. 2007. Anthropological, historical, archaeological and genetic perspectives on the origins of caste in South Asia. In *The Evolution and History of Human Populations in South Asia: Inter-disciplinary Studies in*

- Archaeology, Biological Anthropology, Linguistics and Genetics*, Michael D. Petraglia and Bridget Allchin, eds., pp. 341-361. AA Dordrecht: Springer.
- Brush, Stephen B. 1996. Whose knowledge, whose genes, whose rights? In *Valuing Local Knowledge: Indigenous People and Intellectual Property Rights*. Stephen B. Brush and D. Stabinsky, eds., pp. 1-24. Washington D.C.: Island Press.
- Chadha, Ashish. 2010. Commentary: Archaeological Survey of India and the Science of postcolonial archaeology. In *Handbook of Postcolonial archaeology*. Jane Lydon and Uzma Z. Rizvi, eds., pp. 227-233. Walnut Creek, CA: Left Coast Press, Inc.
- Chakrabarti, Dilip K. 1999. *India, an archaeological history: Paleolithic beginnings to Early Historic Foundations*. New York: Oxford University Press.
- . 2000. Colonial Indology and identity. *Antiquity* 74: 667-671.
- . 2003a. Archaeology under the Judiciary: Ayodhya 2003. *Antiquity* 77: 579-580.
- . 2003b. *Archaeology in the Third World: A History of Indian Archaeology since 1947*. New Delhi: D. K. Printworld Private Limited.
- . 2010. The Colonial Legacy in the Archaeology of South Asia. In *Handbook of Postcolonial archaeology*. Jane Lydon and Uzma Z. Rizvi, eds., pp. 73-80. Walnut Creek, CA: Left Coast Press, Inc.
- Chatterjee, Partha. 1995. Alternative Histories, Alternative Nations: Nationalism and Modern Historiography in Bengal. In *Making Alternative Histories: The Practice of Archaeology and History in Non-Western Settings*. Peter R.

- Schmidt and Thomas C. Patterson, eds., pp. 229-253. Santa Fe, NM: School of American Research Press.
- Chattopadhyaya, Brajadulal. 2006. *Studying early India: Archaeology, texts and historical issues*. Chicago: Anthem Press.
- Chattopadhyaya, Indrani, Bhuvan Vekrama and Sushri M. Vikrama. 2002. A survey of prehistoric investigations by the Archaeological Survey of India since Independence. In *Indian Archaeology in Retrospect, Volume IV Archaeology and Historiography: History, Theory and Method*. S. Settar and Ravi Korisettar, eds., pp. Appendix. New Delhi: Manohar Publishers and Distributors.
- Chauhan, Parth R. 2006. Human origins studies in India: position, problems and prospects. *Assemblage* 9: 1-25.
- Choudhary, B. K. 2009. History of archaeology in Bihar. In *Archaeology in India: individuals, ideas and institutions*. Gautum Sengupta and Kaushik Gangopadhyay, eds., pp. 227-246. New Delhi: Munishiram Manoharlal Publishers Pvt. Ltd.
- Colley, Sarah. 1995. What happened at WAC-3? *Antiquity* 69: 15-18.
- Cunningham, Robin. 2002. Review of S. Settar and R. Korisettar, ed. *Indian archaeology in retrospect* (4 volumes). *Antiquity* 76: 1153–1154.
- Cunningham, Robin and Nicholas Lewler. 2000. Archaeology and identity in south Asia - interpretations and consequences. *Antiquity* 74: 663-667.
- Darsana, S. 2009. History of archaeology in Kerala. In *Archaeology in India: individuals, ideas and institutions*. Gautum Sengupta and Kaushik

- Gangopadhyay, eds., pp. 163-196. New Delhi: Munishiram Manoharlal Publishers Pvt. Ltd.
- Dhavalikar, M. K. 2006. Aryan agro-pastoralists in the Ganga Valley. *Puratattva* 36: 24-29.
- Dongoske, Kurt E., Mark Aldenderfer, and Karen Doehner. eds. 2000. *Working Together: Native Americans and Archaeologists*. Washington, D.C.: Society for American Archaeology.
- Eck, Diana L. 1981. India's "Tīrthas": "Crossings" in Sacred Geography. *History of Religions* 20 (4): 323-344.
- Fisher, William F. 1997. Doing good? The Politics and Antipolitics of NGO Practices. *Annual Review of Anthropology* 26: 439-64.
- Gandhi, Ajay. 2003. Developing compliance and resistance: the state, transnational social movements and tribal peoples contesting India's Narmada project. *Global Networks* 3 (4): 481-495.
- Golson, Jack. 1995. What went wrong with WAC 3 and an attempt to understand why. *Australian Archaeology* 41: 48-54.
- Guha, Ramachandra. 2007. *India after Gandhi: the history of the world's largest democracy*. London: Pan Books (e-book MOBI format).
- Guha, Sudeshna. 2005. Negotiating evidence: History, archaeology and the Indus Civilization. *Modern Asian Studies* 39 (2): 399-426.
- Guha-Thakurta, Tapati. 1997. *Archaeology as Evidence: the contested claims on monuments in Modern India*. Occasional Paper 158. Calcutta: Centre for Studies in Social Sciences.

- Gunter's Space Page. 2011. Bhaskara 1, 2. Retrieved from [http://space.skyrocket.de/doc\\_sdat/bhaskara-1.htm](http://space.skyrocket.de/doc_sdat/bhaskara-1.htm) (January 2012).
- Gupta, Neha. "Archaeological field investigations in India 1993-2000". 1:19,000,000. Global Administrative Database, 2010, India administrative 2 and 3 [shapefile], Shuttle Radar Topography Mission, 2006, South Asia [GeoTiff] and Google Earth, 2011, India rivers digitized [kml]. Montreal: N. Gupta, McGill University, March 2012. Using *ArcGIS 9.3*. Redlands, CA: Environmental Systems Research Institute, Inc., 2008.
- Gupta, Swaraj P. and Kattalai S. Ramachandran, eds. 1976. *Mahabharata: Myth and Reality: differing views*. New Delhi: Agam Prakashan.
- Heitzman, James and Robert L. Worden. eds. 1995. *India: A Country Study*. Washington: GPO for the Library of Congress. Retrieved from <http://countrystudies.us/india/57.htm> (June 2012).
- Indian National Trust for Art and Cultural Heritage (INTACH). 2012. *Mission*. Retrieved from <http://www.intach.org/about-mission.asp?links=about1> (January 2012).
- Indian Space Research Organisation. 2011. *Bhuvan*. Government of India. Retrieved from <http://bhuvan.nrsc.gov.in/bhuvan/content/irs-satellites> (January 2012).
- Indira Gandhi National Centre for Arts (IGNCA). 2012. *National Databank on Indian Art and Culture*. Government of India. Retrieved from [http://ignca.nic.in/ndb\\_0001.htm](http://ignca.nic.in/ndb_0001.htm) (January 2012).

- Jammu and Kashmir Right to Information (Amendment) Act*. 2009. Government of Jammu and Kashmir. Retrieved from <http://www.jksic.nic.in/Pages/revised%20JKRTI-Rules.pdf> (June 2012).
- Jayaswal, Vidula. 2008. Comments on “Early Farmers...” Some observations on Neolithic remains of India. *Pragdhara* 18: 323-330.
- Johansen, Peter. 2003. Recasting the Foundations: new approaches to regional understandings of South Asian archaeology and the problem of culture history. *Asian Perspectives* 42 (2): 192-206.
- Johnson, David M. 2008. A comparison of coincident Landsat-5 TM and Resourcesat-1 AWiFS imagery for classifying croplands. *Photogrammetric Engineering & Remote Sensing* 74 (11): 1413–1423.
- Johnson-Roeher, Susan. 2008. The Archaeological Survey of India and communal violence in post-independence India. *International Journal of Heritage Studies* 14 (6): 506-523.
- Joshi, M. C. 2009. Reminiscences of an Official Archaeologist. In *Archaeology in India: individuals, ideas and institutions*. Gautum Sengupta and Kaushik Gangopadhyay, eds., pp. 1-18. New Delhi: Munishiram Manoharlal Publishers Pvt. Ltd.
- Khan, Sakina Yusuf. 1994a. “Cloud over Archaeological Congress”. *The Times of India* October 3, 10.
- . 1994b. “Major setback to archaeological meet; President refuses to inaugurate conference”. *The Times of India* December 4, 28.
- Khuen, Chung M. 2004. Chasing India. *The Heritage Journal* 1: 38-50.

- Kumar, Manmohan. 2009. Harappan settlements in the Ghaggar-Yamuna divide. In *Linguistics, Archaeology and the Human Past: Occasional Paper 7*. Toshiki Osada and Akinori Uesugi, eds., pp. 1-19. Kyoto: Indus Project, Research Institute for Humanity and Nature.
- Lahiri, Nayanjot. 2006a. *Finding Forgotten Cities: how the Indus civilization was discovered*. New York: Seagull Books.
- . 2006b. Archaeological theory: a perspective from outside the Western academy. *Puratattva* 26: 1-11.
- Lahiri, Nayanjot and Elizabeth A. Bacus. 2004. Exploring the Archaeology of Hinduism. *World Archaeology* 36: 313-325.
- Lakshmy. 2010. "They see the world in a grain of sand". *The New Indian Express* July 25.
- Lal, Braj B. 1953. Protohistoric Investigation. *Ancient India* 9: 80-102.
- . 2001. A note on the excavations at Ayodhya with reference to the Mandir-Masjid issue. In *Destruction and Conservation of Cultural Property*. Robert Layton, Peter G. Stone and Julian Thomas, eds., pp. 117-126. New York: Routledge.
- . 2002. Historicity of the Mahabharata and the Ramayana: What has Archaeology to Say in the Matter? In *Indian Archaeology in Retrospect, Volume IV Archaeology and Historiography: History, Theory and Method*. S. Settar and Ravi Korisettar, eds., pp. 29-61. New Delhi: Manohar Publishers and Distributors.
- Majumder Partha P. 1998. People of India: Biological Diversity and Affinities. *Evolutionary Anthropology* 6: 100-110.

- Maharaja Sayajirao University, Baroda. 2012. Research projects at the Department of Archaeology and Ancient History. Retrieved from [http://www.msubaroda.ac.in/researchprojects/deptvirtualresearch.php?fdept\\_code=2](http://www.msubaroda.ac.in/researchprojects/deptvirtualresearch.php?fdept_code=2) (June 2012).
- Manjhi, H., C. Dorje and A. Banerji. eds. 2000. *Indian archaeology - a review 1994-1995*. New Delhi: Archaeological Survey of India.
- McGuire Randall H. 1992. Archaeology and the first Americans. *American Anthropologist* 94: 816-836.
- Ministry of Culture. 1993. *Annual Report 1992-1993*. New Delhi: Government of India.
- . 2010. *Annual Report 2009-2010*. New Delhi: Government of India, <http://indiabudget.nic.in> (December 2011).
- Misra, Virendra N. 2001. Prehistoric human colonization of India. *Journal of Biosciences* 26 (4): 491-531.
- Murray, Tim. 2011. Archaeologists and indigenous people: a maturing relationship? *Annual Review of Anthropology* 40: 363-378.
- Mukhopadhyay, R. 2009. Archaeology and Construction of regional identity in Mayurbhanj State, Orissa. In *Archaeology in India: individuals, ideas and institutions*. Gautum Sengupta and Kaushik Gangopadhyay, eds., pp. 263-272. New Delhi: Munishiram Manoharlal Publishers Pvt. Ltd.
- Nicholson, Andrew. 2010. *Unifying Hinduism: Philosophy and Identity in Indian Intellectual History*. New York: University of Columbia Press.



- Paddayya, K. 1995. Theoretical perspectives in Indian archaeology: an historical review. In *Theory in Archaeology: A World Perspective*. Peter J. Ucko, ed., pp. 110-149. New York: Routledge.
- . 2009. Colonel Colin Mackenzie and the discovery of the Sanchi Stupa. In *Archaeology in India: individuals, ideas and institutions*. Gautum Sengupta and Kaushik Gangopadhyay, eds., pp. 19-44. New Delhi: Munishiram Manoharlal Publishers Pvt. Ltd.
- Panja, Sheena. 2002. The 'Third Space': the Creation of archaeological knowledge in post-Independence India. *Studies in History* 18 (1): 1-22.
- Pant, P. C. 2008. First farmers in global perspective: some considerations. *Pragdhara* 18: 5-8.
- Pappu, Shanti. 2008. Prehistoric antiquities and personal lives: the untold story of Robert Bruce Foote. *Man and Environment* 33: 30-50.
- Pappu, Shanti, K. V. Raman and N. C. Ghosh. 1999. Archaeology for children: a note on the Sharma Children's Museum. *Man and Environment* 24: 91-92.
- Pappu, Shanti and Kumar Akhilesh. 2005. Prehistoric archaeology and community education: learning from excavations at Attirampakkam, Tamil Nadu. *Humankind* 1: 131-145.
- Pappu, Shanti, Kumar Akhilesh, Sudha Ravindranath and Uday Raj. 2010. Applications of satellite remote sensing for research and heritage management in Indian prehistory. *Journal of Archaeological Science* 37: 2316-2331.
- Patel, Anil. 1995. What do the Narmada Valley tribals want? In *Toward sustainable development: struggling over India's Narmada River*. William F. Fisher, ed., pp. 179-201. New York: M.E. Sharpe, Inc.

- Patil, Sharad. 1976. Myth and reality of Ramayana and Mahabharata. *Social Scientist* 4 (8): 68-72.
- Petraglia, Michael D. and Bridget Allchin, 2007. *The Evolution and History of Human Populations in South Asia: Inter-disciplinary Studies in Archaeology, Biological Anthropology, Linguistics and Genetics*. AA Dordrecht: Springer.
- Pokharia, A. K. and K. S. Saraswat. 1998. Plant economy during Kushana Period (100-300 A.D.) at ancient Sanghol, Punjab. *Pragdhara* 9: 75-121.
- . 1999. Wood charcoal remains from ancient Sanghol, Punjab (Ca. 100-300 A.D.). *Pragdhara* 10: 149-177.
- Possehl, Gregory L. 2002. *The Indus Civilization: a contemporary perspective*. Walnut Creek, CA: AltaMira Press.
- Pratap, Ajay. 2009. *Indigenous archaeology in India: prospects for an archaeology of the subaltern*. BAR International Series 1927. Oxford: Archaeopress.
- Rajan, K. 2009. History of archaeological research in Tamil Nadu. In *Archaeology in India: individuals, ideas and institutions*. Gautum Sengupta and Kaushik Gangopadhyay, eds., pp. 197-226. New Delhi: Munishiram Manoharlal Publishers Pvt. Ltd.: 197-226.
- Rajani, M. B. and A. S. Rajawat. 2011. Potential of satellite based sensors for studying distribution of archaeological sites along palaeochannels: Harappan sites a case study. *Journal of Archaeological Science* 38: 2010-2016.
- Rao, K. P. 2009. Contributions of Nizam State to archaeology In *Archaeology in India: individuals, ideas and institutions*. Gautum Sengupta and Kaushik

- Gangopadhyay, eds., pp. 273-288. New Delhi: Munishiram Manoharlal Publishers Pvt. Ltd.
- Rao, Nandini. 1995. Ethics, Archaeology and World Archaeological Congress. *Economic and Political Weekly* 30 (28): 1725-1728.
- Rao, Nandani and C. Rammanohar Reddy. 2001. Ayodhya, the print media and communalism. In *Destruction and Conservation of Cultural Property*. Robert Layton, Peter G. Stone and Julian Thomas, eds., pp. 139-156. New York: Routledge.
- Rapp, George. 1983. *Archaeological science in India: status, potential, and recommendations*. New Delhi: Ford Foundation.
- Ratnagar, Shereen. 1994. In search of the impossible. *Economic and Political Weekly* 29 (45/46): 2901-2903.
- . 2004. Archaeology at the heart of a political confrontation. *Current Anthropology* 45 (2): 239-259.
- Ray, Himanshu P. 2008. *Colonial Archaeology in South Asia: the legacy of Sir Mortimer Wheeler*. New York: Oxford University Press.
- . ed. 2010. *Sanghol and the archaeology of Punjab*. New Delhi: Aryan Books International.
- Ray, Himanshu P. and Carla Sinopoli. 2004. Preamble. In *Archaeology as History in early South Asia*. Himanshu P. Ray and Carla Sinopoli, eds., pp. 1-11. New Delhi: Indian Council of Historical Research, and Aryan Books International.
- Saraswat, K. S. 1997. Plant economy of Barans at ancient Sanghol (Ca. 1900-1400 B.C.), Punjab. *Pragdhara* 7: 97-114.

- Saraswat, K. S. and A. K. Pokharia. 1997. On the remains of botanical material used in fire-sacrifice ritualized during Kushana Period at Sanghol (Punjab). *Pragdhara* 8: 149-181.
- Selvakumar, V. 2010. The use and relevance of archaeology in the post-modern world: views from India. *World Archaeology* 42 (3): 468-480.
- Sengupta, Gautum and Kaushik Gangopadhyay. 2009. Introduction. In *Archaeology in India: individuals, ideas and institutions*. Gautum Sengupta and Kaushik Gangopadhyay, eds., pp. xiii-xix. New Delhi: Munishiram Manoharlal Publishers Pvt. Ltd.
- Settar, S. and Ravi Korisettar. eds. 2002. *Indian Archaeology in Retrospect*, 4 vols, Publications of the Indian Council for Historical Research. New Delhi: Manohar.
- Singh, Nandita, Pramod Joglekar and Krzysztof Koziol. 2011. First ancient bovine DNA evidence from India: difficult but not impossible. *Journal of Archaeological Science* 38 (9): 2200-2206.
- Singh, Upinder. 2004. *The discovery of ancient India: early archaeologists and the beginnings of archaeology*. New Delhi: Permanent Black.
- Sinopoli, Carla. 2006. Imperial landscapes of South Asia. In *Archaeology of Asia*. Miriam T. Stark, ed., pp. 324-349. Malden, MA: Blackwell Publishing.
- Sonawane, V. H. 2009. Archaeology under the Baroda State. In *Archaeology in India: individuals, ideas and institutions*. Gautum Sengupta and Kaushik Gangopadhyay, eds., pp. 247-262. New Delhi: Munishiram Manoharlal Publishers Pvt. Ltd.

- Srivastava, Sushil. 1994. The abuse of History: a study of the White Papers on Ayodhya. *Social Scientist* 22 (5/6): 39-51.
- Tamil Nadu Public Service Commission. 2012. Tamil Nadu Public Service Commission Epigraphist, Curator and Archaeological Officer recruitment, <http://www.tnpsc.gov.in/recruitnresults.htm> (January 2012).
- Tewari, Rajesh, Kripa S. Saraswat, Girish C. Singh. 2008a. Editorial. *Pragdhara* 18: 1-4.
- . 2008b. Early Farming at Lahuradewa. *Pragdhara* 18: 347-373.
- Thakur, Pooja. 2000. "Villagers argue foul play in transfer of sculptures". *The Times of India* Nov. 26.
- The Ancient Monuments Preservation Act*. 1904. Government of India. Retrieved from [www.helpinelaw.com/docs/THE%20ANCIENT%20MONUMENTS%20PRESERVATION%20ACT,%201904](http://www.helpinelaw.com/docs/THE%20ANCIENT%20MONUMENTS%20PRESERVATION%20ACT,%201904) (January 2012).
- The Right to Information Act*. 2005. Government of India. Retrieved from <http://righttoinformation.gov.in/> (January 2012).
- The Times of India*. 1990. "Babri panel to finalise plan". July 15, 7.
- Trigger, Bruce G. 1980. Archaeology and the Image of the American Indian. *American Antiquity* 45 (4): 662-676.
- Tripathi, Sila, Abhay Mudholkar, K. H. Vora, B. Ramalingeswara Rao, A. S. Gaur and Sundaresh. 2010. Geochemical and mineralogical analysis of stone anchors from west coast of India: provenance study using thin sections, XRF and SEM-EDS. *Journal of Archaeological Science* 37 (8): 1999-2009.
- University Grants Commission, 2012. Interview for Commonwealth Academic Staff Fellowship for the Year 2011: Social Sciences and Humanities.

- Retrieved from <http://www.ugc.ac.in/more/humanitiescandidatelistasf.pdf> (January 2012).
- Uttar Pradesh Public Service Commission, 2012. UPPSC State Department of Archaeology Department Post of Regional Archaeological Officer Recruitment. Retrieved from [http://www.serviceexams.co.in/public\\_service\\_commission\\_psc/up\\_psc/uttar-pradesh-psc-recruitment-registrar.html](http://www.serviceexams.co.in/public_service_commission_psc/up_psc/uttar-pradesh-psc-recruitment-registrar.html) (January 2012).
- Varma, Supriya and Jaya Menon. 2010. Was there a temple under the Babri Masjid? Reading the archaeological 'evidence'. *Economic and Political Weekly* XLV (50): 61-72.
- Walimbe, S. R. 2007. Population movements in the Indian subcontinent during the protohistoric period: Physical anthropological assessment. In *The Evolution and History of Human Populations in South Asia: Inter-disciplinary Studies in Archaeology, Biological Anthropology, Linguistics and Genetics*. Michael D. Petraglia and Bridget Allchin, eds., pp. 297-319. AA Dordrecht: Springer.
- Watkins, Joe E. 2001. Archaeology beyond the margin: American Indians, First Nations, and Archaeology in North America. *American Antiquity* 68 (2): 273: 285.
- Weaver, Hilary N. 2001. Indigenous identity: what is it, and who really has it? *American Indian Quarterly* 25 (2): 240-255.
- Weiner, Tim. 1998. "Pakistan looks ready to test its own bomb". *New York Times* May 14, A1.

Willey, Gordon R. 1953. *Prehistoric settlement patterns in the Viru Valley, Peru*.

Bureau of American Ethnology, Bulletin 155. Washington: Smithsonian Institution.

Wood, John R. 1993. India's Narmada River Dams: Sardar Sarovar under Siege.

*Asian Survey* 33 (10): 968-984.

## Chapter 2:

### **Cultural continuity, identity and archaeological practice in the Indian context**

In *Orientalism, ideology, and identity* (2005), Nicole Boivin, an archaeologist at Oxford University, makes explicit the presumption of cultural continuity in India that has been implicit in previous research (Fairervis 1971; Kenoyer 1989). In the article, she argues, “given that archaeological evidence is often drawn upon to support politically-motivated arguments concerning the origins of various forms of identity in South Asia, including caste, it is hardly a topic that responsible archaeologists can afford to simply ignore” (Boivin 2005: 227).

This argument, however, is inconsistent with Boivin’s explanation that “the *limited theoretical attention* that has been given to caste and other dimensions of social identity in South Asia can be linked to *an overall lack of interest* within South Asian archaeology in exploring the social and political dimensions of archaeological interpretation....” (Boivin 2005: 226; emphasis added). Boivin’s call to better understand the discipline’s role through archaeological investigations of caste is problematic. Influential works on identity in post-Cold War societies have examined the role of politics and archaeology (Meskell 2002; Smith 2000; Diaz-Andreu and Champion 1996; Lahiri 2000 for a colonial context). Others have raised caution on the study of a specific people (Trigger 1995), and examined limitations on the reconstruction of prehistoric ethnicity (Chrisomalis and Trigger 2004). Yet others have warned on the dangers of



conflating culture-historical approaches and nationalism (Childe 1933). These issues raise important questions on the aims of archaeology as a discipline. This presents an opportunity to address key issues in Indian archaeology.

What do we mean by South Asian archaeology? Fuller and Boivin (2002) note the “formulation of regions and periods of archaeological study within South Asia has had as much to do with recent historical and political factors as with occurrences and relationships in the deep past....The boundaries that have been drawn are modern, and are interfering in the effective study of the South Asian past” (Fuller and Boivin 2002: 160). Their chronological and spatial characterization disengages archaeological study from the social context in which the discipline is practiced.

There is general acceptance that South Asian archaeology is characterized by field studies in India (Fairservis 1971; Allchin 1995; Chakrabarti 2003), Pakistan (Possehl 1990; Kenoyer 1991), Bangladesh (Smith 2000), Sri Lanka (Coningham and Young 1999), Nepal, Bhutan and the Maldives (Petraglia and Allchin 2007), and Afghanistan (Wright 2010). Alternatively, Morrison (2002b) has chosen for South Asia an ecological characterization that sees during the Holocene<sup>1</sup> diverse resources and niches, parallel to those in Southeast Asia. Disproportionate research emphasis in post-1947<sup>2</sup> India (see reviews in Fuller and Boivin (2002),

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<sup>1</sup> Diachronically the Holocene is an interglacial period from present to 10, 000 years ago.

<sup>2</sup> British colonial administration in India ended on August 15, 1947, with the formation of East and West Pakistan, and Independent India. Sri Lanka gained administrative independence on February 4, 1948. Bangladesh gained from West Pakistan administrative independence on December 16, 1971.

and Boivin and Fuller (2002)) over neighbouring countries belies these characterizations.

Contemporary issues in Indian archaeology are examined in this conceptual framework. The first issue is a presumed cultural continuity between contemporary and prehistoric societies. The second is prevailing explanation of the archaeological record in India through a correlation between material culture with languages, and/or biological traits. The closely related issues are explored through an examination of studies on the evolution of biological and social complexity in the Indian context.

For more than a century, the identity of Indo-Europeans has been a focal point for prehistoric research in much of Europe, and in Asia. At the heart of the reconstruction is the belief that the linguistic signal corresponds with an archaeological and a genetic one (Ammerman and Cavalli-Sforza 1984; Cavalli-Sforza et al. 1988; Renfrew 1987; Diamond and Bellwood 2003). The Indo-European linguistic signal suggests a branching phylogeny that forms a pattern of parent-and-offspring languages. The same branching pattern is believed to correspond to the origins and spread of agriculture (Gray and Atkinson 2003).

Reconstruction of Indo-European phylogeny is closely aligned with efforts to imagine prehistoric social ideology (Dumézil [1948] 1988; Renfrew 1987; Mallory 1989). Indo-European ideological reconstructions rest on two key assumptions. The first is what the anthropologist Kevin Tuite (2003: 207) calls the characterization of Vedic Sanskrit as an ancestral language or a “living fossil” that had not changed “from the speech of the ancestral community”. The second is

the assumption that early Sanskrit texts are a static archive of traditions. The two beliefs are exemplified in Georges Dumézil's functional tripartite division of an ideal society that features discrete, complimentary religious, military and agricultural peoples (Dumézil [1971a] 1983; [1971b] 1986). External processes alone explain social change in this reconstructed society. Indo-European society thus, is like an isolated biological and social system that exists in an ecosystem but neither depends on, nor impacts the ecosystem (Mikkelsen n.d).

In the same vein, recent research efforts on early societies have emphasized caste as an intrinsic institution (Kenoyer 1991; Boivin 2005; Boivin 2007). These efforts in Indian archaeology presume cultural continuity between contemporary and prehistoric societies. Social structures include group identity or membership, forms of residence, territorial organization and leadership patterns (Morantz 1983). While post-positivist literary critiques (Whitehead 1992; Chatterjee 1993; Cohn 1996; Trautmann 1997; Dirks 2001) have examined the construction of knowledge and the configuration of social institutions in colonial India, contemporary Indian archaeology assumes a perfect correspondence between prehistoric culture, including material culture, and social structure.

In *The Stone-Tipped Arrow*, Bridget Allchin argues there exists a "general structure of Indian society," outside of which "a certain number of them [hunters, pastoralists, hereditary specialists in pot-making, basket-making, metal-working, carrying goods from place to place, moneylending or begging] are undoubtedly survivals from earlier periods – communities which have retained their identity and cohesion in spite of the changing society around them" (Allchin 1966: 73). The statement implies that community is a bounded, exclusionary and essentialist

social entity. Change is brought through external migratory events and technology. Allchin notes, “considerable numbers of people appear to have left or been driven from more advanced areas and to have taken refuge in remote regions where they have been forced to adapt their ways of life, and have sometimes become incorporated into more primitive groups which they found there” (Allchin 1966: 74-75). How then are these communities identified?

Allchin posits that “social, religious and material features that are in complete contrast to Hindu practice” are “undoubtedly direct survivals from more or less remote periods in the past” (Allchin 1966: 75). The assessment of cultural continuity in contemporary Indian society effectively excludes all non-Hindus from ‘the general structure of society,’ and from social dynamics. Allchin holds static Hindu practices to delineate traditions of ‘Others’. The statement presumes a homogeneous, widely spread tradition within a bounded entity.

In his examination of “Alternative Histories, Alternative Nations: Nationalism and Modern Historiography in Bengal” in the mid-nineteenth century, Partha Chatterjee (1995: 249) has presented as a “modern” nationalist construct ‘Indian’ or ‘Hindu’. He argues that the inclusion of anti-Brahmanical religious thought, such as Buddhism and Jainism, within Hinduism is based on their historical origins in a territorially bound India. That in turn makes possible the origin of all indigenous culture in India an ancient Hindu civilization (Chatterjee 1995: 251). The nationalist construct predated the identification of the Indus Valley civilization in early twentieth century colonial India.

Indian archaeology often holds as an organizing principle caste<sup>3</sup> (Kenoyer 1989; Possehl 1990; Boivin 2005). Caste is defined as endogamous, hereditary, and hierarchically organized (Marriott 1955; Majumder 1998). Differentiated by particular traits, discrete castes live in isolation to ensure ritual purity from other castes. In their ethnoarchaeological study on *Ceramics, Caste, and Kin: Spatial Relations in Rajasthan, India*, Carol Kramer and John E. Douglas (1992) examine the production and distribution of ceramics in the cities of Jodhpur and Udaipur. The researchers argue that the pattern of ceramic distribution reflects caste and kin relations, and that these relationships have an archaeological signal. They assume a significant degree of cultural homogeneity within a given caste, and expect greater variation between castes. Homogeneity in this closed social system is both caused by, and results in an endogamous pattern of partner choice. While endogamous relations remain a possibility, the absence of records detailing marriages in the Indian context presents difficulties in the reconstruction of partner choice in both historic and prehistoric scenarios.

Jonathan Mark Kenoyer (1995; 2005) has posited a Harappan<sup>4</sup> legacy in contemporary South Asia. He argues that ritual purity has its archaeological signal in the “segregation of living areas, private water sources, drainage and waste disposal and distinct set of ceramics, specifically those connected with cooking, food preparation and food serving” (Kenoyer 1989: 188). These, he contends, evidence hierarchical stratification in Indus and later societies. For Kenoyer,

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<sup>3</sup> See also Coningham and Young (1999) for a study in Sri Lanka.

<sup>4</sup> Harappa is an Indus Valley site. R.F. Starr (1941) first employed the term ‘Harappan’ in his examination of the pottery recovered from excavations at the site. Starr believed, as many Indian archaeologists had, that culture remained unchanged for long periods of time. Scholars who study urbanization and ancient Indian history believe that the Indus Valley was the first urbanization, and that the second was in the Ganges Valley (Chakrabarti 1973).

cultural continuity in later societies shows the Indus Valley civilization did not end. The mechanism for this continuity suggests a reorganization of Indus studies. Kenoyer (1991; 1995) argues that the development of the 'Localization Era in the Indus Valley Tradition,' of which Harappa is a part, is parallel to developments in northern India, specifically in the Ganga-Yamuna region (Figure 1). He posits "through careful study of different aspects of material culture, it is possible to isolate specific continuities from the Indus Valley Tradition and input from non-Indus communities" (Kenoyer 1995: 214-215). Furthermore, he suggests that the "vast area of the Indus valley itself continued to be inhabited and that most of the sites from this period were established along the newly stabilized rivers and lie buried under cities that have been occupied continuously since that time, ie. Sehwan Sharif, Multan, Kamalia, Harappa, Pak Patan, Depalpur, Lahore, etc." (Kenoyer 1995: 214-215). Within this context, Kenoyer calls for archaeological studies "at sites that are more directly linked to the Vedic period in order to build a transitional chronology from the Harappan period through the Late Harappan and on into the Early Historic period" (Kenoyer 2005: 46).

In their reconstruction of the Indo-Gangetic cultural tradition, Jim G. Shaffer and Diana A. Lichtenstein (1995) have argued that cattle were a form of cultural wealth in the Indus Valley civilization. The shift from the Indus Valley to the forested Ganges Valley presented less ecological potential for pastoralists, whereas the "integration of millet, sorghum and rice with wheat and barley" in addition to abundant water resources resulted in the 'ascendancy' of agriculture over pastoralism (Shaffer and Lichtenstein 1995: 146-147). Shaffer and Lichtenstein assume kin-related or hereditary occupational specialization. They

define a paleoethnic group as a “stylistically distinct archaeological assemblage sharing key traits and relationships with other past, contemporary, and future groups” (Shaffer and Lichtenstein 1995: 142). While they note that paleoethnic groups must not be equated with historic or contemporary ethnic groups, Shaffer and Lichtenstein do not discuss in their study the criteria for requisite ‘key traits’ and relationships. The researchers imply a closed system of inheritance, with little or no internal dynamic.

Scholars face a challenge in reconstructing inheritance in biological and social systems. Human biology is assumed to have direct correspondence with language and culture, and is interchangeable. Castes are identified by hereditary or traditional occupations. The epistemological union presents constraints on explanations for social change. Change in occupations, and thus, in gene frequencies are explained primarily as a result of external events such as migrations, invasions, new technologies and environmental catastrophes. By implication, non-indigenous domination replaces indigenous social institutions, or the latter are assimilated into non-indigenous social institutions (Cavalli-Sforza et al. 1988, 1994; Renfrew 1992). Social institutions, and genes, are intrinsic in time and space.

Michael Bamshad et al. (2001) have reconstructed, using genetic evidence, the origins of caste in India. The researchers suggest that contemporary Indian elites are products of an admixture during prehistoric times between indigenous and non-indigenous populations. Noting that “evidence of diffusion of material culture from Western Eurasia into India has been limited,” the researchers argue immigrants are responsible for establishing social institutions (Bamshad et al.

2001: 995). With an aim to complement the lack of archaeological material, the researchers have analyzed their contemporaries’<sup>5</sup> mitochondrial DNA, or mtDNA and Y-chromosome. In their analysis, Bamshad et al. have identified differences in the frequency of non-indigenous haplotypes<sup>6</sup>.

While the researchers note that contemporary Indians exhibit ‘underlying genomic unity,’ they correlate genetic distances with caste rank, such that upper castes are “significantly more similar to Europeans than are lower castes” (Bamshad et al. 2001: 999). This pattern is observed in Y-chromosome analysis, while mtDNA analysis suggests greater similarity between lower castes and Asians, and less similarity with Europeans. The researchers contend the two patterns evidence ‘asymmetric’ diffusion, an event some time in prehistory, which introduced non-indigenous innovations and social institutions. Bamshad et al. discern greater non-indigenous admixture amongst males than amongst females. The researchers explain that the uneven distribution is a result of the dominance of non-indigenous males, and the upward social mobility of indigenous females (cf. Endicott et al. 2007). A rigid, externally imposed social hierarchy with unidirectional rank change is implicit in the Bamshad et al. study. This in turn implies a perfect correspondence between human biology and social structure.

In 1909, Edgar Thurston, Superintendent for the Madras Government Museum, assisted by K. Rangachari, published a seven-volume series entitled,

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<sup>5</sup> The survey includes adult males in Visakhapatnam, Andhra Pradesh, India. Attributes included caste affiliations, surnames, and birthplace of parents. After consent, researchers collected 8ml of blood, or 5 scalp hairs (Bamshad et al. 2001: 1002).

<sup>6</sup> Haplotypes are identical combinations of mutations on any single location in gene alleles (Endicott et al. 2007: 230).



*Castes and Tribes of Southern India*. The publication served as a report on ethnographic and anthropometric investigations on contemporaries in the Madras Presidency. The survey aimed to collect and document in detail ‘aborigines’, and their characteristics deemed under threat from ‘civilization’<sup>7</sup>. Thurston notes:

In this part of the world, as in others, antiquarian remains show the existence of peoples who used successively implements of unwrought stone, of wrought stone, and of metal fashioned in the most primitive manner. These tribes have also left cairns and stone circles indicating burial places. It has been usual to set these down as earlier than Dravidian. But the hill Coorumbar of the Palmanair plateau, who are only a detached portion of the oldest known Tamulian population, erect dolmens to this day. The sepulchral urns of Tinnevely may be earlier than Dravidian, or they may be Dravidian... (Thurston 1909: xxxiii-xxxiv).<sup>8</sup>

Thurston’s work suggests the character of classification in the early twentieth century. Local non-elites are classified in a unilinear schema based on a correspondence between material culture and language. On the basis of anthropometric measurements<sup>9</sup> on his contemporaries, Thurston further delineates social hierarchy as pre-Tamulian and Tamulian. The pre-Tamulian Dravidian-speaking is ‘older or less civilized’ than the Tamulian (Thurston 1909: xxxiv). Thurston suggests a perfect correspondence between individual cultural ‘traits’ and skeletal morphology. The criterion implies a correlation between human biology and cultural achievements.

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<sup>7</sup> In his introduction, Thurston notes the timeliness of the survey, “...as in the Pacific, and other regions, so in India, civilisation is bringing about a radical change in indigenous manners and customs, and mode of life.” (Thurston 1909:1: xiv).

<sup>8</sup> The Palmanair or Palmaner plateau is located in Chittoor district, Andhra Pradesh, India. Tinnevely, or Tirunelveli is a city and district in Tamil Nadu, India.

<sup>9</sup> Attributes included the length and breadth of the head, stature, nasal height, nasal breadth, skin colour and caste. A broad nose, or nasal index greater than 90, short stature, and dark skin indicated the antiquity of a population (Thurston 1909:lv).

A more fundamental implication is that local prehistory is characterized by stagnation, and the absence of cultural creativity (Trigger 1980; 1989). In this creative chasm, social elites, often products of external influence, are believed to bring dynamism. This is the conceptual space in which Indus Valley cities, Mohenjodaro and Harappa, were identified in the 1920s. The ancient settlements were celebrated as evidence of Indian engineering and innovation. Social elites enthusiastically claimed the ancient society as *their* (pre)-history, to the exclusion of their 'less civilized,' and static contemporaries (Chatterjee 1993; Ramaswamy 2001). Elites envision their past as *always* having been dynamic and creative. The past then, is believed to resemble a present in which local elites are culturally, and spatially separate and discrete from non-elites.

Radhakamal Mukerjee argues that in rural society, "men live in close physical proximity with one another; social distance which exists in rural society is abridged by neighbourly spirit and sympathy and community service...." (Mukerjee 1942: 156). The rural dweller lives simply, and in harmony, with people and the environment. In contrast, urban society is where "culture becomes no longer an organized, integrated pattern of living adequate for the needs of individuals, but rather an agglomeration of individuals, associations, and institutions characterized by the constant conflict between individual achievements and moral values and social objectives" (Mukerjee 1942: 156). The urban dweller then is characterized as one who "constantly strives to change his ecologic space, drift to jobs, occupations, and areas that represent higher levels of economic attainment; he strives to change his social space, attain higher social status and prestige; and he also aims at the realization of maximum goals of life

although he actually secures few of them, and the few he achieves often become incompatible with the well-being and progress of society” (Mukerjee 1942: 156-157). Where the rural dweller lives in balance and harmony, the urban dweller is dynamic and changing, moving toward bigger and better at society’s expense. The costly endeavour signifies creativity and success.

Archaeologists and scholars in closely related disciplines such as anthropology and sociology have examined hierarchical ordering through investigations of forms of residence, village layout, and land tenure. In the Indian context, all castes are related, and hierarchically ordered under *Brahmins*, who are at the top (Marriott 1955; Gough 1960). Caste spatial organization in villages is believed to reflect ancient Indian society. Sinha (1990: 12) has argued that villages are spatially organized to reflect hierarchical social order. She contends village neighbourhoods are symbols of ritual purity, similar to those carried by residents, such that the village “is a replica of the cosmos” (Sinha 1990: 18). Observing many dimensions in spatial order, Sinha concludes that territorial segregation is not always evident in villages (Sinha 1990: 18). Thus the study suggests hierarchical ordering indicates social inequality. Yet, there remains considerable scope for research on the dynamics of social change (Leach 1960; Attwood 1992).

The past is reconstructed on the basis of particular social ‘traits’ or traditions believed to be essentialist, and static. In *Living Traditions*, Bridget Allchin argues that contemporary traditions such as craft specialization, house forms, and

regional relationships in the Indian context have survived from prehistoric times (Allchin 1995: 2-3).

In “Subsistence and Associated Settlement Patterns in Central India: an ethnoarchaeological analysis”, Nandini Rao examines settlement patterns amongst Gonds in the Kuntala Reserved Forest, Andhra Pradesh. Rao notes that the identification of archaeological sites prompted further investigations. The investigations were confined due to “political instability” (Rao 1995: 143). In the study, Rao hypothesized resources, in particular the availability of water, determined contemporary and prehistoric settlement patterns, such that permanent camps would be located in close proximity to perennial water sources, and transient ones away from perennial water sources. Through her participant observations in villages, Rao notes that the Gonds practice their ‘traditional’ occupations, hunting, fishing and foraging. The majority of their time, however, is spent on agriculture (Rao 1995: 145). She attributes this surprising phenomenon to recent “pressures exerted on forest-based groups to take up plough cultivation and to the expansion of non-forest-based communities into forested areas” (Rao 1995: 147). Rao explains that although Gonds live in permanent settlements, their traditional activities involve mobility and, thus, seasonal variations must impact their pattern of settlement.

Mark Kenoyer (1992: 237) remarks in his ethnoarchaeological study on “Socio-ritual Artifacts of Upper Paleolithic Hunter-Gatherers in South Asia”, that “the fact that most of the communities [of contemporary hunter-gatherers] available for study today have had contact with settled communities is most definitely a disturbance factor”. This suggests that the “symbolic expressions of

hunter-gatherer communities” are recovered when the “effects of settled communities” are accounted for. Elsewhere Kenoyer (1992: 236) argues that hunter-gatherer communities have “infused settled communities with ancient symbols and perceptions of the environment and supernatural powers” and that some of these beliefs “may extend back to the Paleolithic period”. The problem of ‘settler effect’ “can be treated in much the same way as water movement of bioturbation is treated in stratigraphic analysis” (Kenoyer 1992: 237). He contends that prehistoric adaptations are simple in comparison to the complexity seen amongst agriculturalists.

Similarly, in his investigation of activity patterns around a stone platform in Madhya Pradesh, Kenoyer argues that the feature, dated to 11, 000 years ago, functioned as a communal area. He contends that the hypothesis is testable through archaeological and ethnoarchaeological investigations of continuous use of similar materials. Within this context he notes contemporary hunter-gatherers have “a high variability of shrines and structures,” and that this patterning differs from his archaeological identification (Kenoyer 1992: 247). He concludes, nonetheless, a “correlation between the raw material and medium used to express the symbol and also a similarity in the environmental context of late Upper Paleolithic and modern hunter-gatherers” (Kenoyer 1992: 247). For Kenoyer, the latter indicates a “significant thread of continuity in socio-ritual symbolism” (1992: *ibid*).

In the same vein, Kathleen Morrison (2002a) has argued that the time depth of gathering and hunting as a subsistence strategy warrants its study in contemporary South and Southeast Asian societies. She argues the continuity of foraging

indicates “important components of both subsistence and sociocultural identity” (Morrison 2002b: 21). Morrison contends that subsistence strategies must be examined from deep prehistory to the present day and, she aims to move away from essentialist definitions for foragers. To that end, Morrison has examined the exchange and intensification of the spice trade in what she calls “precolonial and early colonial” southern India between 1400 and 1700 AD<sup>10</sup> (Morrison 2002c: 105).

Indeed in her study, Morrison argues the “productive demands placed on peasant agriculturalists, gatherers of forest products, and export-oriented swidden cultivators were all structured through networks of local power and authority” (Morrison 2002c: 115). Given that her interest is in the “operation of political and social power” and its influence on the “expansion of the coastal spice trade” (Morrison 2002c: 105), it is surprising that Morrison explains that for indigenous producers, the distinction between “luxury” goods such as pepper and cardamom and “utilitarian” goods such as rice and cotton textiles was “largely academic” (Morrison 2002c: 115). Moreover, Morrison notes that tribute and taxes rested with local leaders, who were in turn accountable to “larger-scale political entities” (Morrison 2002c: 111-112). She implies that indigenous producers were immune to the political interests of the rule of Calicut, and rapid changes in demand and tax differentiation for these goods by Portuguese traders. How did local leaders, or chiefs, navigate differing “colonial” tax regulations on utilitarian goods and

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<sup>10</sup> Morrison is referring to Portuguese trading posts along the coastline before 1700 AD. Most historians would not think of this as an “early colonial” period; the Portuguese were one amongst several European traders vying for trading rights from the late fifteenth century onwards, for example, see Dietmar Rothermund (1993) *An Economic History of India*, especially chapter 2. This is often termed the “medieval” period in Indian history, whereas “colonial” is generally reserved for British administration of India.

luxury goods? This is particularly interesting as Morrison suggests that the “basic subsistence needs of specialized foragers and possibly swidden spice cultivators were met through the mobilization of this [wet rice agriculture] surplus” (Morrison 2002c: 115). It seems unlikely, then, that foragers and spice cultivators strategically remained practicing foragers and spice cultivators. In this scenario, establishing permanent fields seems a plausible alternative strategy to harvesting forest products alone.

A more fundamental implication of embedding biology in social structure is the naturalization of social inequality. This is a reductionist view of biological and social systems. The acceptance of social inequality as a continuity from the past, replicating itself in the present, and in the future, is precisely what limits an understanding of social change. The former presents a never-broken chain of causation in which one event has a ‘domino effect’ on another to an inevitable result. This consequence is then construed as universal, or structural to human behaviour, and to societies (Lewontin et al. 1984).

Within this context, a recent publication by Petraglia and Allchin (2007) asks – Why South Asia? Eighteen contributions in the *Evolution and History of Human Populations in South Asia* examine key events from deep prehistory in Africa, to agricultural origins in five centres in India. The volume presents an interdisciplinary approach in the chronological reconstruction of prehistory.

Boivin (2007) examines anthropological, historical and archaeological perspectives on the origins of caste in South Asia. She notes that the origins of

caste are elusive for all three disciplines. The solution to this problem, she argues, is genetics. She explains “if the disciplines of the social sciences have demonstrated that ideas about caste and its origins are often shaped by contemporary social, political and economic agendas, then perhaps the answer to questions about caste origins in South Asia is best sought in the more objective data offered by the natural sciences” (Boivin 2007: 350). This is a curious proposition. In her review of contemporary genetic studies in South Asia, Boivin observes no consensus, and no one objective answer to the origins of caste. She rightly notes that each study comes with its assumptions, such that there is a diversity of patterns. Yet, common to each study is an assumed stable biological marker for caste or another socially constructed identity, whether *Brahmin* or tribal, from Andhra Pradesh, or Greece, Arab or French. That in turn makes possible the identification of quintessential *Brahmin* or French genes, which remain unchanged over long periods of time.

Elsewhere, Boivin (2005: 236) has argued, “ethnoarchaeologists have an important role to play in revealing the material dimensions of caste”. She further argues that long-term ethnoarchaeological studies must be undertaken to make caste ‘accessible’ to archaeologists. The research strategy fundamentally premises that caste *has* a material correlate. In the *Archaeo-Ethnology of Hunter-Gatherers or the Tyranny of the Ethnographic Record in Archaeology*, Martin Wobst (1978: 303) argues that a hypothesis will “only predict the human behaviour that ethnographers can and have observed, in the way that ethnographers have summarized it”. It is to the benefit of archaeologists in the Indian context to consider Wobst’s caveat.



## ***Conclusion***

This essay aimed to examine cultural continuity and archaeological practice in Indian archaeology. Contemporary practice in Indian archaeology is marked by presumed cultural continuity. A recent call for the archaeological study of caste has presented an opportunity to discuss key issues in Indian archaeology. An issue is raised on the characterization of South Asian archaeology. The chronological and spatial characterization indicates the scale at which archaeological study is examined. There is disproportionate emphasis on research efforts in Independent India. It is suggested that archaeological study be examined within the social setting in which it is practiced.

Contemporary practice in Indian archaeology assumes a correspondence between material culture and social structure. The issue of cultural continuity is explored through studies on the evolution of biological and social complexity in the Indian context. Contrary to Bovin's (2005) assessment, archaeological interpretations presume material correlates of multiple dimensions of social identity, caste, in particular.

The presumption of cultural continuity in contemporary Indian society effectively excludes all non-Hindus from social dynamics and social history. 'Indian' identity is characterized as a modern, nationalist construct. The significance of an ancient Hindu civilization is suggested, and is explored through recent studies on the Indus Valley civilization. Prevailing archaeological reconstructions in Indian archaeology contend a deep and close relationship between material culture and human biology and that the two are interchangeable.

Reconstructions reinforce a view of social elites as being dynamic and creative. This is in contrast with non-elites, who are believed to be simple, and in harmony with their environment. The statement is inconsistent with ethnoarchaeological studies that suggest variability and dynamism amongst both elites and non-elites. Whereas scholars in closely related disciplines have examined the construction of knowledge and changes in social ideology, Indian archaeology conflates language, caste, culture and biology, which continues to be seen in works such as Walimbe (2007). This implies a static and unchanging society. In this simplistic society, internal dynamics are absent, and external processes necessarily explain change. The past, then, is believed to resemble a present in which local elites are culturally, biologically and spatially separate and discrete from non-elites. This presents a fractured view of society. That in turn impedes our understanding of theoretical developments in archaeology.

**Table I. South Asia: General Archaeological Labels and Chronology**

Archaeological Label	General dates
Early Historic Period begins around	600 B.C.
Post Indus	
Northern Black Polished Ware	+700 to 300 B.C.
Painted Grey Ware	+1200 to 800 B.C.
Indus Tradition	
Localization Era	1900 to 1300 B.C.
Integration Era	2600 to 1900 B.C.
Regionalization Era	ca. 5000 to 2600 B.C.
Early Food Producing Era	ca. 6500 to 5000 B.C.

**Table 1.1 Chronology of the Indus and Indo-Gangetic Traditions**

Archaeological/historical events	General dates
<i>Indus Tradition</i>	
Early Food Producing Era	c.6500–5000 BC
Regionalization Era	c.5000–2600 BC
Harappa Period 1A/B	3300–2800 BC
Harappa Period 2	2800–2600 BC
Integration Era	2600–1900 BC
Harappa Period 3A	2600–2450 BC
Harappa Period 3B	2450–2200 BC
Harappa Period 3C	2200–1900 BC
Localization Era	1900–1300 (or 1000) BC
Late Harappan – Harappa Period 4	1900–1800 BC
Late Harappan – Harappa Period 5	1800–1700 BC
Post-Indus Painted Grey Ware	+1200–800 BC
Mahabharata Battle	c.836 BC
<i>Indo-Gangetic Tradition: beginning of</i>	
<i>Regionalization Era for Indo-Gangetic Tradition</i>	
Early Historic Period begins around	600 BC
Northern Black Polished Ware	(?700) 500–300 BC
<i>Ramayana Episode (early NBP period)</i>	
Panini (Sanskrit grammarian)	c.500–400 BC
Buddha (Siddhartha Gautama)	563–483 BC (or 440–360 BC)
<i>Mauryan Empire (Integration Era)</i>	
Chandragupta Maurya	?317–298 BC
Bindusara	298–274 BC
Ashoka	274–232 BC

Figure 1 showing “Table 1: South Asia: General Archaeological Labels and Chronology” from Kenoyer 1991: 333 (top), and “Table 1.1 Chronology of the Indus and Indo-Gangetic Traditions”, both from Kenoyer 2005: 27 (bottom). Note the changes in the terminology and significant modifications to the chronology to indicate historical events.

## ***References***

- Allchin, Bridget. 1966. *The Stone-tipped arrow: Late Stone-Age hunters of the tropical old world*. New York: Barnes & Noble.
- . 1995. South Asia's Living Past. In *Living Traditions: Studies in the Ethnoarchaeology of South Asia*. Bridget Allchin, ed., pp. 1-12. New Delhi: Oxford & IBH Publishing Co Pvt. Ltd.
- Ammerman, Albert J. and Luigi L. Cavalli-Sforza. 1984. *The Neolithic Transition and the Genetics of Populations in Europe*. Princeton: Princeton University Press.
- Attwood, Donald W. 1992. *Raising Cane: the Political Economy of Sugar in Western India*. Boulder: Westview Press.
- Bamshad, Michael, Toomas Kivisild, W. Scott Watkins, Mary E. Dixon, Chris E. Ricker, Baskara B. Rao, J. Mastan Naidu, B. V. Ravi Prasad, P. G. Reddy, A. Rasanayagam, S. S. Papiha, R. Villems, A. J. Redd, M. F. Hammer, S. V. Nguyen, M. L. Carroll, M. A. Batzer, and L. B. Jorde. 2001. Genetic evidence on the origins of Indian caste populations. *Genome Research* 11 (6): 994-1004.
- Boivin, Nicole. 2005. Orientalism, ideology and identity: examining caste in South Asian archaeology. *Journal of Social Archaeology* 5 (2): 225-252.
- . 2007. Anthropological, historical, archaeological and genetic perspectives on the origins of caste in South Asia. In *The Evolution and History of Human Populations in South Asia: Inter-disciplinary Studies in Archaeology, Biological Anthropology, Linguistics and Genetics*. Michael D.

- Petraglia and Bridget Allchin, eds., pp. 341-361. AA Dordrecht: Springer.
- Boivin, Nicole and Dorian Q. Fuller. 2002. Looking for post-processual theory in South Asian archaeology. In *Indian Archaeology in Retrospect, Volume IV Archaeology and Historiography: History, Theory and Method*. S. Settar and Ravi Korisettar, eds., pp. 191-215. New Delhi: Manohar.
- Cavalli-Sforza, Luigi L., Alberto Piazza, Paolo Menozzi, and J. Mountain. 1988. Reconstruction of human evolution: Bringing together genetic, archaeological, and linguistic data. *Proceedings of the National Academy of Sciences of the United States of America* 85: 6002-6006.
- Cavalli-Sforza, Luigi L., Paolo Menozzi, and Alberto Piazza. 1994. *The history and geography of human genes*. Princeton, NJ: Princeton University Press.
- Chakrabarti, Dilip K. 1973. Concept of urban revolution and the Indian context. *Puratattva* 6: 27-32.
- . 2003. *Archaeology in the Third World: a history of Indian archaeology since 1947*. New Delhi: D.K. Printworld.
- Chatterjee, Partha. 1993. *The nation and its fragments: colonial and postcolonial histories*. Princeton, NJ: Princeton University Press.
- . 1995. Alternative Histories, Alternative Nations: Nationalism and Modern Historiography in Bengal. In *Making Alternative Histories: The Practice of Archaeology and History in Non-Western Settings*. Peter R. Schmidt and Thomas C. Patterson, eds., pp. 229-253. Santa Fe, NM: School of American Research Press.
- Childe, Vere G. 1933. Races, Peoples and Cultures in Prehistoric Europe. *History* 18: 193-203.

- Chrisomalis, Stephen A. and Bruce G. Trigger. 2004. Reconstructing Prehistoric Ethnicity: Problems and Possibilities. In *A Passion for the Past: Papers in Honour of James F. Pendergast*. James V. Wright and Jean-Luc Pilon, eds., pp. 419-433. Gatineau: Canadian Museum of Civilization.
- Cohn, Bernard S. 1996. *Colonialism and its forms of knowledge: the British in India*. Princeton, NJ: Princeton University Press.
- Coningham, Robin and Ruth Young. 1999. The Archaeological Visibility of Caste: an Introduction. In *Case Studies in Archaeology and World Religion: The Proceedings of the Cambridge Conference*. Timothy Insoll, ed., pp. 84-93. BAR International Series 755. Oxford: Archaeopress.
- Dhavalikar, Madhukar K. 1995. Chalcolithic Architecture at Inamgaon and Walki: An Ethnoarchaeological Study. In *Living Traditions: Studies in the Ethnoarchaeology of South Asia*. Bridget Allchin, ed., pp. 31-52. New Delhi: Oxford & IBH Publishing Co Pvt. Ltd.
- Diamond, Jared and Peter Bellwood. 2003. Farmers and their Languages: the First Expansions. *Science* 300: 597-603.
- Diaz-Andreu, Margarita and Timothy Champion. eds. 1996. *Nationalism and Archaeology in Europe*. London: Univ. College London Press.
- Dirks, Nicholas. 2001. *Castes of mind: colonialism and the making of modern India*. Princeton, NJ: Princeton University Press.
- Dumézil, Georges. [1948] 1988. *Mitra-Varuna: an essay on two Indo-European representations of sovereignty*. New York: Zone Books.
- . [1971a] 1983. *The stakes of the warrior*. Translated by D. Weeks. Berkeley: University of California Press.

- . [1971b] 1986. *The plight of a sorcerer*. Edited by J. Puhvel and D. Weeks. Berkeley: University of California Press.
- Endicott, Philip, Mait Metspalu, and Toomas Kivisild. 2007. Genetic evidence on modern human dispersals in South Asia: Y chromosome and mitochondrial DNA perspectives: The world through the eyes of two haploid genomes. In *The Evolution and History of Human Populations in South Asia: Interdisciplinary Studies in Archaeology, Biological Anthropology, Linguistics and Genetics*. Michael D. Petraglia and Bridget Allchin, eds., pp. 229-244. AA Dordrecht: Springer.
- Fairservis, Walter A. 1975. *The Roots of Ancient India*. Chicago: University of Chicago Press.
- Fuller, Dorian Q. and Nicole Boivin. 2002. Beyond description and diffusion: a history of processual theory in the archaeology of South Asia. In *Indian Archaeology in Retrospect, Volume IV Archaeology and Historiography: History, Theory and Method*. S. Settar and Ravi Korisettar, eds., pp. 159-190. New Delhi: Manohar.
- Gough, E. Kathleen. 1960. Caste in a Tanjore Village. In *Aspects of Caste in South India, Ceylon and North-West Pakistan*. Edmund R. Leach, ed., pp. 11-60. New York: Cambridge University Press.
- Gray, Randall D., and Quentin D. Atkinson. 2003. Language-tree divergence times support the Anatolian theory of Indo-European origin. *Nature* 426: 435-438.
- Kenoyer, J. Mark. 1989. Socio-economic structures of the Indus civilization as reflected in specialized crafts and the question of ritual segregation. In *Old*

- Problems and New Perspectives in the Archaeology of South Asia*. Wisconsin Archaeological Reports, Volume 2. J. Mark Kenoyer, ed., pp. 183-192. Madison, WI: Department of Anthropology, University of Wisconsin, Madison.
- . 1991. The Indus Valley Tradition of Pakistan and Western India. *Journal of World Prehistory* 5 (4): 331-385.
- . 1992. Socio-ritual Artifacts of Upper Paleolithic Hunter-Gatherers in South Asia. In *South Asian Archaeology Studies*. Gregory L. Possehl, ed., pp. 233-251. New Delhi: Oxford & IBH Publishing Co. Pvt. Ltd.
- . 1995. Interaction systems, specialized crafts and culture change: The Indus Valley Tradition and the Indo-Gangetic Tradition in South Asia. In *The Indo-Aryans of Ancient South Asia*. George Erdosy, ed., pp. 213-257. New York: Walter de Gruyter.
- . 2005. Culture change during the Late Harappan period at Harappa: new insights on Vedic Aryan issues. In *The Indo-Aryan Controversy: evidence and inference in Indian history*. Edwin F. Bryant and Laurie L. Patton, eds., pp. 21-49. New York: Routledge.
- Kramer, Carol and John E. Douglas. 1992. Ceramics, Caste, and Kin: Spatial Relations in Rajasthan, India. *Journal of Anthropological Archaeology* 11: 187-201.
- Lahiri, Nayanjot. 2000. Archaeology and identity in colonial India. *Antiquity* 74 (285): 687–692.
- Leach, Edmund R. 1960. Introduction: What Should We Mean by Caste. In *Aspects of Caste in South India, Ceylon and North-West Pakistan*. Edmund R.



- Leach, ed., pp. 1-10. New York: Cambridge University Press.
- Lewontin, Richard C., Steven P. R. Rose, and Leon J. Kamin. 1984. *Not in Our Genes*. New York: Pantheon Books.
- Majumder, Partha P. 1998. People of India: biological diversity and affinities. *Evolutionary Anthropology* 6: 100-110.
- Mallory, J. P. 1989. *In search of the Indo-Europeans: language, archaeology, and myth*. London: Thames and Hudson.
- Marriott, McKim. 1955. *Village India - Studies in the Little Communities*. Chicago: University of Chicago Press.
- Meskel, Lynn. 2002. The Intersections of Identity and Politics in Archaeology. *Annual Review of Anthropology* 31:279-301.
- Mikkelsen, Gregory M. n.d. Part-whole relationships and the unity of ecology. <http://webpages.mcgill.ca/staff/Group3/gmikke/web/pwrue.pdf> (Accessed March 23, 2012).
- Morantz, Toby. 1983. *An Ethnohistoric Study of Eastern James Bay Cree Social Organization (1700 – 1850)*. Ottawa: National Museums of Canada.
- Morrison, Kathleen D. 2002a. Historicizing adaptation, adapting to history: forager-traders in South and Southeast Asia. In *Forager-Traders in South and Southeast Asia: Long-Term Histories*. Kathleen D. Morrison and Laura L. Junker, eds., pp. 1-17. New York: Cambridge University Press.
- . 2002b. Introduction. In *Forager-Traders in South and Southeast Asia: Long-Term Histories*. Kathleen D. Morrison and Laura L. Junker, eds., pp. 21-40. New York: Cambridge University Press.
- . 2002c. Pepper in the hills: upland-lowland exchange and the

- intensification of the spice trade. In *Forager-Traders in South and Southeast Asia: Long-Term Histories*. Kathleen D. Morrison and Laura L. Junker, eds., pp. 105-128. New York: Cambridge University Press.
- Mukerjee, Radhakamal. 1942. Mobility, Ecological and Social. *Social Forces* 21(2): 154-159.
- Petraglia, Michael D. and Bridget Allchin. eds. 2007. *The Evolution and History of Human Populations in South Asia: Inter-disciplinary Studies in Archaeology, Biological Anthropology, Linguistics, and Genetics*. AA Dordrecht: Springer.
- Possehl, Gregory L. 1990. Revolution in the Urban Revolution: The Emergence of Indus Urbanization. *Annual Review of Anthropology* 19: 261-82.
- Ramaswamy, Sumathi. 2001. Remains of the race: archaeology, nationalism, and the yearning for civilization in the Indus valley. *The Indian Economic and Social History Review* 38 (2): 105-145.
- Rao, Nandini. 1995. Subsistence and Associated Settlement Patterns in Central India: An Ethnoarchaeological Analysis. In *Living Traditions: Studies in the Ethnoarchaeology of South Asia*. Bridget Allchin, ed., pp. 143-168. New Delhi: Oxford & IBH Publishing Co Pvt. Ltd.
- Renfrew, Colin. 1987. *Archaeology and Language: The puzzle of Indo-European origins*. New York: Cambridge University Press.
- . 1992. Archaeology, Genetics and Linguistic Diversity. *Man, New Series* 27 (3): 445-478.
- Rothermund, Dieter. 1993. *An economic history of India*. 2<sup>nd</sup> edition. New York: Routledge.

- Shaffer, Jim G., and Diane A. Lichtenstein. 1995. The concepts of “cultural tradition” and “palaeoethnicity” in South Asian archaeology. In *The Indo-Aryans of Ancient South Asia*. George Erdosy, ed., pp. 126-154. New York: Walter de Gruyter.
- Sinha, Amita. 1990. Social and Spatial Order in Villages in India. *Landscape Research* 15 (3): 12-20.
- Smith, Monica L., 2000. Bangladesh: Building national identity through archaeology. *Antiquity* 74 (285): 701-706.
- Starr, Richard F. S. 1941. *Indus Valley Painted Pottery - A Comparative Study of the Designs on the Painted Wares of the Harappa Culture*. Princeton: Princeton University Press.
- Thurston, Edgar. 1909. *Castes and Tribes of Southern India*. Madras: Madras Government Press.
- Trautmann, Thomas R. 1997. *Aryans and British India*. Berkeley: University of California Press.
- Trigger, Bruce G. 1980. Archaeology and the image of the American Indian. *American Antiquity* 45 (4): 662-676.
- . 1989. *A history of archaeological thought*. New York: Cambridge University Press.
- . 1995. Romanticism, Nationalism and Archaeology. In *Nationalism, politics and the practice of archaeology*. Philip L. Kohl and Clare Fawcett, eds., pp. 263-279. New York: Cambridge University Press
- Tuite, Kevin. 2003. Explorations in the ideological infrastructure of Indo-European studies [Review of the book *Modèles linguistiques et Idéologie*:

- “Indo-Européen” by Sylvie Vanséveren]. *Historiographia Linguistica* 30 (1-2): 205-217.
- Walimbe, S. R. 2007. Population movements in the Indian subcontinent during the protohistoric period: Physical anthropological assessment. In *The Evolution and History of Human Populations in South Asia: Inter-disciplinary Studies in Archaeology, Biological Anthropology, Linguistics and Genetics*. Michael D. Petraglia and Bridget Allchin, eds., pp. 297-319. AA Dordrecht: Springer.
- Whitehead, Judy. 1992. Images of nature and culture in British and French representations of caste. *Journal of Historical Sociology* 5 (4): 410-430.
- Wobst, H. Martin. 1978. Archaeo-Ethnology of Hunter-Gatherers or the Tyranny of the Ethnographic Record in Archaeology. *American Antiquity* 43 (2): 303-309.
- Wright, Rita P. 2010. *The Ancient Indus: urbanism, economy and society*. New York: Cambridge University Press.

## Chapter 3:

### **Before Creation: the Indus Valley civilization in Indian archaeology**

Many observers have remarked that Indian archaeology is nationalistic (Coningham and Lewer 2000; S. Guha 2005). Scholars often suggest that the discovery of the Indus Valley civilization in Crown-administered India is both the point of origin for an “upsurge in nationalism” (Ray 2008: 2) and the source for “popular perceptions of India’s ancient past” (Lahiri 2006: 3). Yet these views often underestimate the influence of values and beliefs on the practice of Indian archaeology.

Discovered amid nationalist furor, Indian scholars and leading politicians believed that they had recovered in the Indus Valley civilization their indigenous golden age. A growing Western-educated Indian middle class took pride in knowing their glorious past, and they rejected claims by Western scholars that their civilization was an off-shoot of the Sumerian one at Ur. It was precisely this nationalist reaction that brought independence from the British Crown in 1947. The popular rendering resonated so deeply that it shaped the practice of Indian archaeology until the 1990s (Jha 1991).

With a sensational headline for *The Times of London* in December 1924, “Important finds in India – possible link with Sumerians”, John Hubert Marshall, Director General of Archaeology, unveiled Mohenjodaro in District Larkana, Sind, and its northern counterpart Harappa in District Montgomery, Punjab, as the

“Indo-Sumerian civilization” (*The Times* 1924). Yet in 1928, Marshall publicly replaced his startling appellation “Indo-Sumerian civilization” with “Indus civilization”. How did Marshall’s Indus compare with his earlier Indo-Sumerian civilization? What methods did Marshall employ to show that the Indus civilization was indigenous? What was its relationship with known Indian history?

In this chapter, I show that geo-political concerns and competing colonial and nationalist interests influenced understandings of the Indus Valley civilization before the creation of Independent India in 1947. I argue that assumptions about cultural continuity between contemporary and prehistoric societies influenced interpretations of Indus sites. These methods often served social and political aims. Prior to professionalization of their discipline, archaeologists often garnered support for their knowledge claims through public outreach. Through an analysis of government reports, scholarly publications and popular works, I show how, before independence, colonial understandings of the civilization were reinterpreted as Indian or nationalistic ones. This has implications for our understanding of colonial and national science.

My examination overlaps with the history of science, and the study of complex societies in addition to colonial and post-colonial studies, which developed following in the wake of the Second World War, as support for imperialist institutions waned. The creation of Pakistan and Independent India in 1947 is best understood in the context of changing geo-political interests and alliances, during which Indians increasingly questioned the legitimacy of the British Crown and demanded *swaraj*, or self-rule. Leading politicians often thought of the Indus

civilization in terms of a glorious golden age when India was independent, peaceful, technologically-advanced and idyllic. This view of the Indian past was in juxtaposition to the unstable, poor, caste-ridden and oppressed colonial India that they now fought to free from the Crown's grip. Fostered by this highly anti-imperialist milieu and armed with material evidence for their dynamic and creative past, Indians declared '*poorna swaraj*' or complete independence.

The dissolution of empires, as Fredrick Cooper (2005: 231) has pointed out, must not be divorced from the concurrent development of 'supranational' institutions, and international justice in the form of universal human rights, all of which influenced post-war developments. Indians who took over administration from the Crown faced the challenge of uniting and securing a sprawling multi-ethnic and multi-lingual state. For leading politicians, the issues were pressing as they sought to form a representative Indian government. These concerns influenced where Indian archaeologists carried out archaeological field studies, and the particular time-periods they gave most attention to (Gupta chapter 4).

There is the issue of 'science' and 'colonial science' as George Basalla (1967: 613) defined them, successive phases in doing science. Colonial science he argued, distinguished nations with established scientific cultures from those without. He explained that colonial science referred neither to scientific imperialism<sup>1</sup> nor required necessarily, a 'colonial relationship' (ibid.). Because

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<sup>1</sup> But see Basalla (1967: 613), where he argues that a colonial scientist is unlikely to contribute to the development of new lines of enquiry because "he is dependent upon an external scientific culture and yet not a fully participating member of that culture." For more on conflicts and contradictions in world systems analysis, see Wallerstein (2004).

‘scientific culture’ was synonymous with ‘Western Europe’,<sup>2</sup> and because there was only one Western Europe, colonial science referred to the diffusion of science to specific places at a particular time and saw colonial science dependent on an ‘external’ tradition. Basalla does not make explicit what or how colonial scientists rely on external traditions.

The essentialist view gives the impression that science was unified, without conflict, and directed exclusively by the state<sup>3</sup>. Mark Harrison (2005: 56) instead has pointed out that this scenario has resulted in a poor understanding of science not directed by the state or by corporations. Yet, while this view broadens our perspective on financial motives and conflicts of interest in research, it does not deepen our understanding of the changing relationship between science and society.

What does this mean for Indian archaeology in the former Crown colony and one-time East India Company possession?

Scholars are increasingly interested in the politics of knowledge, and the relationship between nationalism and Indian archaeology (Ratnagar 2004). Some archaeologists have argued that the Indian public has been “kept ignorant” on archaeological methodology (S. Guha 2005: 400-401), and that this situation has

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<sup>2</sup> Basalla defines Western Europe geopolitically - “original home of modern science during the 16<sup>th</sup> and 17<sup>th</sup> centuries: Italy, France, England, the Netherlands, Germany, Austria and the Scandinavian countries” (1967: 611). Italian city-states unified, as did German ones, in the mid-nineteenth century.

<sup>3</sup> On this point, see Harrison (2005: 55) on studying colonial expansion prior to the mid-nineteenth century, and science under the East India Company.



led archaeology to legitimize claims by *Hindutva* or neo-Hindu nationalists<sup>4</sup>. They draw attention to efforts by influential archaeologists who claim Vedic origins for the *Sindhu Saraswati Sabhyata* or the Indus-Saraswati civilization in northern India (S. P. Gupta 1995). This indigenous civilization, situated between the Indus and Ganges Rivers, archaeologists allege, is the source of both historic Hindu and ancient Vedic society. The precarious state of Indian archaeology, scholars argue, is made more problematic by the state-funded Archaeological Survey of India, or the Survey<sup>5</sup> (Ray 2008: 244).

But what does neo-Hindu nationalism have to do with archaeological methodology?

Although Sudeshna Guha does not say so, *Hindutva* claims are premised on the belief that Vedas are a static archive of traditions, and that modern Hindu traditions in northern India are descended from them. Influential historians often presume cultural continuity between contemporary and prehistoric societies (Habib 2001). Some archaeologists often think in terms of recovering territories of historical groups. This perspective influences the practice of Indian archaeology. The historical framework strengthens claims of Hindus over lands

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<sup>4</sup> Sudeshna Guha stated, “by choosing to keep the public ignorant of the methodologies through which corroborative analogies are commonly derived to interpret material finds, the officers of the Survey seem to have willingly complied with the myth implicit in the judiciary’s decision, that historical truth exists ‘somewhere out there’ waiting to be unearthed” (2005: 400). But see Varma and Menon (2010: 61), on requests by local interest groups for professional archaeologists to observe excavations. For more on politics, and nationalism in archaeology, see Kohl and Fawcett (1995); Trigger (1984) and (1989).

<sup>5</sup> The Survey is the national department for archaeology and heritage legislation in the Republic of India. Archaeological legislation has roots in colonial India, and was expanded upon by Indians who took over administration from the Crown.

they are occupying. This is the conceptual framework in which I examine investigations of Indus sites in colonial India and discuss what their interpretations meant for understandings of ancient India. The examination requires an historical perspective.

### ***The study of ancient India and the East India Company***

European travellers and missionaries first remarked on monuments dotting the Indian coastline in the sixteenth century<sup>6</sup> (Chakrabarti 1982: 326). Europeans often observed local practices, recorded folklore and languages, and remarked on race (Županov 2005: 36-37). They systemically recorded monuments and megaliths from the mid-eighteenth century. European interest in the Indian past grew as a result of the realization that Sanskrit, the language of the Vedic texts, and descended modern languages in northern India, were related to European ones<sup>7</sup>.

European scholars believed that in studying Sanskrit and the Vedas, they would gain an understanding of ancient Indo-European culture (which I discussed in more detail in Chapter 2). Because this was so and because ancient times were not very long ago, ancient India was often cast in relation to ancient Greece. Scholars often compared mythological gods of extinct Egyptians and Greeks with polytheistic Brahmins. Modern Brahmins, scholars believed, were direct

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<sup>6</sup> But see Cremo (2008) for examples of ‘indigenous curiosity-driven’ field investigation. He traces in Hindu religious texts the recovery of sculptures, temple and water tanks sometime in the sixteenth century.

<sup>7</sup> Puisne Judge William Jones and his colleagues in the East India Company actively collected and translated Indian languages, laws, literature and philosophy. Their growing interest precipitated the creation of the *Asiatic Society* in Calcutta in 1784.

descendents of ancient Indians, and their civilization could shed light on ancient Egypt and Greece. Yet, the study of ‘material remains’ to understand the Indian past remained remote from traditional scholarship.

Most scholars relied on ethnography and often attributed material remains to specific linguistic and ethnic groups. They often explained change as a result of migration. In the southern parts of the Indian peninsula, Europeans had observed cromlechs and other stone burials. They remarked on similarities of these monuments with those recorded in many parts of Britain and continental Europe. They believed that the burials marked the territories of Celtic-Scythian groups who had migrated into the Indian peninsula not too long ago (Schmid 1847; Taylor 1851).

### ***Antiquarians and Indian historiography in Crown-administered India***

The geo-political scenario and the Company’s priorities changed following their unsuccessful military campaign against the Amir in Kabul in 1842 (*The Times* 1843). The loss delayed direct altercation between the Company and an increasingly imperialist Russia. Yet, local resistance lingered in Punjab, the north western most territory that the Company had acquired, following the dissolution of Ranjit Singh’s kingdom. Cooperation between Native rulers there with Kabul challenged the security of the Company’s more eastern possessions. These insecurities led the Company to recruit troops from Bengal and Britain in hopes of strengthening their position in the geopolitically strategic territory.

The call for European enlistment was acutely felt when in 1857, Indian soldiers at the northern cantonment of Meerut rose in revolt of the Company's control<sup>8</sup>. Heightened tensions in these former Mughal administered Awadh territories and 'Upper India' was cause for unease. It was amid these social and political concerns that the Crown took over administration of the Company's Indian possessions in 1858.

Rapid economic, social and political change at the heels of colonial restructuring saw scholars and policy makers grow increasingly aware of the demolition of settlements and monuments to make way for public works. This economic development included the construction of canals, bridges and railroads. Ironically, these aggressive economic policies encouraged the Calcutta-based Government of India to promote the study of numismatics, architecture and epigraphy. This scholarship was increasingly practised in universities and colleges that were often located in large urban centres. Because policy makers believed that most if not all Indian culture would soon disappear, the government organized surveys for the collection of data on Indians, including languages, mythology, physical anthropology and antiquities (U. Singh 2004: 2-3). As a result of these policies, British officers soon amassed large collections of archaeological data in territories under their administration. Upon retirement or

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<sup>8</sup> "Colonists" referred to this as the "Sepoy Mutiny" and "Indian nationalists" refer to it as the "First War of Independence" (R. Guha 2007: 651). Ramachandra Guha suggests that "atrocities" were committed by "both sides" (2007: 9). Historical accounts on the multifaceted issue are voluminous. See Clare Anderson (2007) *Indian Uprising of 1857-8: Prisons, Prisoners and Rebellion*, Christopher A. Bayly (1988) *Indian Society and the Making of the British Empire* and Śekhara Bandyopadhyay (2004) *From Plassey to Partition: A History of Modern India*. Also see C. Hibbert (1978) *The Great Mutiny: India 1857*.

death of British officers, some of their collections often found their way into the Asiatic Society's vaults in Calcutta and Bombay.

In the middle of the nineteenth century, growing concern over the destruction of local monuments prompted British officials and Western-educated Indians to create the Delhi Archaeological Society<sup>9</sup> (Narayani Gupta 2000). The Society often provided for-charge repair and restoration services within Delhi and elsewhere in northern India. These interest groups encouraged the study of ancient remains and history amongst educated classes. At the same time, the colonial Government of India commissioned archaeological investigations with an emphasis on monuments in Upper India and supported the creation of the Archaeological Survey under Colonel Alexander Cunningham.

Cunningham's survey was geopolitically specific: he was to record antiquities in Upper India, including the 'North-Western Provinces' and 'Behar'<sup>10</sup> (Chakrabarti 1988: 219-226). Scholars thought that *topes* or *stupas*, brick-structures in the north western territories, were royal tombs (Court 1834). Their interest in these monuments grew as a result of the realization that Buddhism, as practised in Ava, Nepal and Ceylon, descended from somewhere in India. They also established Buddha as a historical figure who travelled across northwest and southern India some time not too long ago.

Some scholars believed that the study of archaeological remains alone could shed light on the Indian past (Cunningham 1871: iii). Because they believed the

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<sup>9</sup> For more on architectural studies and restoration efforts in Delhi during the nineteenth century, see Narayani Gupta (2000: 46-64 )

<sup>10</sup> The territories saw intense competition for sovereignty a few years prior. These territories should not to be confused with the 'North-West Frontier Province' which was created in the twentieth century. On Cunningham's assignment see appendix in Chakrabarti (1988: 219-226).

earliest available texts did not have secure dates and did not place events, Indian historians often studied inscriptions, coins, art and monuments. Some scholars argued that because there existed in India little written tradition, monuments alone were the most accurate guide to ancient India. Western scholars believed that their study revealed past accomplishments of historical groups. They established a connected history. This view promoted the pre-existing tradition of historical geography which identified specific places to aid the recovery of historical territories (Cremo 2008).

At the same time, Indian scholars grew increasingly anxious to demonstrate that their ancestors were not culturally backward as some observers had remarked (Strachey 1888). They were also eager to show that their ancestors had occupied all, if not most of Crown-administered India. Indian historiography that emerged at that time emphasized ethnic and linguistic groups. Historians often thought in terms of racial groups and viewed the Indian past as a succession of migrations. They often employed external factors such as migration and diffusion to explain change. They believed migrants brought creativity and dynamism into India, and these people soon became absorbed into the Indian way of life. Scholars thought that ancient times were not very long ago, and that ancient India was creative, peaceful and idyllic.

### **Vedic origins of Hindu civilization**

Some Indian scholars, influenced by growing Hindu nationalism, renewed their interest in oral accounts recorded in Vedic texts. Yet, unlike chronicles of dynasties and the lives of kings in ancient Egypt, China, Assyria and Babylon,

Indian scholars believed that Vedic texts belonged to ‘the people’ (Dutt 1889). They alleged that because the Vedas recorded memories, the texts accurately documented the progress of Hindu knowledge, literature and science over three thousand years. Knowledge had not been lost, these scholars claimed, since tradition was orally transmitted. This instilled in Hindus a sense of pride in their past.

The same scholars believed that the recent history of India, from the Mughal to medieval times, had received most scholarly attention. This situation had drawn away resources from the study of ancient India or the ‘Hindu period’. Influential historian Romesh Chunder Dutt aimed to address this void in Indian history with his three-volume *A History of Civilization in Ancient India*<sup>11</sup> (1889). Dutt’s account was based on his translation of Sanskrit texts, derived dates of compilation for these texts, as well as works on historical geography, mythology and epigraphy. His was an unbroken cultural history of ‘Hindu civilization’.

Dutt saw cultural development in five “epochs”, each of which was distinguished from the next as clearly as geological “strata” (1893: Introduction). Because he relied on Sanskrit texts to understand social organization and change, all that needed to be known was the technological stage of a culture. Dutt classified Hindu civilization on cultural achievements and identified five ages, which were from the most recent: (1) Puranic; (2) Buddhist; (3) Rationalistic; (4) Epic; and (5) Vedic. He thought that Hindu civilization progressed to its greatest vigour in the Rationalistic, and had gradually declined into the “dark ages”.

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<sup>11</sup> Dutt’s *Ancient India*, published in 1904 was a new impression for a series on Epochs in Indian History. This edition included two maps. Dutt’s *Civilization of India* published in 1900 included three maps, and covered post-Puranic history – Rajput, Afghan, Moghul and Marhatta.

This degeneration had left northern India susceptible to invaders<sup>12</sup>. The most remote or Vedic times saw settlement along the Indus River and its ‘five branches’, but no further than the Sutlej River. In these territories, Aryan settlers had displaced “dark-skinned aborigines” (Dutt 1893: 5). Dutt did not evaluate archaeological remains in his *History*. Had he done so, he would have recognized that the frequency of change was not uniform as he had proposed. He also would have realized how much spadework was needed to lend support for the frequent invasions and migrations that he had postulated.

There are competing interpretations on the Vedic origins of civilization. Some scholars suggest that these views promoted an “Aryan-non-Aryan dichotomy” in Indian archaeology (Chakrabarti 2000: 670), whereas others have suggested that Dutt’s works and similar historical studies played an important part in the “construction of a nation” (Ratnagar 2007: 351).

Another dimension concerns the origin of these ideas. On this complex issue, some scholars attribute “a mindless acceptance” by nationalistic Indians of “western Indology” (Chakrabarti 2000: 670). Others attribute these ideas to the value with which Hindus held Vedic texts in the nineteenth century (Ratnagar 2007: 354). The realization that Sanskrit and the descended modern languages of northern India were related to European ones came from Western scholars. Yet it was Indians who often studied and taught the Vedas. They continued its scholarship. Their tradition is in contrast with Indian historians who increasingly

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<sup>12</sup> Dutt’s final epoch ended either in 800AD or ‘eighth century’ and was followed by the ‘dark ages’. He related subsequent developments with those in Europe as “...the new defenders of Hinduism and of Christianity had to fight in India and in Europe against the same rising power, viz, the Muhammadans” (Dutt 1893: 11).



published historical accounts, and translated narratives in Sanskrit and local languages for a Western-educated middle class.

Ethnocentric views celebrated the progress of Hindus, while at the same time emphasized the lack of creativity amongst aboriginal peoples. Dutt and other scholars believed that Hindus had passed through all stages of development, whereas aborigines, over time, had remained at the barbaric stage. Because scholars assumed migration and diffusion were primary factors in culture change, and because these processes were active in the past, they believed that the earliest inhabitants had likely become ‘extinct’. To understand the social organization of that past culture, all that was needed was the ethnography of social groups at the same technological stage.

For many scholars and policy makers, aboriginal peoples were synonymous with prehistoric cultures. More than other scientific methods, Indian scholars embraced ethnography. They assumed that aborigines had not changed, and were static. These ‘fossil cultures’ gave insight on the earliest stages of human society. Because scholars believed that the most remote times were simple, they thought that the simplest culture was most likely the oldest. The unilinear schema conflated ethnic and linguistic groups and emphasized culture as a homogenous entity (P. Mitra 1923: 29; Figure 1)<sup>13</sup>.

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<sup>13</sup> Panchanan Mitra was a Yale-trained anthropologist. His doctoral thesis examined the history of American anthropology. Mitra was lecturer in anthropology and ancient Indian history and culture at the University of Calcutta and was later Head of the Anthropology Department. The first edition of *Prehistoric India* was in press when Marshall made the announcement on Mohenjodaro and Harappa. The second edition, published in 1927, included a chapter on Mohenjodaro.

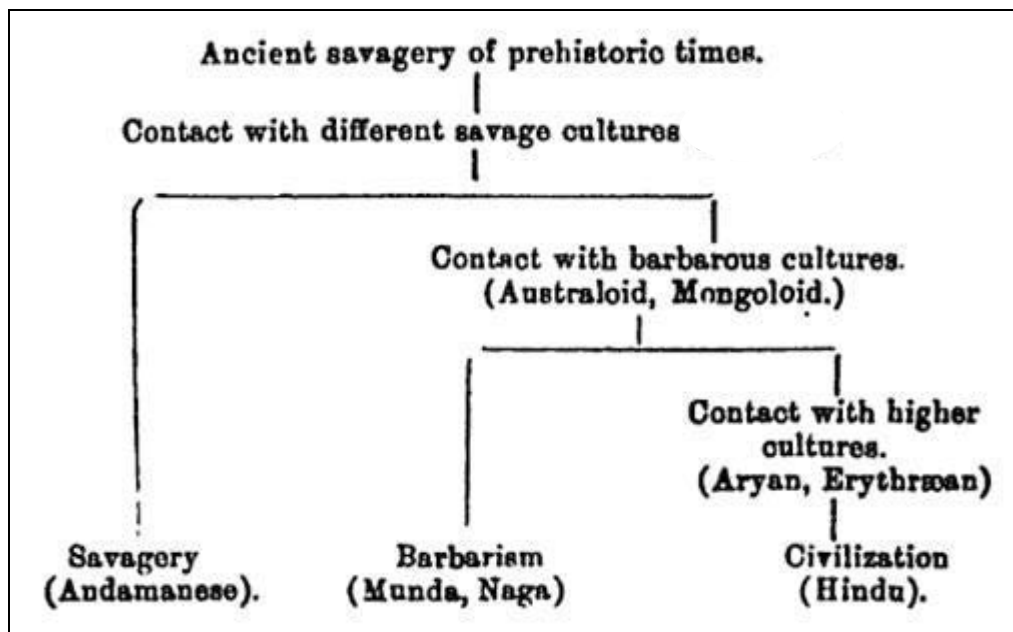


Figure 1: Prachanan Mitra's illustration on Indian 'cultures and their relationships', in *Prehistoric India: its place in the world's cultures*, 1923: 29.

These views influenced the study of material culture. When archaeological data pointed to development over time, and a more complex prehistoric past, scholars often attributed material culture to dynamic and creative immigrants or invaders. Policy makers often thought in terms of natural law and justified social, economic, cultural and political marginalization of aboriginal peoples. Some scholars conflated language, race and material culture and denigrated aboriginal peoples as 'Stone Age' (R. Banerji [1934] 1939: 7). They explained the co-occurrence of Stone Age culture and Hindu civilization as Hindu peaceful cooperation and accommodation for all.

## Prehistoric research in India

Pressing geopolitical concerns at that time influenced the study of Indian prehistory. Scholars often cast understandings of the past in relation to the

sensitive north-western territories. They remarked on a “great wall of snow peaks” beyond which lay Afghanistan and Baluchistan (Huxley 1869: 91). The same fortress, scholars argued, offered India unparalleled natural protection from outside. Ironically, they argued that there had been a migration of Aryans sometime in the past.

In his address to the Ethnological Society of London, Colonel Meadows Taylor presented on ‘prehistoric unity’ between India and England (1869). He asked if “Sanskrit-speaking Aryans” migrated to Europe carrying their language and beliefs, and left material remains, then, could Aryan invaders of India have done the same in successive waves? (Taylor 1869: 174). For over half a century, British officers on assignment in the southern parts of the Indian peninsula had noted megalith and stone burials (Babington 1820). They remarked on the use of stone slabs and similarity in their arrangement with stone monuments recorded in parts of Britain. Some scholars explained that the European *kistvaens* or cairns belonged to Druids. In India, officers had sometimes excavated graves and they often collected from them pots, spears, arrowheads and iron implements. They sometimes recovered human skeletal remains from the graves (Taylor 1862: 339).

Were similarities a result of common origin or a result of “common human instinct”? asked Taylor (1869: 173). Scholars sought the identity of the people to whom the material remains belonged. They thought in terms of continuity between contemporary and prehistoric peoples. When archaeological material pointed to idiosyncrasies, influential scholars made prehistory conform to accepted explanations.

Some archaeologists remarked that cromlechs and cairns were recorded in territories where there were 'Dravidian speakers'. They questioned the Aryan identity of these monuments, and argued instead that the Vedic texts did not refer to these burial practices (Taylor 1869: 177). Yet, because scholars believed that aborigines had not changed since the most remote times, and because they were assumed to lack skills necessary to construct megalith burials, the migration of creative and dynamic groups into India alone explained the creation of stone burials. Thus, all that needed to be known was the route between Britain and the Indian peninsula.

In their *Census of India* (1903), Herbert H. Risley and his colleague Edward Gait explained factors for change in India<sup>14</sup>. Their understanding was premised on a direct correlation between contemporary and prehistoric societies:

From time immemorial a stream of movement in India has been setting from west to east and from north to south—a tendency impelling the higher types towards the territories occupied by the lower. In the course of this movement representatives of the Indo-Aryan type have spread themselves all over India as conquerors, traders, landowners, or priests, preserving their original characteristics in varying degrees, and receiving a measure of social recognition dependent in the main on the supposed purity of their descent from the original immigrants (Risley and Gait 1903: 501).

Scholars thought of Indo-European and Dravidian-speakers as historical groups and they believed that historical territories were best identified by studying material remains. Many archaeologists also accepted external factors as explanations for change as Indian historians had done.

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<sup>14</sup> Their 1903 Report on the Census of India credited Anders Retzius (1796-1860) and Paul Broca (1824-1880) with developing a system of classification for skulls (Risley and Gait 1903: 492).

## ***Imperial reorganization and the recovery of ancient India***

At the turn of the twentieth century, the British Crown launched a reorganization of its possessions with the aim to secure them. The Government of India signed an agreement with the Afghan Amir, and established a frontline between Afghanistan and the north-western most Crown-administered territories<sup>15</sup>. The Indian frontier was hotly debated because its maintenance had been financed by Indian revenue (Dutt 1900). The Crown believed that this would protect its Indian possessions from foreign invasion. At that time, the Crown considered the northwest frontier its Achilles heel in maintaining the empire. Policy makers believed that there lay key passages through the otherwise impassable ‘natural barriers’<sup>16</sup>. Because this was so, acquiring specific places and routes was imperative to repel invasions.

It was precisely these geo-political concerns that led to the creation in 1901, of the North West Frontier Province on the sensitive border (Figure 2). At the same time, in securing these territories, the Government of India brought relative peace and stability to neighbouring Provinces and Native States, including the Province of Punjab. The sometimes volatile frontline remained until India’s independence in 1947<sup>17</sup>.

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<sup>15</sup> This was the Durand Line, an agreement named after Henry Mortimer Durand, Foreign Secretary of the Government of India, and signed by him and Amir Abdur Rahman Khan in 1893. For more on these territories and Pashtu-speakers see Hasan (1962) and Qureshi (1966). On recent diplomatic and foreign affairs, see Rubin (2007) in “Saving Afghanistan”.

<sup>16</sup> On cartography and ground surveys, see Edney (1997) *Geographical construction of British India*. On ‘frontiers’ see Kirk (1960) “The Sino-Indian frontier dispute” and John Strachey (1888) in *India*.

<sup>17</sup> The Dominion of Pakistan took over administration of the geo-politically tenuous border in 1947. The North West Frontier Province was dissolved in 1955 during Chaudary Muhammad Ali’s administration as a prelude to the creation of the short-lived democratic Islamic Republic of



Figure 2: Imperial Gazetteer Atlas, Plate 20 map illustrating geo-political territories in 1909. Crown-administered territories are in red and pink. Native States are yellow. The frontline with Afghanistan is highlighted in bright red to illustrate the geopolitical position of the North West Frontier Province. The Indus River [1] and Ganges River [2] are highlighted. Base image from Wikipedia, 2012.

Growing nationalism fostered a milieu in which Indians increasingly questioned both the authority and legitimacy of the government. Western-educated Indian elites in the Provinces grew increasingly dissatisfied with a lack of voice in the Government of India. Local and, increasingly, regional interest groups organized civil and political activities that emphasized ethnicity and language. Renewed interest in the Vedas saw influential lawyer and member of the Punjab Congress, Lala Lajpat Rai revive the Arya Samaj, an organization that

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Pakistan in 1956. Old territories of the Province were reorganized as Khyber Pakhtunkhwa in April 2010.

aimed to rescue Hindu society through service and self-reliance<sup>18</sup>. In the wake of consecutive drought years, which had led to famine in many parts of northern India, many Indians grew increasingly frustrated with their apparent powerlessness to influence foreign and economic policy<sup>19</sup>.

As a result of the partition of Bengal, influential Bengali-speaking landowners in the west of the Province were separated from their labour-rich counterparts in the east. The Government of India moved its capital from Calcutta, Bengal to Delhi, on the banks of the Yamuna River, in the Delhi Division of Punjab<sup>20</sup>. As a reaction to these unpopular measures, many Indian politicians called for the boycott of *videshi* or imported goods and encouraged investment in *swadesh*, or own-country. It was amid these internal and foreign policy concerns that the Viceroy, Nathaniel George Curzon<sup>21</sup> appointed John Marshall Director General of Archaeology.

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<sup>18</sup> The Arya Samaj promoted 'reformed' Vedic or Hindu society on ten principles, including service and self-reliance. Created by Dayananda Saraswati in 1877, the Arya Samaj distinguished itself from orthodox Brahmanical tradition as 'anti-caste'. Aryas rejected caste distinction based on birth and opted for hierarchical 'professional guilds' created by the state to assign rights and privileges. In this occupational caste, demotion and promotion or hierarchical mobility was possible. Aryas distinguished themselves from the Lahore-based Brahmo Samaj. Saraswati considered the Vedas 'books of true knowledge' that had divine origin. He believed that Hindus had become corrupt and that Hindu society was decaying (Rai 1915: 102-107). The glorious Hindu past could be regained by reaffirming principles in the Vedas, particularly those relating to education and society. This appealed to rising professional classes who increasingly sought social and political ground in Punjab. On this point and on Lajpat Rai, see Barrier (1967). On Hindu nationalism in Punjab as a reaction to Christian missionary work see Jones (1976) *Arya dharm: Hindu consciousness in 19th-century Punjab*.

<sup>19</sup> Romesh Chunder Dutt wrote an open letter to Curzon, and criticized the Government's handling of the famine, as well as their foreign policy (1900). He argued that the Government was despotic and was responsible to no one. Dutt called for Indian representation in policy making. For more on famine, see David Arnold (1998) *Famine: Social Crisis and Historical Change (New Perspectives on the Past)* and for perspective on famine prevention in western India, Donald Attwood (2005).

<sup>20</sup> 'New' Delhi was built south of the old city in the 1920s. Until 1857, Delhi was part of the North Western Province, after which it became a division of Punjab. The North Western Province was amalgamated in 1902 creating the United Provinces of Agra and Oudh.

<sup>21</sup> Curzon resigned soon after the unpopular Bengal partition. He served as Foreign Secretary until 1924.

## **Preservation of cultural heritage**

Ironically, government interest in preserving ancient objects and monuments was often met with suspicion and raised questions about ownership (U. Singh 2004: 302-304). By the time Marshall introduced *The Ancient Monuments Preservation Act* (1904) to preserve ancient objects and monuments, many communities actively maintained monuments in their locales. In the face of growing Hindu nationalism, Punjabi-speaking Sikhs grew increasingly anxious about their social and political liberties. These concerns, including the management of *gurdwaras*, led to the creation in 1902, of the Chief Khalsa Diwan. Leading politicians believed that maintaining monuments, and thus, cultural heritage was their responsibility.

There are competing interpretations of these measures. Some scholars characterize the laws as organizational achievements that encouraged archaeological work. Survey archaeologist S. Roy (1961: 85) suggested that these measures supplied the Archaeology Department necessary authority to acquire “decaying” monuments that were privately owned. Some archaeologists also highlight the introduction of ‘scientific methods’ in exploration and excavation – activities which were previously carried out by ‘treasure-hunters’ (Roy 1961: 85). These measures included licensing archaeological field investigations. Other scholars find that the laws limited antiquities trafficking in both Provinces and Native States. These efforts, they argue, fostered archaeological inquiry (Chakrabarti 1988: 121-123). Yet others suggest that the department’s measures



displaced traditional methods and changed the “nature of archaeological sites and religious architecture” (Ray 2008: 3).

There is the issue of the origin of conservation principles. Some scholars credit Viceroy Curzon for his “enlightened” view with regard to cultural heritage (Lahiri 1997: 131). They applaud efforts by the imperial government to conserve archaeological and historical objects. They often stress the role of government in preventing antiquities trafficking, and preserving monuments as a way of correcting past wrong doings (Lahiri 1997: 131). Alternatively, other scholars suggest the oversight of an indigenous or ‘folk’ archaeological tradition that encouraged the recovery and display of material objects (Cremo 2008: 185). Yet, these views give little insight on the ideological basis for cultural heritage protection. Why would an imperial government, a European one, encourage the preservation of Indian heritage?

Some scholars have claimed that these efforts were an attempt to promote an “enlightened” and “cultured” imperial administration (Lahiri 2006: 51). The situation cannot be divorced from non-British European interest in Indian territories at that time. The measures authorized the Archaeology Department *alone* for the discovery, classification, conservation, and the maintenance of Indian heritage. Curzon had reasoned that possessions that the Crown had secured were vulnerable to exploitation by other Europeans. Thus, preventative measures were central to Imperial interests (Curzon 1907).

Locally, the act gave leverage for Survey Officers serving as surveyors in Native States and as superintendents in Provincial Governments. The protectionist approach delineated terms on which other investigators and museums, foreign or

otherwise, worked in Imperial India. This does not, however, explain why the legislation distinguished between objects of “archaeological, historical and artistic interest” (Ancient Monuments Preservation Act 1904). Nor does it explain Marshall’s lament of “religious enthusiasts” in the southern parts of the peninsula, who believed that “replacing of an old temple by a new one is the highest form of devotion to its god” (Chakrabarti 1988: 124).

### **Survey-financed archaeology**

Scholars suggest that up until sometime in the 1950s, archaeological research was exclusively government-sponsored (Chakrabarti 2003: Preface). They generally accept that modern field methods, including three-dimensional recording, were introduced by Western archaeologists (Ray 2008: 3). During his tenure as Director General of Archaeology in India, Mortimer Wheeler trained Indian archaeologists, many of whom then established university departments of archaeology or joined the Survey in Independent India. Scholars suggest that Indian archaeologists faced three questions: [1] establishing the extent of the Indus civilization; [2] establishing the relationship between historic sites and Indus sites; [3] Indian prehistory<sup>22</sup> (Chakrabarti 2003: Preface).

Until Mohenjodaro’s identification by Survey Officer Rakhaldas Banerji, the long-standing questions on Indian antiquities ranged from the origin of civilization, the impact on the Indian peninsula from the migration of Aryans from the north and west, to prehistory or the time before the Greeks came. The

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<sup>22</sup> H.D. Sankalia (1962: 27-28) remarked on this issue. He pointed to difficulties in bringing together protohistory and prehistory – the former being the “[i] Vedic and post-Vedic period; [ii] Indus or Harappa civilization; [iii] early Chalcolithic or late Neolithic cultures” - and the latter reserved for “various Stone Ages when man was a nomadic hunter”.

accepted history of India told of an Aryan migration not very long ago into the Indian peninsula. Riding through the north and the west, the northern Indo-Aryan pushed southward the Dravidian inhabitants. Thus, among southern Dravidians were found static and unchanged the most archaic institutions. Stone tools and megaliths that had been recorded since the early nineteenth century in the peninsula were assumed to demarcate the geographical extent of these groups. The northern Indo-Aryan had changed and developed as a result of subsequent migrations, and so, history began in the north.

The most remote antiquities were coins, stone pillars, Buddhist brick *stupas*, and rock-cut temples. Early explorers had collected inscriptions and coins from *stupas*, which aided the study of epigraphy and numismatics. In turn, scholars were able to read inscriptions on coins and from them they delineated a relative historical chronology from the time of Alexander onwards. Scholars generally accepted migration as an explanation for change. Ancient India was seen ruled by powerful dynasties that managed large territories (R. Mitra 1881). These successive empires were classified from the most recent as “British”, “Mohammedan” “Jaina”, and “Buddhist”. That was *known* history. But a void still existed in the history of India: what came before the Buddhist ruins? Where were the imposing ruins like at Luxor and Thebes? What else had the Aryans built?

### **Relative dating at Mohenjodaro**

On June 29, 1923, John Marshall wrote to the Editor of *The Times*. Responding to a press report on recent archaeological work in Sind, Marshall corrected the Bombay Correspondent on the nature and character of “seals with hieroglyphics”

collected at Mohenjodaro. Over the winter of 1922, Banerji, then superintendent of the Western Circle of the Archaeology Department, conducted preliminary investigations on three of five mounds at Mohenjodaro (*The Times* 1923). He concluded that the site dated to the most remote time in Indian history. He explained his reasoning in a report submitted to Marshall<sup>23</sup>.

Banerji emphasized chronology and ethnicity in his report. His views give insight on prevailing thought on prehistory. Early excavators often believed that monuments and artefacts that they were studying were records of past accomplishments. They thought that the golden age would be recovered by their efforts. They identified discrete linguistic and ethnic cultures in the archaeological record. Scholars explained similarities in material culture as a result of migration and external influences. They often thought in terms of establishing the antiquity and creativity of their ancestors. Because they explained change as a result of migration and because the Vedic texts explained social organization all that needed to be known was the sequence of ‘cultures’ recovered at specific places.

At Mohenjodaro, Banerji found “pre-Buddhist” remains and concluded that the site was older than any known site at that time. Because this was so, Banerji saw Mohenjodaro as evidence for the Hindu period. He explained idiosyncrasies and change through a combination of catastrophic events, and migration. These explanations effectively denied local relationships and innovation. Banerji sought

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<sup>23</sup> Banerji likely submitted photographs with the report. The copy consulted for this examination was published as *Mohenjodaro: a forgotten report* in 1984 with a publishers’ preface which alleged that Marshall had “concealed” Banerji’s report and had kept the photographs (1984: Preface).

out artefacts that made a connected history available, such as coins and seals with inscriptions.

Relative dating at Mohenjodaro was the core of Banerji's analysis and key to understanding the site's significance. While there he examined the highest Buddhist *stupa*, and observed a thick layer of ash below the base of the tower. The layer of ash suggested to Banerji that the platform was built on the ruins of an earlier structure, possibly an ancient temple. From this stratigraphy and on the basis of inscribed copper coins, he distinguished four different periods. It was precisely the under laying structure that confirmed a 'pre-Buddhist' culture in Sind. This, as Banerji explained, was the first material evidence of the Hindu period.

The material culture at the mounds pointed to the co-existence of a civilized culture with a stone-tool using, simple culture in the most remote period. Banerji collected coins and categorised them with the most recent being the *stupa* or Buddhist period (R. Banerji 1923). At the bottom of the structure, he collected a soap-stone seal inscribed with a "one-horned quadruped". He recognized this seal as it was similar to two others recently recovered at Harappa by his colleague Daya Ram Sahni. Banerji collected two more seals at the first mound. Because the seals at Mohenjodaro were recovered in context from a layer below the *stupa*, Banerji concluded that they must, like the brick structure, belong to pre-Buddhist times.

The stratigraphic context was particularly important since similar seals had been recovered in the past but without any contextual data<sup>24</sup>. The situation was made more difficult because symbols inscribed on the seals were unlike any that Indian scholars had seen and the symbols could not be read like inscriptions on coins. Unable to read the script and previously collected out of their depositional context, archaeologists had not been able to date the seals. Coins were easily read and those collected at the *stupa* mound confirmed the culture-history in the Province. Stone tools, cores, clay and conch shell bangles, copper and bronze beads, as well as painted and funerary pots suggested to Banerji that a civilized people inhabited Mohenjodaro sometime not very long ago.

Banerji examined two other mounds at Mohenjodaro. He classified pottery from the mounds by their physical characteristics – red slip, white slip, and glazed. The *stupa* mound alone yielded the ‘superior’ glazed type. He noted the absence of Mohammedan coins from the mounds. He concluded that Mohenjodaro had been abandoned long before the eighth century A.D. when Mohammedans invaded Sind. Because of his familiarity with the local topography and because of his success in tracing dried river channels, Banerji concluded that Mohenjodaro was abandoned due to changes in the course of the Indus River. Dried channels west from the present channel supported Banerji’s proposition. Yet, he did not say when and how often the river changed courses. Nor did Banerji suggest how changes in settlement patterns related to river instability.

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<sup>24</sup> Marshall (1924: 47) pointed out in his report that Cunningham had collected seals at Harappa in 1875 and that J.L. Fleet had published a paper on seals in the British Museum’s collection in 1912.

Banerji identified burials on the mounds. He classified these remains as “Aryan post-cremation period urns”, cist, coffin and jar burials (1984: 114). Unlike the *stupa*, he did not use relative dating for the burials, nor were these investigations based on stratigraphic principles. Rather, Banerji described each as the historical record of contemporary peoples. Banerji thought that jar burials represented Munda customs, whereas urns with ashes at the site indicated predominant Hindu “post-cremation” customs (Banerji 1984: 115-116). Banerji further suggested diversity in urn shapes and sizes; he assumed continuity in diagnostic shapes and sizes through time. This implied that contemporary society was not very different than prehistoric times.

Banerji’s investigations then supported what many had believed about the credibility of the Vedas. Because the relative antiquity of archaeological finds at the ancient settlement generally accorded with the historical account, many Indian scholars and politicians accepted the civilization as theirs.

### ***The First World War and the ‘prehistoric civilization***

The Crown raised the ante during the First World War with increased political, economic, and military persuasion in Mesopotamia, relying heavily on Indian ground troops to secure oil-rich territories during the war (Jeffery 1984). At the same time, armed conflict broke out with the Afghan Amir in the tenuous North West Frontier, further stretching Indian army recruitment. Indian enthusiasm and support for the war waned as it drew longer than had been expected. Indians grew

increasingly dissatisfied with the Government of India's economic and foreign policies.

Simmering tension in the Province of Punjab reached boiling point when, in the spring of 1919, Imperial forces in Lahore and Amritsar attacked civilians protesting the infringement of their liberties. Hundreds of people gathered at Jallianwala Bagh in Amritsar, Punjab, to protest the Rowlatt Act, were fired upon by Imperial troops. This civil unrest compounded pre-existing tension in the Punjab as a result of the Ghadr agitation<sup>25</sup>.

The Rowlatt Act, proposed by the colonial government in 1919 following in the wake of the Russian Revolution, was to extend the restrictive wartime measures laid out in the *Defence of India Regulations Act* (1915)<sup>26</sup>. Implemented for the war and in the face of growing social and political unrest, the 1915 provision made anti-Imperial activities, including public rallies, punishable without appeal. The measures included censorship of the press, and holding special tribunals for prosecuting 'the King's enemies' (Ilbert 1917).

Following the loss of human life in Amritsar, nationalist leaders proclaimed that firing upon unarmed civilians was undeniable proof that the Crown was unjust, and that Europeans certainly were not culturally and morally superior to

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<sup>25</sup> The anti-imperialist and often aggressive Ghadr organization had its roots in the Pacific Coast Hindustan Association, created by Punjabi-speaking immigrants settled in the West coast of the United States and Canada. The Ghadr found support in the Akali Dal, an influential political organization in the Province of Punjab. For more on pre-Revolution concerns, including 'the Ghadr conspiracy' in India and intelligence gathering, see Popplewell (1995) *British Intelligence and the Defence of the Indian Empire 1904-1924* and Sarkar (1983) *Modern India, 1885-1947*.

<sup>26</sup> For context on this and the Constitution of India, see Brij Kishore Sharma (2009). The Rowlatt Act was not very unpopular amongst Indians and, as a result, was not implemented by the colonial government.



indigenous rulers. It was in this turbulent social and political climate that Marshall and his Officers undertook archaeological field studies along the Indus River.

### **Introducing Mohenjodaro**

The ancient civilization on the Indus was first announced in *The Times of London* in 1924 after the discovery, by a team of Survey archaeologists working in the Lower Indus, of seals bearing an unknown script and brickworks of an unknown age. Excavations at Mohenjodaro and at Harappa between 1923 and 1927 constituted the largest undertaking by the Archaeology Department in Crown-administered India. During the winter months, excavators from the Northern and Western Circles converged at the two sites, and enlisted up to 1200 labourers to dig for archaeological objects. Each archaeological officer was responsible for his section at the excavation site and submitted his report for the *Annual*, the Archaeological Survey's in-house publication. Marshall introduced the departmental publication when he took office in 1902. He oversaw both the administrative and popular dissemination of Survey's groundbreaking work in the 1920s. At that time, Marshall was the public face of archaeological field studies in India.

For Marshall and his colleagues, Mohenjodaro bore features like no other excavated site in Imperial India. In his popular writings, antiquities – particularly seals – evidenced “a widespread culture which must have flourished for many centuries in the plains of the Indus” (Marshall 1924). Thus, the lead excavator believed that culture diffused over territories. Mohenjodaro was a ‘flourishing’

brick city with roads, a shrine, and a royal palace, lying deep below an ancient site, all dating to a time before the Greeks came.

Previously, prehistoric research in the Provinces had revealed scattered stone tools, “cyclopean walls”, and cromlech burials, but none had a buried city. Seals inscribed with a script were unlike anything seen in India. Although Marshall and his Officers likened the seals to coins, they were unable to read the unusual markings on them. They remarked on brick tombs with grave goods as these were unlike the simple graves and cremation urns recovered from other sites. Excavators marvelled at similarities in painted pottery, ornaments, and decorative arts with those found at sites in Punjab and Baluchistan (Marshall 1926a).

In his public announcements, Marshall stressed similarities between engraved steatite seals collected from Mohenjodaro and those from Harappa. Marshall believed that the ancient civilization extended not only along the Indus but also further west of the river towards the politically sensitive Kingdom of Iraq. He thought that the culture at the two sites was part of a “much wider sphere” that included India, Persia, southern Iraq, and Central Asia and likely extended as far west as the Mediterranean (*The Times* 1924; Marshall 1926b: 49). Thus, he argued that similarities in material culture were key to the identity and extent of the civilization. He asserted that 400 miles between the sites added to the significance of the discoveries. This assumed there was an underlying unity across territories.

## **Archaeology for the public**

The relationship between the Archaeology Department and the public was a concern for Marshall. Wary of fanciful writing by the public on the department and its works, he had opted to present ongoing work as a regularly published government report rather than through popular publications (Marshall 1904). For most of his tenure and up until 1923, Marshall had not published the department's activities in popular journals. Thus, the sensational reports that Marshall published on Mohenjodaro and Harappa were a significant change in direction for the Survey. Marshall often released to popular journals, news on the department's investigations up until the publication of his final three-volume report in 1931. As a result of public interest, popular articles on archaeology were a feature in newspapers, long before Indian independence in 1947.

The issue on scientists and popular publications is multifaceted. There are conflicting interpretations of Marshall's approach. Some suggest that Marshall published popular articles to garner financial support for his department (Lahiri 2006). They argue that these efforts were necessary because of financial stringency at that time (Ray 2008: 19). Other scholars remark that Marshall's policy on publishing annual reports was unlike that of his predecessors. They suggest that his foresight in organizing the department's publications encouraged archaeological interest and even promoted foreign scholarship on Indian archaeology (Chakrabarti 1988: 128).

The excitement generated by the Survey's archaeological investigations influenced the practice of archaeology in Imperial India. The vista that

Mohenjodaro opened presented new opportunities and challenges. Marshall's public exhibition of the civilization encouraged both Indian interest and foreign excavators eager to harvest the "limitless field" (Marshall 1926a). Up until that time, Provincial Governments had discretion over how the *Preservation Act* (1904) was interpreted and locally implemented. In practice, the measures emphasized the conservation of standing monuments; thus, so long as the monument was safe from damage, local excavators were free to dig as they chose. They were at liberty to decide what to do with unearthed materials (Marshall 1930a). This flexible arrangement allowed Survey Officers to purchase from local excavators antiquities that were of greatest interest to the Archaeology Department.

The scenario was in contrast to that in the Kingdom of Iraq. Just as the *Illustrated London News* brought its readers Howard Carter's Tutankhamen, C. Leonard Woolley gave them the Tower of Babel in the Iraqi ziggurat (Woolley 1924). Woolley was lead excavator at Ur. He often had published his findings in popular journals over the twelve years of his excavations at the site. Financed by the British Museum in London and the University Museum in Philadelphia, Woolley was trusted to act in the best interests of the Museum and to acquire unique pieces for display. Future funding, if not annual allowances, had depended on the project leader delivering these goods. This was a source of intense rivalry between field archaeologists prior to the professionalization of their discipline.

The Survey's work appealed to the Indian nationalist. Where the department had conducted its excavations on a tight budget in the past, no longer would this be the case. During its meeting in February 1925, the Education Department

announced an additional 80,000 Rs/£ 5,333 for the excavations (*The Times* 1925). At the same time, facing increasing pressure from eager foreign archaeologists, Marshall proposed two amendments to Section 20 of the *Preservation Act*. The first extended the protection of “ancient monuments” to include virtually any place that might yield buried antiquities, and the second vested legislative authority on excavations and on the ownership of antiquities in the Governor General in Council (Marshall 1930a)<sup>27</sup>. Much to the disadvantage of local communities and irk of Provincial authorities, the amendments brought known sites and as yet unknown places of interest into direct regulation of the government. Antiquities were at the core of Marshall’s amendments and from that point on, scholars weighed material culture by its “national importance” (Marshall 1930a).

### ***Indus = Indo-Sumerian?***

Was Mesopotamia or India the cradle of West Asian culture? That was the question posed when Marshall unveiled Mohenjodaro in *The Times* in 1924. The sensational announcement had its place. Woolley had been excavating at Ur and had recovered spectacular archaeological material (Winstone 1990).

Academic dialogue raged in popular journals on the origin and nature of the Indo-Sumerian civilization. Within days of Marshall’s *Illustrated London News* piece, Cyril Gadd and Sidney Smith, both from the British Museum, and both working with Woolley at Ur, remarked on the newly discovered Indo-Sumerian

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<sup>27</sup> The two are amendments to Section 20 of the 1904 Ancient Monuments Preservation Act. The second amendment came into effect in 1932.

civilization. This followed a publication by Archibald Sayce, eminent Assyriologist and Professor at Oxford University. He had remarked on similarities in the script on seals from Babylonian, Elamite, and Indus sites (Sayce 1924).

At that time, influential British scholars believed that foreigners had made the spectacular monuments that Woolley had recovered in Ur. They thought that ancient Sumerians were distinct from local Iraqis in their language, institutions, and race. Akin to Indo-Aryans who had migrated into India not long ago, scholars argued that the ancient Sumerians were intrusive and that they had originated from outside.

The view assumed that Sumerian culture had remained largely unchanged since ancient times and that the Aryans were influential in the development of ancient Ur. Scholars claimed that neither Ur nor Mohenjodaro were local developments. For example, Gadd and Smith (1924) pointed to apparent similarities in material culture recovered at Ur and Mohenjodaro. They suggested a close kinship between the two sites. They argued that during the Third Dynasty, Ur and Mohenjodaro, “pictographs of bulls” on seals were identical, as were brickworks (Gadd and Smith 1924: 614). They concluded that these similarities could not be explained by independent innovation. Thus, between 3000 and 2800 B.C., Indus inhabitants had borrowed Sumerian culture, including its script and art. In the absence of datable material culture, and absolute dating, these relative dating methods gave archaeologists provisional dates for Mohenjodaro. Both authors subsequently contributed to Marshall’s edited volumes on Mohenjodaro and the Indus civilization (Gadd [1931] 1973; Smith [1931] 1973).

Marshall instead argued that the ancient culture had deep roots in the Indus. He put forth the idea that in the Indus valley lay the root of Babylonian, Assyrian, and Western Asian culture (*The Times* 1924). It was precisely to recover the extent of the Indo-Sumerian civilization that Marshall sent his officer, Harold Hargreaves, westward for an archaeological survey in Kalat State and Baluchistan (Hargreaves 1927).

### ***Complete independence and the Indian civilization***

During and after the First World War, the Crown weighed the cost of maintaining the tenuous Afghan-North West Frontier frontline. This in turn led to the suggestion for cost-effective alternatives to Indian troops for missions abroad, including investment in a Royal Air Force. As a result of those investments, the RAF conducted the first airborne surveys along the Indus River in 1925 (Marshall 1927: 1931).

By the close of the 1920s, Indian protesters roared for *swaraj* (self-rule). Now armed with material evidence for their golden age, Indian elites no longer pursued the Government for a voice in decision-making. Leading politicians sought representative government. A key issue for Indian politicians was joint or separate electorates for ethnic and linguistic groups. Leading political organizations, including the Muslim League, Communist Party, Hindu Mahasabha, Akali Dal and Khalsa Diwan vied to secure social and political liberties for their supporters. The situation was tense as the overwhelmingly Hindi-speaking Indian National

Congress had declared ‘*poorna swaraj*’ or complete independence from the Crown. Thus, matters of Indian freedom were immediate and pressing.

The wave of anti-imperialism and pronounced nationalism had a highly racialized and exclusionary overtone. Ironically, the government undertook measures to encourage Western science at a time when Indians increasingly thought in terms of an unbroken indigenous scientific tradition dating several millennia<sup>28</sup>. It was in this context that understandings of the ancient civilization took a surprising turn.

### **An indigenous origin for the Indus civilization**

In his 1928 publication in *The Times*, Marshall discarded the term “Indo-Sumerian” and publicly replaced it with “Indus” civilization (Marshall 1928). Until then, Marshall had argued that the culture of the Indus had a close relationship with the Sumerians. Their accord was critical in shaping the early study of the civilization. Marshall had explained resemblances in material culture as a common, single source of origin. He thought in terms of an Indus-based empire with a cultural wingspan extending to the Mediterranean. Emphasizing similarities in seals, he relied on archaeology to construct a connected history of the Indo-Sumerian civilization at Mohenjodaro and Harappa.

By the conclusion of the department’s excavations in 1927, Marshall had established the indigenous Indus civilization. He christened it in public the following year (Marshall 1928; 1930b: 53). Marshall explained that his

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<sup>28</sup> See David Arnold (2000), especially chapter 6, on national science in the 1930s and C.V. Raman’s Noble Prize for physics.



excavations showed a long presence of civilization in India. The mechanism for this continuity suggests a reorganization of Indus studies.

Marshall suggested the separate civilization on three counts: [1] Mohenjodaro and Harappa were large cities with multiple strata; [2] similarity in material culture at the widely spread sites; and [3] their great distance from the sea<sup>29</sup>. All three combined with the surface discovery of seals, proved that a culture akin to, if not more advanced than the Sumerian and Egyptian civilizations had developed along the Indus. This implied that Indus culture was largely homogenous and that idiosyncrasies in material culture were a result of traditions specific to locality.

Marshall had once argued that resemblances in the Indus and Sumerian material culture supported the theory of a single civilization. However, he now proposed that there were two separate civilizations. Similarities in material culture at Mohenjodaro and Ur were now proof that the indigenous civilizations had “intimate commercial and other intercourse” (Marshall 1928: 13). Yet the direction of this exchange remained an issue – was Indus, or Sumer, on the receiving end – or was their exchange equal? He concluded that the Indus civilization was “not an incipient civilization, but one already age-old and stereotyped on Indian soil, with many millennia of human endeavour behind it” (Marshall [1931] 1973a: viii). The Indus people, Marshall proclaimed in his final report, possessed a “highly developed culture in which no vestige of Indo-Aryan influence is to be found” ([1931] 1973a: v). He stressed that the copper and

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<sup>29</sup> On this point see Suniti Kumar Chatterji (1924) who argued that west Asiatic ‘elements’ were in the oldest Indo-Dravidian culture. This, he explained, was a result of Dravidian sea faring and trade with the Mediterranean from ancient times. In his report on Mohenjodaro, Ernest Mackay (1938) also suggested similarities between west Asia and the Indus and remarked on sea trade between Indus, Elam and Sumer.

bronze-using Indus people predated the iron-using Indo-Aryans and that considerable time had passed between the Iron Age and the Copper-Bronze Age ([1931] 1973c: 106-108). In this conceptual framework, both an indigenous civilization and later settlers co-existed.

Marshall's interpretation of the Indus civilization assumed a direct correlation between contemporary and prehistoric societies. He thought in terms of a connected history and relied on ethnography to explain the archaeological record. He explained that material evidence of the Indus people gave insight on "popular, devotional and superstitious" Hinduism, whereas the "rational" and "esoteric ideas" such as those in later Hinduism, often attributed to Aryans had left no traces (Marshall [1931] 1973b: 77). This supported the view that the pre-Aryan religion was the "linear progenitor of Hinduism" ([1931] 1973b: 77).

On practices of the 'jungle tribes' Marshall argued that they, as in prehistoric times, co-existed with Hindus. This was possible because Hinduism "has ever been ready to admit within its fold any and every kind of teaching, creed or cult" ([1931] 1973b: 78). But some had never entered the fold ([1931] 1973b: 51). Thus, the jungle tribes or non-Aryans preserved the "cruder and more elemental features of the pre-Aryan religion" (ibid.). At the same time, Marshall drew attention to 'public works' or conveniences for ordinary Indus people. He emphasized the uniqueness of the "Great Bath" at Mohenjodaro, built for many to use. This was contrasted with the wasteful and opulent temples, palaces and tombs in prehistoric Egypt and Ur (Marshall [1931] 1973a: vi).

There are competing views of these developments. Some scholars have remarked on the 'provisional' nature of Marshall's appellation (S. Guha 2005:

407; Possehl 2003: 12), suggesting there is little to its subsequent modification. Other scholars find that the change from “Indo-Sumerian” to “Indus” civilization was a result of the gradual accumulation of archaeological data (Lahiri 2006: 325).

Another issue is the interpretation of Marshall’s tenure as Director General. Many scholars find this “period” as the “most glorious” during which government-sponsored archaeology grew (Chakrabarti 1982: 334; Lahiri 2006: 290), whereas other scholars suggest Marshall’s role in introducing large-scale excavations (Ray 2008: 18), and his contributions to the organizational structure of Indian archaeology (Roy 1961). Interestingly, archaeological research and contributions by subsequent Directors General, before Mortimer Wheeler’s appointment in 1944, are often dismissed as “of no academic interest” (Chakrabarti 1982: 335). Some Indian scholars describe archaeological research in the intervening years as sporadic and aimless<sup>30</sup> (Roy 1961: 140).

But how did this indigenous Indus civilization relate to known Indian history, which commenced with the dynamism and creativity of the Aryans?

Influential Indian scholars suggested that Dravidians, and other non-Aryans in India descended from ‘dark-skinned’ aborigines. Not only were they the original ‘races’ who settled along the Indus, they also had built the magnificent cities at Mohenjodaro and Harappa when Aryans or the fair-skinned Indo-Europeans were a ‘backward race’ (Chatterji 1924). Thus, the Aryans did not bring civilization;

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<sup>30</sup> Although Mackay published his report in 1938 and Vats his report on Harappa in 1940.

rather, they had destroyed it. In so doing, indigenous Indians had become subjugated and were oppressed by the invaders. The once flourishing civilization had become poor, and shackled by caste.

Scholars and policy makers who abhorred imperialism generally accepted these views. This included Jawaharlal Nehru, influential member of the Indian National Congress, and Independent India's first Prime Minister. They often thought of the Indus civilization in terms of a glorious golden age when India was independent, peaceful, technologically-advanced and idyllic. This view of the Indian past was juxtaposed to the volatile, poor and oppressed colonial India that they now fought to free from the Crown's clutches.

These views influenced Indian prehistory. Scholars influenced by Marxism often focused on the marginalization of non-elites, as well as, social stratification and agrarian relations (U. Singh 2008). Indian historians had also thought in terms of simple prehistoric societies, such that territoriality and social inequalities emerged with the practice of large-scale agriculture. Because scholars believed that caste was introduced by the Aryans, and because this social ideology more than others, had characterized Indian society, the examination of these relations was of greatest interest (Mitra 1927: 14). That this issue overshadowed others, including social and political rights of ethnic and linguistic minorities, is unlikely to have been a coincidence. At the same time, scholars often thought in terms of biological continuity and they promoted the racialized study of social groups. Indian anthropologists studying skeletal remains often emphasized ethnicity. They assumed group endogamy and often sought stable traits that would assist identification of races in the archaeological record (Mitra 1927: 379).

The study of archaeological material then was often cast within this historical framework. ‘Pre-history’ – that is, the time before the Indus civilization and before the Vedas – was put aside in favour of urgent concerns over ‘caste relations’. Because prehistory was synonymous with pre-agricultural societies and because prehistoric society was thought to be simple and idyllic, its study was made to conform to Indian history. This may explain the highly descriptive nature of archaeological research during the terminal years of Crown administration.

### ***Conclusion***

This chapter aimed to examine social and political influences on understandings of the Indus Valley civilization prior to the creation of Independent India in 1947. Growing interest in the politics of knowledge and the relationship between nationalism and archaeology presented an opportunity to discuss conceptual issues in Indian archaeology. I examined the announcement of the ‘Indo-Sumerian’ civilization and its subsequent modification to ‘Indus’ civilization. The change suggests a reorganization of the study of ancient India during the Crown’s administration.

Colonial interpretations of the civilization were often reinterpreted by Indian scholars. This suggests a deeper influence of values and beliefs on the practice of Indian archaeology than has been assumed. Indian scholars and policy makers believed they had recovered their indigenous golden age, and they rejected claims by Western scholars that the civilization was merely an off-shoot of a more

advanced civilization. It was precisely this nationalist reaction that brought Indians the independence they wanted.

Scholars often assumed cultural continuity between contemporary and prehistoric groups when it came to the interpretation of archaeological data. These methods served colonial interests as well as Indian ones. British scholars assumed that the Indian past was best explained by the migration of Indo-Europeans who brought creativity and dynamism into India. These views were reinterpreted by some Indian scholars as Vedic origins for Hindu civilization. This perspective influenced the interpretation of archaeological data.

Indian historiography that emerged in the wake of colonial restructuring in the mid-nineteenth century emphasized ethnic and linguistic groups. Ethnocentric views often celebrated the progress of Hindus in a unilinear fashion, while simultaneously highlighted the absence of creativity amongst aboriginal peoples. These groups were often thought to be static and unchanging. They were often considered simple and were thought synonymous with prehistoric cultures that had gone extinct. Thus, when archaeological data pointed to a more complex prehistoric past, scholars often attributed material culture to dynamic and creative immigrants or invaders. These perspectives justified social, economic, cultural and political marginalization.

Because they believed in the credibility of the Vedic texts, and because scholars believed that they were recovering cultural achievements of historical groups, archaeologists often neglected examination of internal dynamics as explanations for change. Their commitment to Vedic origins also meant that archaeologists interpreted archaeological data as a record of caste-relations

between Aryans and pre-Aryans. These views are being challenged by archaeologists.

## ***References***

- Anderson, Clare. 2007. *Indian Uprising of 1857–8: Prisons, Prisoners and Rebellion*. New York: Anthem Press.
- Arnold, David. 1998. *Famine: Social Crisis and Historical Change*. New York: Blackwell.
- . 2000. *Science, Technology and Medicine in Colonial India* vol 3, part 5, of *The New Cambridge History of India*. New York: Cambridge University Press.
- Attwood, Donald. 2005. Big Is Ugly? How Large-Scale Institutions Prevent Famines in Western India. *World Development* 33 (12): 2067-2083.
- Babington, J. 1820. Description of the Pandoo coolies in Malabhar. *Transactions of the Literary Society of Bombay* 3: 324-330.
- Bandyopadhyay, Śekhara. 2004. *From Plassey to Partition: A History of Modern India*. New Delhi: Orient Longman Private Limited.
- Banerji, Rakhaladas. 1923. Mohen-jo-daro. In *Annual Report of the Archaeological Survey of India, 1922-1923*. David B. Spooner, ed., pp. 102-104. Calcutta: Government of India Central Publication Branch.
- . [1934] 1939. *Prehistoric Ancient and Hindu India*. Bombay: Blackie and Son (India) Limited.
- . 1984. *Mohenjodaro: a forgotten report*. Varanasi: Prithivi Prakashan.
- Barrier, Norman G. 1967. The Arya Samaj and Congress Politics in the Punjab, 1894-1908. *The Journal of Asian Studies*, 26 (3): 363-379.
- Basalla, George. 1967. The Spread of Western Science. *Science*, New Series 156



- (3775): 611-622.
- Bayly, Christopher A. 1988. *Indian Society and the Making of the British Empire*. New York: Cambridge University Press.
- Chakrabarti, Dilip K. 1982. The development of archaeology in the Indian subcontinent. *World Archaeology*, 13 (3): 326-344.
- . 1988. *A History of Indian Archaeology from the beginning to 1947*. New Delhi: Munshiram Manoharlal Publishers Pvt. Ltd.
- . 2000. Colonial Indology and identity. *Antiquity* 74: 667-671.
- . 2003. *Archaeology in the Third World: a history of Indian archaeology since 1947*. New Delhi: D.K. Printworld.
- Chatterji, S. K. 1924. Dravidian origins and the beginnings of Indian civilization. *The Modern Review* 36: 665-666.
- Coningham, Robin and Nicholas Lewer. 2000. Archaeology and identity in South Asia. *Antiquity* 74: 664-667.
- Cooper, Frederick. 2005. *Colonialism in Question: Theory, Knowledge History*. Berkeley: University of California Press.
- Court, A. 1834. Further information on the topes of Manikyala, being the translation of an extract from a manuscript memoir on ancient Taxila. *Journal of the Asiatic Society of Bengal* 3: 556-562.
- Cremo, Michael A. 2008. Excavating the eternal: an indigenous archaeological tradition in India. *Antiquity* 82: 178-188.
- Cunningham, Alexander. 1871. *Archaeological Survey of India: Four Reports made during the years 1862-63-64-65*. Volume I. Simla: Government Central Press.

- Curzon, George N. 1907. *Frontiers*. Oxford: Clarendon Press.
- Defence of India Act 1915*. 1915. Calcutta: Government of India.
- Dutt, Romesh C. 1889. *A History of Civilization in Ancient India, Based on Sanscrit Literature*. 3 vols. Calcutta-London:Thacker, Spink and Co.; Trübner and Co.
- . 1893. *A History of Civilization in Ancient India, Based on Sanscrit Literature*. 3 vols. Calcutta-London:Thacker, Spink and Co.; Trübner and Co.
- . 1900. *Open Letters to Lord Curzon on Famines and Land Assessments in India*. London: Kegan Paul, Trench, Trubner and Co., Ltd.
- Edney, Matthew H. 1997. *Mapping an empire: the geographical construction of British India, 1765-1843*. Chicago: University of Chicago Press.
- Gadd, C. J. [1931] 1973. Sign-list of Early Indus script: Part I, Some external features of writing. In *Mohenjo-daro and the Indus civilization*. Volume 2. John H. Marshall, ed. pp. 406-414. New Delhi: Indological Book House.
- Gadd, C. J. and Sidney Smith 1924. “The new link between Indian and Babylonian civilizations”. *Illustrated London News* Oct. 4, 614-616.
- Guha, Ramachandra. 2007. *India after Gandhi: the history of the world’s largest democracy*. London: Pan Books (e-book MOBI format).
- Guha, Sudeshna. 2005. Negotiating evidence: history, archaeology and the Indus Civilization. *Modern Asian Studies* 39 (2): 399-426.
- Gupta, Narayani. 2000. From Architecture to archaeology: the momentualising of Delhi’s history in the nineteenth century. In *Perspectives of mutual encounters in South Asian history, 1760-1860*. Jamal Malik, ed. pp. 49-64. Boston: Brill.
- Gupta, Swaraj P. 1995. *The ‘Lost’ Saraswati and the Indus civilization*. Jodhpur:

- Kusumanjali Prakashan.
- Habib, Irfan. 2001. *People's History of India - Part 1: Prehistory*. Aligarh: Aligarh Historians Society and Tulika Books.
- Hargreaves, Harold. 1927. Baluchistan. In *Annual Report of the Archaeological Survey of India, 1924-1925*. J. F. Blakiston, ed., pp. 50-60. Calcutta: Government of India Central Publication Branch.
- Harrison, Mark. 2005. Science and the British Empire. *Isis* 96 (1): 56-63.
- Hasan, Khurshid. 1962. Pakistan-Afghanistan Relations. *Asian Survey* 2 (7): 14-24.
- Hibbert, Christopher. 1978. *The Great Mutiny: India 1857*. London: Penguin Books.
- Huxley, Thomas H. 1869. On the Ethnology and Archaeology of India. *The Journal of the Ethnological Society of London* New series I.: 89-93.
- Ilbert, Courtney. 1917. British India. *Journal of the Society of Comparative Legislation* New Series 17: 132-139.
- Jones, Kenneth W. 1976. *Arya dharm: Hindu consciousness in 19th-century Punjab*. Berkeley: University of California Press.
- Jeffery, Keith. 1984. *The British army and the crisis of empire, 1918-22*. Manchester: Manchester University Press.
- Jha, Vivekanand. 1991. Social Stratification in Ancient India: Some Reflections. *Social Scientist* 19 (3/4): 19-40.
- Kirk, William. 1960. The Sino-Indian frontier dispute: a geographical review. *Scottish Geographical Magazine* 76 (1): 3-13.
- Kohl, Philip L. and Clare Fawcett. eds. 1995. *Nationalism, politics and the*

- practice of archaeology*. New York: Cambridge University Press.
- Lahiri, Nayanjot. 1997. John Marshall's Appointment as Director-General of the Archaeological Survey of India: A Survey of the Papers Pertaining to His Selection. *South Asian Studies* 13 (1): 127-139.
- . 2006. *Finding Forgotten Cities: how the Indus civilization was discovered*. New York: Seagull Books.
- Mackay, Ernest J. H. 1938. *Further excavations at Mohenjo-daro*. 2 Volumes. New Delhi: Manager of Publications.
- Marshall, John H. 1904. Introduction. In *Annual Report of the Archaeological Survey of India, 1902-1903*. John Marshall, ed., pp. 1-13. Simla: Government of India Press.
- . 1923. "Ancient cities of Sind: To the Editor of the Times". *The Times of London* Jun. 29, 10.
- . 1924. "First light on a long-forgotten civilization: new discoveries of an unknown prehistoric past in India". *Illustrated London News* Sept. 20, 528-532, 548.
- . 1926a. "Prehistoric India – Sind and Punjab Discoveries: A Limitless Field". *The Times of London* Feb. 26, 15-16, 18.
- . 1926b. Harappa and Mohenjo-daro. In *Annual Report of the Archaeological Survey of India, 1923-1924*. John Marshall, ed., pp. 47-51. Calcutta: Government of India Central Publication Branch.
- . 1927. The prehistoric civilization of the Indus. In *Annual Report of the Archaeological Survey of India, 1924-1925*. John Marshall, ed., pp. 60-63. Calcutta: Government of India Central Publication Branch.

- . 1928. “India of 5000 years ago, Mohenjo-daro, the excavated cities”. *The Times of London* Jan. 4, 13.
- . 1930a. Introduction. In *Annual Report of the Archaeological Survey of India, 1926-1927*. John Marshall, ed., pp. xv-xix. Calcutta: Government of India Press.
- . 1930b. The Indus culture. In *Annual Report of the Archaeological Survey of India, 1926-1927*. John Marshall, ed., pp. 51-60. Calcutta: Government of India Press.
- . [1931] 1973a. Preface. In *Mohenjo-daro and the Indus civilization*. Vol 1. John H. Marshall, ed., pp. v-x. New Delhi: Indological Book House.
- . [1931] 1973b. Religion. In *Mohenjo-daro and the Indus civilization*. Vol 1. John H. Marshall, ed., pp. 48-78. New Delhi: Indological Book House.
- . [1931] 1973c. The Age and Authors of the Indus Civilization. In *Mohenjo-daro and the Indus civilization*. Vol 1. John H. Marshall, ed., pp. 102-112. New Delhi: Indological Book House.
- Mitra, Paanchanan 1923. *Prehistoric India: its place in the world's cultures*. Calcutta: Calcutta University.
- . 1927. *Prehistoric India: its place in the world's cultures*. Calcutta: Calcutta University.
- Mitra, Rajendralal 1881. *Indo-Aryans: contributions towards the elucidation of their ancient and medieval history*, 2 Vols. London-Calcutta: Edward Stanford; W. Newman and Co.
- “Political divisions of the Indian Empire”. 1909. [map] [no scale]. In *The Imperial Gazetteer of India*. New York: Oxford University Press. Retrieved

- from [http://upload.wikimedia.org/wikipedia/commons/d/d1/Political\\_Divisions\\_of\\_the\\_Indian\\_Empire%2C\\_1909.jpg](http://upload.wikimedia.org/wikipedia/commons/d/d1/Political_Divisions_of_the_Indian_Empire%2C_1909.jpg) (March 2012).
- Popplewell, Richard J. 1995. *British Intelligence and the Defence of the Indian Empire 1904-1924*. Portlnd: F. Cass.
- Possehl, Gregory L. 2003. *The Indus Civilization: a contemporary perspective*. Lanham: AltaMira Press.
- Qureshi, S. M. 1996. Pakhtunistan: The Frontier Dispute Between Afghanistan and Pakistan. *Pacific Affairs* 39 (1/2): 99-114.
- Rai, Lala L. 1929. Europeanization and the Ancient Culture of India. *Annals of the American Academy of Political and Social Science* 145(2): 188-195.
- Ratnagar, Shereen. 2004. Archaeology at the heart of a political confrontation. *Current Anthropology* 45(2): 239-259.
- . 2007. The Aryan Homeland Debate in India. In *Selective Remembrances: archaeology in the construction, commemoration and consecration of national pasts*. Philip L. Kohl, Mara Kozelsky, Nachman Ben-Yehuda, eds., pp. 349-378. Chicago: The University of Chicago Press.
- Ray, Himanshu P. 2008. *Colonial Archaeology in South Asia: the legacy of Sir Mortimer Wheeler*. New York: Oxford University Press.
- Risley, Herbert H. and E. A. Gait. 1903. *Census of India 1901: Appendices*. 3 vols. Vol. 1. Calcutta: Superintendent of Government Printing.
- Roy, Sourindranath. 1961. *The Story of Indian archaeology, 1784-1947*. New Delhi: Archaeological Survey of India.
- Rubin, Barnett R. 2007. Saving Afghanistan. *Foreign Affairs* 86 (1): 57.
- Sankalia, Hasmukh D. 1962. *Indian archaeology today*. Bombay: Asia Publishing

- House.
- Sarkar, Sumit. 1983. *Modern India, 1885-1947*. Columbia, MO: South Asia Books.
- Sayce, Archibald H. 1924. "Remarkable discoveries in India". *Illustrated London News* Sept. 27, 566.
- Schmid, Rev B. 1847. Remarks on the Origin and Languages of the Aborigines of the Nilgiris, suggested by the papers of Captain Congreve and the Rev. W. Taylor on the supposed Celto-Scythic Antiquities in the South of India. *Journal of the Bombay Branch of the Royal Asiatic Society* 50-53.
- Sharma, Brij K. 2009. *Introduction to the Constitution of India*. 5<sup>th</sup> ed. New Delhi: Asoke K. Ghosh, PHI Learning Private Limited.
- Singh, Upinder. 2004. *The Discovery of ancient India: early archaeologists and the beginnings of Archaeology*. New Delhi: Permanent Black.
- . 2008. *A History of Ancient and Early Medieval India: From the Stone Age to the 12th Century*. Toronto: Pearson Education Canada, Ltd.
- Smith, Sidney. [1931] 1973. Sign-list of early Indus script: Part II, Mechanical nature of the early Indus writing. In *Mohenjo-daro and the Indus civilization*. Volume 2. John H. Marshall, ed., pp. 415-422. New Delhi: Indological Book House.
- Strachey, John. 1888. *India*. London: K. Paul, Trench.
- Taylor, P. Meadows. 1851. Ancient Remains at the Village of Jiwarji near Ferozabad on the Bhima. *Journal of the Bombay Branch of the Royal Asiatic Society* [3.2] 179-196.
- . 1862. Description of cairns, cromlechs, kistvaens, and other Celtic,

- Druidical or Scythian monuments in the Dekhan. *Transactions of the Royal Irish Academy* XXIV: 329-362.
- . 1869. On Prehistoric archaeology of India. *Journal of the Ethnological Society New Series* 157-181.
- The Ancient Monuments Preservation Act*. 1904. Retrieved from <http://www.helplinelaw.com/docs/THE%20ANCIENT%20MONUMENTS%20PRESERVATION%20ACT,%201904> (May 2012).
- The Times of London*. 1843. “The Cabul Disaster: the committee appointed”. May 8: 4.
- . 1923. “Ancient cities of Sind: Buddhist shrine excavated, remarkable finds”. June 25: 13.
- . 1924. “Important finds in India: Possible link with Sumerians”. December 10: 13.
- . 1925. “Indian Excavations”. February 3: 11.
- Trigger, Bruce G. 1984. Alternative Archaeologies: Nationalist, Colonialist, Imperialist. *Man* 19 (3): 355-370.
- . 1989. *A History of Archaeological Thought*. New York: Cambridge University Press.
- Varma, Supriya and Jaya Menon. 2010. Was there a temple under the Babri Masjid? Reading the archaeological ‘evidence’. *Economic and Political Weekly* XLV (50): 61-72.
- Wallerstein, Immanuel M. 2004. *World-systems analysis: an introduction*. New York: Duke University Press.
- Winstone, Harry V. F. 1990. *Woolley of Ur: the life of Sir Leonard Woolley*.



London: Secker and Warburg.

Woolley, C. Leonard. 1924. "A second 'Tower of Babel': the 'house of the Mountain' at Ur". *Illustrated London News* October 25: 780-781.

Županov, Ines G. 2005. *Missionary Tropics: The Catholic frontier in India (16th-17th Centuries)*. Ann Arbor: The University of Michigan Press.

## **Chapter 4:**

### **Why does Sanghol matter? Political crisis and national archaeology in postwar India**

The practice of archaeology in non-Western contexts is sometimes thought to have developed in isolation. In their study of non-Western archaeologies and histories, Peter Schmidt and Thomas Patterson (1995: 3), remark that Third World archaeologists<sup>1</sup> “often work in isolation and are unaware of allies elsewhere”. Furthermore, they suggest that some archaeologists, particularly North American ones, are “unreceptive to and uninfluenced by anthropological perspectives and practices” (1995: 1), and that this situation is “paradoxical” since “one of the tenets of North American archaeology is that archaeology is anthropology”. These issues are compounded by the “absence of a common language and mutually respected methodologies among First and Third World archaeologists” (Schmidt and Patterson 1995: 2). Yet while these efforts shed light on the sociology of science, they obscure the dual influence of geopolitical factors and the desire for social and political stability in national contexts on the way scientists carry out their studies.

Some scholars observe that archaeology in the Third World, especially in former colonies, differs from the practice of archaeology in the First World. In the Indian context, Dilip Chakrabarti (2003: 216) contends that contemporary

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<sup>1</sup> Schmidt and Patterson (1995: 1) consider the Third World in “plurality” such that the term refers not only to countries, but also to “Native Americans whose nations have treaties with the United States and for African Americans whose ancestors were enslaved and brought to the United States against their will”.

practices show “uninterrupted continuity between the colonial and post-Independence situations” such that “government regulations controlling archaeological research” (2003: 213) have increased in Independent India. Whereas these views give insight on the influence of state-oriented organizations on archaeological research, they obscure the relationship between local communities – where archaeological field studies often take place – and state-oriented institutions and underestimate the role of individuals in the preservation of cultural heritage and the interpretation of archaeological data.

B. M. Pande (2010), a former director of the Archaeological Survey of India, which I will call the Survey – the national department for archaeology and heritage legislation – has remarked that Sanghol is “one of the most important sites not only in the Punjab but in the subcontinent”. In its initial report on excavations at Sanghol in 1984, the Punjab Department of Cultural Affairs, Archaeology and Museums described its finds as “epoch making” and the “biggest discovery of the century in the field of Indian archaeology”. Yet in his assessment of Sanghol in the 1950s, Survey archaeologist Yajna Datta Sharma, henceforth Y. D. Sharma, remarked that an excavation there would only confirm the sequence of occupation at Rupar, an archaeological site roughly twenty-five kilometers north, which he had attributed to the ‘Harappan’<sup>2</sup> culture. Y. D.

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<sup>2</sup> Harrapa is an Indus Valley site which was excavated in the 1920s by Survey Officer Daya Ram Sahni. R.F. Starr (1941) first employed the term ‘Harappan’ in his examination of the pottery recovered at the site. Starr believed, as many Indian archaeologists had, that culture remained unchanged for long periods of time, and that pottery decoration served a ritualistic function (1941: 11). Archaeologists often conflated language with material culture, and they thought of cultures in the Indus Valley in terms of a branching phylogeny, in which the Harappan was the ‘parent’ culture.

Sharma recommended his officers excavate no more than “a small shaft to ascertain the sequence” at Sanghol<sup>3</sup> (NAI 1962).

Located 200 km from the Pakistan-India frontline, Sanghol was the scene of excavations by Ganga Bishan Sharma, his Department, the Survey and the community to recover over a hundred stone sculptures, and other material culture dating to the ‘Kushan’<sup>4</sup> period. These investigations in the mid-1980s, renewed and expanded prior ones carried out by S. S. Talwar and R. S. Bisht for the Punjab Department<sup>5</sup> (Michon 2010). In the late 1960s and early 1970s, Talwar and Bisht established the culture history or sequence of occupations at the site based on pottery, tools, and structures (Talwar 1975: 14-15). They opened trenches in five specific places and these were the basis for subsequent investigations. Their annual excavation summaries were published in the Survey’s in-house journal *Indian Archaeology – a Review*. Despite their extensive work at Sanghol, Talwar and Bisht did not characterize the site as critically important for Indian archaeology, nor did the Survey seek to carry out field studies there. Thus, the recovery between 1984 and 1990 was not the only one reported to the Survey, nor was it the first to identify a Buddhist *stupa*, sculptures, coins and seals.

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<sup>3</sup> I will refer to archived material at the National Archives of India, New Delhi, India as NAI. The documents are files from the Ministry of Culture, or Ministry of Education and Culture. In the cited document, Survey officers discuss how to protect the “ancient site called Sanghol” and describe previous archaeological studies in this community. The record shows discontinuity in investigations. The document sheds light on views about the preservation of cultural heritage, and on the relationship between local communities and archaeologists.

<sup>4</sup> Scholars often think of Kushans or Indo-Scythians as a historical group that invaded the northwest of India (Margabandhu 1971). British historian Vincent A. Smith (1919: 127) remarked that Yueh-chi or Scythians were a historical nomadic group that had lived north of the Hindu Kush. Scholars thought of the Kushan ‘clan’ or ‘sept’ as invaders who travelled south of the Hindu Kush, through Kabul and Taxila. This study of ancient India was based on epigraphy and numismatics, and it was of greatest interest to Indian scholars up until the recovery of the Indus Valley civilization in the 1920s.

<sup>5</sup> I interviewed R. S. Bisht in 2009 and asked how and why he chose Sanghol for investigation. He explained that his thesis supervisor had suggested the site.

Yet, in 1984, several Indian archaeologists proclaimed the site's significance and drew public attention to their archaeological study. Sculptures recovered from Sanghol were prominently featured in the Festival of India exhibition held in Washington, D.C. in 1985 (Guha-Thakurta 2007). For example, Indian archaeologist, Swarajya Prakash Gupta<sup>6</sup> (1987) interpreted Sanghol as a "meeting place" for the ancient culture of Gandhara – situated northwest of the Indus River – and the "Indian culture"<sup>7</sup> of the Ganges Valley. Scholars who study art history and architecture consider Gandhara to have been administered by ancient Greeks (Marshall 1960). They often think of the Indus River as the eastern extent of Alexander's expeditions<sup>8</sup>.

Scholars believe the ancient cultures co-existed, yet they do not have a good understanding of their relations (Margabandhu 1971: 2). Why did archaeologists believe Sanghol to be of critical importance in the mid-1980s? What methods did Indian archaeologists employ to show Sanghol's importance? What do their approaches tell us about the practice of national archaeology?

In this chapter, I show how geopolitical concerns and political crisis influenced understandings of Sanghol in postwar India. I argue that discontinuities in research at Sanghol show that it was not an important archaeological site within

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<sup>6</sup> To some Western scholars, S. P. Gupta is best known for his association with former Survey archaeologist B. B. Lal, and their complacency in the demolition of the Babri Masjid, which I discuss in Chapter 1. For example, in their examination of the demolition of the medieval mosque in 1992, Bernbeck and Pollock (1996: S139) remark that S. P. Gupta was an "archaeologist known for his close associations with an extremist Hindu paramilitary organization, the Rashtriya Swayamsevak Sangh" or RSS.

<sup>7</sup> Scholars who study art and architecture believe that Kushans administered parts of northern India, including Mathura, between 1st century B.C and 2nd century A.D. S. P. Gupta and Asthana (2002: 74-75) explain that the Kushans were foreign rulers, but "thoroughly naturalized" or "Indianized".

<sup>8</sup> I discuss the geopolitical significance of the Indus River and its influence on Indian archaeology in Chapter 3. On the study of Buddhism, see Charles Prebish (2008).

the established historical framework in which innovations developed elsewhere were brought into India by Aryans. This has implications for our understanding of national archaeology.

Following in the wake of India's independence from the British Crown in 1947, some Indian archaeologists, influenced by Hindu nationalism, increasingly questioned the Aryan invasion, and the foreign origins of caste (Lal 1953: 87-88). This view brought scholarly attention to the relationship between the *Rg Veda* and later Sanskrit texts, the *Puranas*. Because many Indian historians believed in the Vedic origins of civilization, and because they thought that Aryans had introduced caste, up until the early 1990s, relations between Aryan and non-Aryan were of greatest interest to scholars and policy makers (Jha 1991). These views often overshadowed concerns of India's ethnic and linguistic minorities, including Sikhs and aboriginal peoples. It was precisely amid social and political uncertainties in the wake of intense competition for an autonomous state of Khalistan for Khalsa Sikhs, and Prime Minister Indira Gandhi's assassination in 1984, that Sanghol gained its place in Indian archaeology.

These methods served the social and political aims of the national government at a time when it faced growing social unrest and severe internal political instability. Through analysis of scholarly publications and archival records, I show how, after independence from the British Crown, the practice of Indian archaeology was influenced by both an ideology of 'fundamental unity' throughout India and by Hindu nationalism. Increasingly sensitive relations between a pro-Hindi-speaking central government and India's ethnic and linguistic minorities marked growing disagreement over archaeological

interpretation and the preservation of cultural heritage. For scholars and policy makers, concerns over Indian unity and security were heightened by sensitive geopolitical relations with India's immediate neighbours.

This framework highlights the issue of 'national science,' or independent scientific traditions, which George Basalla (1967: 618) characterized as the end of colonial science. Independent scientists faced the challenge of "fully integrating science into a society that previously had little contact with Western science" (ibid.). Yet this state-oriented view obscures the influence of foreign policy concerns of newly-created states.

The deployment of atomic bombs at the end of World War II in 1945 had cast scientists onto a new plane of international diplomacy (Doel and Harper 2006). Science and technology did not just win the Second World War for the Allies; it was highly-prized currency on the international market in a newly-non-aligned world (Kevles 1995). Indian insecurities were heightened as a result of armed conflict not only with West Pakistan in the sensitive north-west territories but also with China in the north-east. This precarious geopolitical climate was marked as Indian and Pakistani troops battled each other soon after Nehru's death in 1964 and then again in 1971. The creation of Bangladesh in 1971 came in part through Indian economic and military support for East Pakistanis in their civil war (Choudhury 1972).

The security concerns did little to veil growing dissatisfaction amongst India's middle class and internal political division within India. These social and political uncertainties precipitated popular election of India's first non-Congress, coalition national government in 1977 (Blair 1980). Yet through the 1950s and 1960s, India

was open to foreign scholars. Many Indians often took pride in their use of the English language. American interest in South Asia saw the creation of government-funded programs, including the Fulbright-Hays and American Institute of Indian Studies (Brown 1964). These investments fostered scholarly exchange through archaeological field studies that increased in the early 1980s (Jacobson 1986).

The 1950s had ushered a new era in the practice of archaeology. New organizations, including universities, opened and old ones such as the Archaeological Survey were reorganized as a national or ‘central’ department. Some scholars wrote a national narrative in which prehistory was made to conform to Indian history (Majumdar et al. 1953). Spurred by a pre-independence wave of anti-imperialism and nationalism, a (re-) vitalized India saw rapid economic, social and political change. This included land redistribution for mining and the construction of large dams, roads, airports, and power plants. Policy makers renewed and expanded existing cultural protection laws, yet the relationship between central and state governments and local communities influenced how heritage was protected in the new Republic.

Indira Gandhi, Nehru’s daughter, who led India into armed conflict with West Pakistan in 1971, faced growing dissatisfaction amongst India’s ethnic and linguistic minorities. The Indian middle class grew increasingly frustrated with growing inequality and corruption (Blair 1980). These tensions were heightened in the wake of the dissolution of civil liberties, imposition of press censorship and the imprisonment of opposition politicians in 1975 (Morris-Jones 1975). Moreover, resistance to these oppressive measures galvanized some Punjabi-



speaking Sikhs who demanded the creation of Khalistan, an autonomous state for Khalsa Sikhs in India's northwest (Hardgrave 1985). They believed sovereignty was the ideal resolution for their pressing concerns. These simmering tensions reached boiling when Indian troops stormed the Golden Temple<sup>9</sup> in Amritsar, and were met with members of the community who aggressively competed for Khalistan. It was amid these sensitivities that Survey archaeologists carried out field studies in Sanghol.

This is the historical framework within which I examine methods archaeologists employed at Sanghol, and discuss how the site came to be of critical importance to archaeology in a multi-ethnic and multi-lingual India.

### ***Indian prestige in Crown-administrated India***

In the 1920s, a growing Western-educated Indian middle class increasingly demanded greater social and political liberties. It grew increasingly dissatisfied with the colonial Government of India and intensified calls for *swaraj* or self-rule. It was amid these social and political tensions, that the Archaeological Survey first introduced into public space the Indus Valley civilization (Gupta chapter 3). The Indian middle class took pride in knowing its glorious past, and rejected claims by scholars that the Indus Valley civilization was an off-shoot of the Sumerian one at Ur. It was precisely this nationalist reaction that brought independence from the British Crown in 1947.

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<sup>9</sup> Also known as Harmandir Sahib, the *gurdwara* was rebuilt in the mid- and late 1700s, following armed conflict between the Afghan Durrani and Mughal armies. It was in this context that the Sarbat Khalsa or assembly organized and the *gurdwara* grew as a place for local social and political life.

Ironically, for the leaders of ‘Quit-India’<sup>10</sup> who would take over Crown administration, *swaraj* or self-rule was coupled with growing uncertainty about India’s future and its prestige on the international stage. Jawaharlal Nehru (1938: 231), a leading member of the Indian National Congress, asked: ‘Could India stand together and free if British rule were withdrawn?’ Nehru believed that India had ‘fundamental unity’. He believed, as some Indian scholars had, that external factors such as migration explained change. Nehru thought in terms of historical groups who brought creativity and dynamism into India, and were soon absorbed into the Indian way of life.

Since the middle of the nineteenth century, some Indian scholars had thought that anti-Brahmanical traditions, including Buddhism and Jainism, were part of Hinduism (Mookerji 1914). The ideology was based on historical origins within a territorially bound India (Chatterjee 1995: 251). Scholars and policy makers believed in geopolitical unity and often thought in terms of a self-contained and unified ancient Indian empire that extended its administration west of the Indus River and eastward into the Straits of Malacca (Nehru 1938: 236).

Writing in the wake of the Russian Revolution, and influenced by ideas of class society, Frederick Eden Pargiter,<sup>11</sup> one-time judge at the High Court in

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<sup>10</sup> Mohandas K. Gandhi’s resolution in 1942, supported by the Indian National Congress, called for immediate independence from the Crown.

<sup>11</sup> Influential Indian archaeologist K. Paddayya (1995: 111) has remarked that Pargiter “was the first to attempt a comprehensive critical review of [the idea that Indians were an ahistorical people]”. Pargiter presented his understanding of the *Puranas* in his *Ancient Indian Historical Tradition* (1922), in which he had argued that the *Rg Veda* was a religious composition and that it could not be considered history (1922: Preface). His views challenged established understandings of Indian history (Keith 1914). I discuss the *Puranas* and writing of a ‘national narrative’ in a later section.

Calcutta, argued that Brahman priests, who wrote the *Rg Veda*,<sup>12</sup> had lacked “historical sense”, and that, because they had lived in “secluded” places, their priestly accounts could not possibly have recorded matters relating to towns, courts and kings (1922: 10).

The *Puranas*, or old narratives, he argued, were chronicles of kings, and that these accounts of conquests were the only reliable works on political matters (Pargiter 1922: 8). This view of Indian history narrated a Ganges Valley-centric account within the pre-existing framework of Vedic origins of Hindu civilization. Because these views challenged the authority of the Brahmanical tradition, they resonated with Hindu nationalists who had increasingly questioned the legitimacy of some Indian politicians and their claims for cultural and biological superiority (Omvedt 1974).

The *Puranas* instilled in Hindus a sense of pride in their past. Since the mid- and late nineteenth century, influential Indian scholars had interpreted the “Puranic Age” as a “Renaissance” of Hindu literature, science and religion, “marked by an upheaval of the national mind” (Dutt 1893: x). Influenced by ideals of equality and fairness, some scholars increasingly saw failings of the Brahmanical tradition in light of successes of Hindu social reform, including caste hierarchy (Omvedt 1974).

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<sup>12</sup> Vedic scholars consider the *Rg Veda* is early Sanskrit text, and a predecessor to the *Puranas*. Indian historiography that emerged in the mid-nineteenth century narrated a Vedic origin of civilization (Dutt 1893), in which Hindu civilization after the Puranic Age, had declined into the ‘dark ages’. For more, see Gupta, chapter 3.

In her examination of the nationalist movement in Poona<sup>13</sup> during the 1920s and 1930s, Gail Omvedt (1974: 201) argues that “educational dominance and the administrative and professional employment it provided” were the base for Brahman political power. It was here, too, where “non-Brahman mass mobilization”, which included non-Marathas<sup>14</sup>, challenged Brahman claims for moral and cultural superiority and the leadership of the Congress (Omvedt 1974: 211). Hindu nationalists recited the mantra that a free and prosperous society was one in which *all* Hindus united against foreigners. Some Indian scholars and policy makers increasingly thought in terms of an unbroken Hindu scientific tradition dating several millennia (Arnold 2000: 169)<sup>15</sup>.

Because scholars believed that Sanskrit, language of the Vedic texts, and the descended languages of northern India were related to European ones, and because the account in the *Puranas* generally accorded with the northern Vedic origins of Hindu civilization, these views were accepted. Ironically, because both the *Rg Veda* and the *Puranas* presented a north-centric account, and because policy makers increasingly promoted Hindi as a national language, many ethnic and linguistic minorities grew anxious about a northern-dominated Independent

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<sup>13</sup> Omvedt (1974: 201) remarks that Poona was the “political and symbolic centre of Maharashtra”. In the early twentieth century, Poona was a city and municipality in Bombay Presidency, a British administered territory.

<sup>14</sup> For perspective on Maratha identity including language, caste and ethnicity prior to British administration, see Stewart Gordon’s *The Marathas 1600-1818* (1993).

<sup>15</sup> Here, historian David Arnold discusses the ‘return of Hindu science’ as “a means of establishing Indian antecedents and contexts for modern science and securing the self-esteem and autonomy of Indians in the contemporary scientific world” (2000: 170). Meera Nanda (2003: 47) offers perspective on “Vedanta” Hindu nationalism in the late 1990s, and suggests that its “seeming openness to modern ideas [secularism and science] serves only to confirm the greatness of orthodox Hindu traditions”. Thus, she argues, a return to “traditions” means “to become modern” (ibid.).

India. This in turn promoted an inward looking perspective that emphasized ethnicity and local history.

The issue of language re-emerged with a vengeance in the terminal years of Crown administration with some Indian politicians arguing that Hindi with Sanskrit roots, in the Devanagari script, rather than Hindustani, a “unique amalgam” of the former and Urdu in the Arabic script, was to be the national language (R. Guha 2007: 299). The initiative had little appeal for political leaders in the southern and eastern states, where neither Hindi nor Urdu and Hindustani, were the languages of social and administrative life. The national language seemed more an imposition of northern dominance over other parts of India, if not another way to discriminate against southern and eastern states.

At the same time, leading politicians grew increasingly concerned about India’s prestige on the international stage. As independent India’s first prime minister, Jawaharlal Nehru believed that impoverishment was the greatest hurdle for Indians. He saw poverty as the cause of society’s “ills” (1938: 231). Nehru took pride in the Indian past and thought of the Indus Valley civilization as a golden age when India was independent, peaceful, technologically sophisticated and idyllic.

This glorious past juxtaposed with the unstable, poor, caste-ridden<sup>16</sup> and oppressed India that Indians now inherited from the Crown (Nehru 1938: 236-237). Nehru rallied Indians behind the idea that India was not always poor; rather,

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<sup>16</sup> Nehru remarked that caste was “a division of society by occupation” and pointed to its rigidity as “a citadel of social reaction and a basis for the exploitation of the masses” (1938: 237). For Nehru, caste had fallen from *its* golden age, when it was “far from rigid” (ibid.). Some scholars thought of caste as preserving Hindu culture during times of change (Munshi 1951: 9). I discuss these views in more detail in a later section.

India had *become* poor as a result of foreign rulers. If economic and social self-sufficiency was the common (-man's) goal, the common path to get India there was science. These aims intertwined with non-alignment<sup>17</sup> and Indian prestige. A commitment to ideals of autonomy and self-sufficiency influenced how science was practiced in India.

These concerns were heightened as growing civil unrest turned violent even against local authorities (J. Chatterji 1994). A growing Western-educated middle class grew increasingly resentful of constraints on its civil liberties. Influenced by ideals of equality and fairness, its members demanded rapid social change and greater political representation (Omvedt 1974: 203). Leading Indian politicians often had promoted themselves as mentally and morally superior than other Indians, and often thought of themselves as a separate ethnic group. 'Dark-skinned' Dravidians, conversely, were looked down upon in a highly racialized caste hierarchy (Thapar 1996: 7-8; Sumit Guha 1998: 429).

The Indian middle class increasingly challenged the legitimacy of the Congress leadership on the very themes through which Indian politicians had questioned European administration – their claims for moral and cultural superiority. These concerns played out on what the historian Ramachandra Guha (2007: 25) calls five axes of conflict, namely; caste, language, religion, class and gender. These issues influenced centre-state relations in the Republic of India.

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<sup>17</sup> Nehru was a proponent and founding member of the non-aligned states, created in the wake of the Cold War. Scholars often examine Nehru's foreign policy, followed closely by his science policy, yet few examine foreign policy and its influence on disciplines. See A.P. Rana (1976) *The imperatives of nonalignment: A conceptual study of India's foreign policy strategy in the Nehru period*; and A. Rahman ([1968] 2008) Science Policy in India, in *Ciba Foundation Symposium - Decision Making in National Science Policy*. But see Itty Abraham (1998: 54-57) on "insecurities" of the new state, external threat and the creation of the Atomic Energy Commission.

Writers and policy makers influenced by Hindu nationalism pointed out Brahman moral failings and urged them to unite against foreigners. In its extreme, Hindu nationalists envisioned a homogenous Hindu India in which non-Hindus,<sup>18</sup> recognized not only their own numerical and cultural inferiority, but accepted a subordinate role to Hindus (Baxter 1969: 31). Moreover, some Hindu nationalists often thought of Sikhs as part of a larger Hindu tradition (Jones 1973: 459).

Since the mid-nineteenth century, the Arya Samaj in northern India had identified with Sikhs (Jones 1973). In his examination of the Hindu reformist religious organization, Jones remarks that the Arya Samaj saw Sikhism as a “movement” to “create a purified Hinduism, devoid of idolatry, caste, and the evils of priestly dominance” (1973: 459). This view implied that Sikhs were little more than reformist Hindus.

The issue of Sikh identity is best understood within the context of growing concerns amongst Hindu nationalists in Punjab over the Punjab Muslim League, which had rapidly organized (Barrier 1967). That much of Punjab, particularly territories west of the Sutlej River acceded to West Pakistan in 1947, speaks to the social and political influence of the Punjab Muslim League. The Punjab League operated separately from the All-India Muslim League, led by Mohammed Jinnah. After independence, however, as R. Guha (2007: 441) suggests, it was the Hindus and the Congress that leading Sikh politicians perceived as the greatest

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<sup>18</sup> Baxter (1969: 31) cites a passage by Rashtriya Swayamsevak Sangh, better known as the RSS, member and later, its leader, Madhav Sadashiv Golwalkar: “.....in a word they [non-Hindus] must cease to be foreigners, or may stay in this country, wholly subordinated to the Hindu nation, claiming nothing, deserving no privilege, far less any preferential treatment-not even citizens’ rights”.

threat to Sikh identity. These views challenged the ‘fundamental unity’ that was championed by the leaders who took over administration of India in 1947.

### ***Independence and ‘national’ archaeology***

On January 26, 1950, the Republic of India was born as a democratic and secular state, bringing together one-time Crown Provinces and Native States. Territories administered by royal families at independence in 1947 had either acceded to the newly-created dominions of East and West Pakistan, and of India, or remained independent. Patiala State had affirmed its independence and soon united with neighbouring territories to create the Patiala and East Punjab States Union or PEPSU. The Republic recognized PEPSU as a Rajpramukh or ‘Part B state’ (Figure 1). As a result, many communities in the territories between the Ganges-Yamuna and Sutlej Rivers, including Sanghol, became accessible to New Delhi.



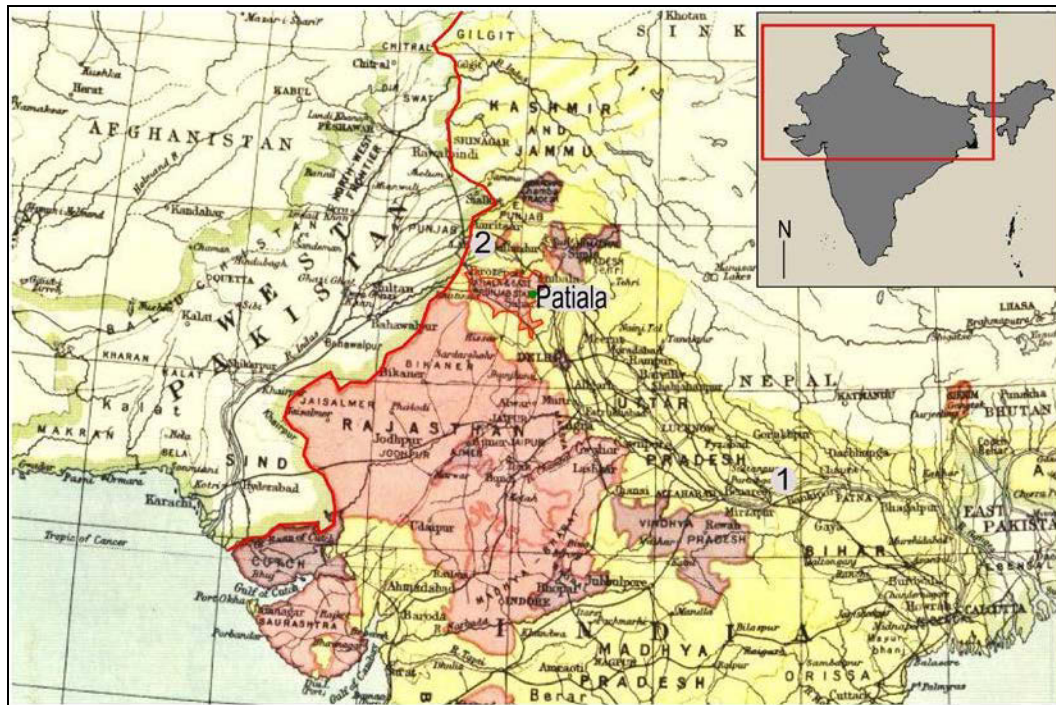


Figure 1 is adapted from a John Bartholomew & Son Ltd. (Edinburgh) map and illustrates territories of Rajpramukh states (red), Governor and centrally administered states (purple and yellow) in 1950. The heavy red line illustrates the frontline between West Pakistan and India, and its proximity to the Patiala and the East Punjab States Union. PEPSU's administrative capital, Patiala, is marked. [1] marks the Ganges River at Benares, and [2] marks the Sutlej River where it enters West Pakistan. Base image from Wikipedia, March 2012.

“Redrawing the map” as Ramachandra Guha (2007: 430) suggests, was as much an issue post-1947 as it was prior to “partition” and the creation of East and West Pakistan. The latter developments came in the wake of civil unrest in the terminal years of Crown administration (Wolpert 2006). Fearing for their lives, thousands of families sought safety across newly created borders between West Pakistan and India in Punjab, and between East Pakistan and India in Bengal. Armed conflict broke out in the north-west territories between independent India and Pakistan within months of their creation (Khan 2007). A ceasefire came as a

result of United Nations arbitration, yet tensions along the frontline influenced Indian foreign policy.

According to the historian Ramachandra Guha (2007: 280), the Constitution of India, crafted to “promote national unity and to facilitate progressive social change”, had a “certain bias towards the rights of the Union of India over those of its constituent states”. Responsibility for tax revenues, economic development, including minerals and heavy industry were placed under “exclusive central control” (R. Guha 2007: 282), and there were many more under concurrent preserve than there were under exclusive state responsibility.

It is no surprise then that rapid economic change in independent India, which hastened in the 1950s, saw land redistribution for mining and the construction of large dams, irrigation canals and power plants. Policy makers in the central government believed these investments were the path to (re-) vitalizing India (R. Guha 2007: 283; Morgenthau 1962) and a strong centre was indispensable to planning for the Republic’s future.

Issues that had dominated the Indian politics in the 1930s and 1940s, such as joint or separate electorates and ‘national language’, became more pressing for the Congress-led central government. Which minorities constituted a deserving group for reservation when it came to economic opportunities, social equality and political representation? Would it be Muslims, the largest of India’s religious minorities, women throughout India, “Harijans” or the lowest of Hindu castes (R. Guha 2007: 289) or would it be the “adivasis” or Indian “tribals”?

For some Indian scholars and policy makers, Hindu society had “sinned” against tribals by “ignoring them or exploiting them”, by colonizing “their land

and forests” and denying them “modern facilities for education and health” (R. Guha 2007: 296). Policy makers thought of aboriginal peoples or tribals as fossil cultures who were ‘outside’ Indian society. Because it was believed that caste, more than any other social ideology, influenced Indian society, and because aboriginal peoples were thought of as becoming extinct, scholars encouraged the study of culture contact between Indian or caste society and ‘tribal society’ (Sinha 1958). They often sought ways to “make partial amends” and thus, in the new Republic, the government reserved jobs and ensured political representation for tribals (R. Guha 2007: 289).

Ethnography, and to a lesser degree the study of material remains, was to play a key role in writing this national narrative in postwar India. Some archaeologists thought in terms of recovering cultural achievements (Subbarao 1958). The historical account celebrated ancient India as a peaceful and progressive society that *always* had accommodated, and absorbed, different ethnic groups (Kosambi 1956). Scholars in Independent India wrote a narrative that emphasized the cultural achievements of Hindus (Majumdar et al. 1953). They thought in terms of a simple and static prehistory and they explained change as a result of external factors. These methods served social and political aims of the national government at a time when it perceived an external and internal threat to its stability.

## Writing a ‘national’ narrative

In their multi-volume *An Advanced History of India* (1953), historians Ramesh Chandra Majumdar, Hem Chandra Raychaudhuri and Kalikinkar Datta,<sup>19</sup> presented an account of the history of India in three parts, namely, (1) prehistory to ancient India; (2) medieval times to the Mughul empire; and (3) the growth of British power and modern India to 1947. There are at least four editions of the volume, the first being published in 1946. This collection is comparable only to the *History and Culture of the Indian People*, which Majumdar co-edited, and completed in 1977. The first of eleven volumes in that series, “The Vedic Age”, was published in 1951.

Influenced by potent anti-imperialism and nationalism, Indian scholars often believed that Indian history had received “defective” treatment in the hands of foreign rulers, and that these efforts had neglected to present how the “Hindu social system” had come “into existence as a synthesis of political, social, economic and cultural forces”, and how it had “protected life and culture” for “millennia” during times of change (Munshi 1951: 9). At the same time, Majumdar et al. (1953) believed, as Indian historians in the mid-nineteenth century had, that the study of ancient India or the ‘Hindu period’ was often overlooked (Dutt 1889).

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<sup>19</sup> At the time of the first publication in 1946, Majumdar was Professor of History in Dacca University in Dacca, Bengal, whereas Raychaudhuri was Professor at the Department of Ancient History and Culture at the University of Calcutta, in Calcutta, Bengal. Datta served in the same capacity at Patna College in Patna, Bihar. Majumdar transferred to the College of Indology, Benaras Hindu University after East Pakistan was created. He served as President of the Indian History Congress. All three scholars specialized in the study of ancient India.

Yet, unlike previous narratives, *Advanced History* aimed to synthesize available archaeological data with the *Puranas*. In their national narrative, Majumdar and his colleagues employed methods from historical geography to characterize the “Indian empire as it existed” before Independence (1953: 3). They believed that *Bharata-Varsha*, or “the land of Bharata” from the Puranic tradition, referred to the “sub-continent of India” (1953: 3-4). The geopolitical term had a lineage in mid-nineteenth century imperialism, and most often denoted self-containment, and isolation (Gupta chapter 3). At the same time, scholars remarked that “Bharata’s descendents” had fundamental unity and shared a common language in Prakrit (Majumdar et al. 1953: 7). Thus, this was twentieth century understandings of the *Puranas*, extended back two millennia.

This view assumed that the *Puranas* were a static archive of traditions, and that place names recorded in the Sanskrit texts had remained the same since ancient times (Altekar 1925). The method built upon a pre-existing tradition of historical geography which aimed to locate specific places referred to in written sources and recover historical territories (Cremo 2008). These approaches strengthened claims of Hindus over lands they were occupying. *Advanced History* then, was an unbroken geopolitical history of Hindu civilization (Majumdar et al. 1953: 4).

Majumdar and his co-authors believed that Indian history was a record of Hindu cultural achievements, and that archaeology recovered the most remote period of that historical account (1953: 9). Because they relied on Sanskrit texts to understand social and political organization, and because they believed that the prehistoric past was simple, all that needed to be known was the technological stage of a culture. The scholars classified the prehistoric past on technology and

had identified three ages by increasing social complexity: (1) Stone Age; (2) Copper Age; and (3) Iron Age. Majumdar et al. (1953: 13) remarked that the Iron and Copper Ages represented the “limits of the historical period”<sup>20</sup>. At the same time, the researchers remarked on sharp differences between Indo-Aryan northern India, where archaeologists had recovered stone, copper and iron implements, and Dravidian southern India, which had “no traces of the intermediate Copper Age” (1953: 13).

This highly racialized view meant that when prehistory pointed to a complex past and development over time, Indian scholars often attributed change to dynamic and creative groups. In this hierarchical framework, aboriginal peoples were synonymous with the Stone Age, and during the thousands of years since then, they had not made “any appreciable progress” (1953: 14). Change, Majumdar and his colleagues explained, was a result of successive invasions by the Dravidians, and then, by the Aryans, who took over from them (ibid.). This view maintained pre-Independence ideas about innovations being developed elsewhere and brought into India.

These ethnocentric views celebrated the achievements of Hindus, and denied creativity and dynamism amongst aboriginal peoples. Scholars often assumed that aboriginal peoples had not changed, and that they were simple and monolithic. They believed that most had become ‘extinct’ as a result of repeated invasions by

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<sup>20</sup> This reflected the uncertain relationship between the *Rg Veda* and the *Puranas* at that time. Some scholars think of the early Sanskrit texts as an ancestor of the later ones (Thapar 1984). For context on this issue, see Jan Gonda (1975: 28), especially where he remarked “[a]ttempts at determining the date of Vedic hymns with the help of puranic passages, whether or not dealing with Vedic persons, or at finding support of a relative chronology in the few passages which might refer to historical can, because of the unreliability of legendary traditions, hardly be expected to lead to acceptable results. Conclusions about contemporaneity or difference are hazardous”.

dynamic and creative groups, and that aboriginal peoples residing in jungles were ‘fossil cultures’ that represented the earliest period of human history (Majumdar et al. 1953: 14). Because scholars and policy makers believed that the prehistoric past was simple, they thought that the simplest culture was most likely the oldest. This unilinear schema conflated ethnicity and language, and emphasized culture as a homogenous and essentialist entity.

There are competing views about the writing of Indian history and its relationship with archaeology. Some scholars remark that nationalist historiography like Majumdar et al.’s (1953), insisted upon “indigenous roots for all major cultural developments”, and that these narratives often “weave[d]” data from a number of sources, including texts, inscriptions, coins, and material remains (U. Singh 2008: 8). They suggest that these narratives “valorized” the Hindu period and saw the Islamic period as a tragedy. Others argue that Indian history was colonizer-written, and emphasized successive empires (Ray 2008: 2). They suggest, instead, that this culture-history obscured the co-existence of Buddhist, Hindu, Jaina and local traditions in ancient India (Ray 2008: 250-251). Some scholars contend that culture-historical approaches have promoted “conventional” archaeological field projects and that these methods have served India well (Lahiri 2006: 9). These views do not shed light on why Indian scholars, including nationalist ones, employed migration as an explanation for change, or how these views influenced Indian archaeology.

Another dimension is the role of archaeology in Indian society. Some Indian archaeologists remark that archaeology is a “European innovation” and that most European scholars believed that “Indians lacked a sense of history” (Paddayya

1995: 111). They suggest that “indigenous epistemological traditions” such as the *Puranas*, are “sacred literature” descended from the *Rg Veda* and that these texts offer methods to explain the archaeological record (Paddayya 1995: 113; 138). Other archaeologists point out that archaeology in India developed as “an adjunct to ancient historical studies” (Chakrabarti 1982: 339). They argue instead that written sources on ancient India are “severely limited in quantity and suffer from the additional handicaps of ambiguity, chronological uncertainty and limited geographical applicability” (ibid.). Still other scholars argue that the Vedas offer scholars “cyclical time” and a chronology longer than 6000 years, during which the universe and human societies are thought to have been repeatedly created and destroyed (Cremo 2003: 478-480). This does not explain why Indian scholars wrote a national narrative as a historical continuum, or why they sought a deeper understanding of Indian society.

In *An introduction to the study of Indian history*, Damodar D. Kosambi (1956: 1) presented methods to explain India’s “caste-ridden backwardness” in terms of the “means and relations of production”. Influenced by Marxism, Kosambi aimed to shed light on the “essential relationship” in society that developed “through production and mutual exchange of commodities” (1956: viii). Whereas traditional views of Indian history had emphasized dynasties and political change, Kosambi drew attention to the social and economic factors that influenced Indian society.

Kosambi argued that “dynastic changes of importance” often indicated “powerful changes in the productive basis” (1956: 13). He believed that territoriality and political activities began with agriculture-based economies or the



“first great social revolution” (1955: 35). This process saw food-gatherers taken over by food-producing villages (1956: 21). Because these processes were ongoing, and because the ancient Hindus were farmers, Hinduism, he remarked was a living record of ‘developed’ and ‘less developed’ societies. This important economic change was evident in the “caste system” and its practices, including endogamy, “commensal taboo” and “caste *sabha* councils” (1955: 35). Kosambi argued that some of these practices had tribal origins and thus, caste had emerged from contact between tribal and non-tribal peoples. For Kosambi, caste was a uniquely “Indian method” that “reduced the need for violence” (1955: 36).

Kosambi employed archaeology and ethnography in his study of “productive relations” (1956: 7). He characterized relations between “classes and groups” yet, in his analysis, he relied primarily on “all strata of caste society” (ibid.). This presented a historical chain of cultural superiority. Kosambi assumed the centrality of caste for the interpretation of material remains. At the same time, he did not clarify whether, or how, class and interest groups differed from caste. Kosambi argued that “bitter, violent conflict” between the ‘most primitive’ and the ‘most developed’ was rare in Indian society (1956: 8). This presumed that interests of both ‘primitive’ and ‘developed’ were the same, and that society was invariably free from conflict.

Kosambi believed that creative and dynamic groups brought innovations into India. He believed, as Majumdar et al. (1953) had, that there were three such periods in Indian history, namely, from the oldest, the Aryan, the Islamic, and the British. He explained that the Aryan Brahman was an “immigrant” and “an effective pioneer and educator” (1955: 36). Ancient Indus society had stagnated,

and the Aryan had introduced “new relations of production”, which had made cultivation possible in previously uninhabited places (1956: 79). Many centuries later, ‘Islamic raiders’ broke old customs and introduced new technologies in a similar fashion (1956: 340). These views had general accord with pre-independence views on racial and class superiority of Aryans over non-Aryans. They served the social and political aims of the national government at a time when it had invested in large-scale construction projects that displaced local communities. Whereas this historical framework included aboriginal peoples, leading politicians often saw linguistic minorities in India, including Sikhs, as part of a larger Hindu tradition (Banningan 1952). This provided a new metaphor for the Republic as a secular state.

Although Indian scholars often cite Kosambi’s works on the collection of archaeological data, there are very few critical examinations of his publications by Indian archaeologists. Shereen Ratnagar (2008) examines “Kosambi’s archaeology” in which she argues that his interpretation of archaeological data was flawed (2008: 71). Ratnagar questions Kosambi’s assumptions about forest clearance in the absence of iron technologies, and his belief that the iron plough was a necessary prerequisite for agricultural surplus to sustain a sizable urban population (2008: 72). She remarks on Kosambi’s lack of knowledge of archaeological methods of data collection and analysis, and the ‘dismissal’<sup>21</sup> by Indian archaeologists like H. D. Sankalia of Kosambi’s interpretations (2008: 77). While Ratnagar draws attention to disagreements on the interpretation of

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<sup>21</sup> Ratnagar (2008: 77; endnote number 1) remarks on the relationship between Sankalia and Kosambi, and suggests that “it appears that Sankalia rubbished most of [Kosambi’s] ‘discoveries’”.

archaeological data, only a closer examination of competition, conflict and collaboration between Kosambi and his contemporaries who specialized in archaeology will shed light on relations between the two disciplines.

### **Preservation of cultural heritage in ‘New’ India**

The 1950s ushered a new era in the practice of Indian archaeology. New universities and organizations opened and old ones, such as the Archaeological Survey, were reoriented. Cultural protection laws created prior to independence were expanded with *The Antiquities Export Control Act* in 1947, which in turn was repealed and revised by *The Antiquities and Art Treasures Act* in 1972. Protection for movable material culture remained separate from that for monuments and archaeological sites, as expressed in *The Ancient and Historical Monuments and Archaeological Sites and Remains (Declaration of National Importance) Act* in 1951, which was amended in 1956, 1958 and 2010. Amid rapid social, economic and political change, these protective measures encouraged the accumulation of archaeological material and the preservation of cultural heritage.

The distinction between moveable and immovable material culture suggests the value Indian scholars and policy makers had for antiquities. Most archaeologists often collected artefacts during surveys and excavations and attributed them to specific historical groups (Krishnaswami 1949: 42). Because they often believed that they were recovering cultural achievements of their ancestors, and because they thought culture was an essentialist entity, Indian archaeologists often emphasized cultural continuity in their study of material culture (Ghosh and

Panigrahi 1946: 40). The most important culture, they presumed, was not lost despite successive invasions. At the same time, because scholars and policy makers often believed that change was a result of migration, and because many Indian archaeologists believed they were recovering historical territories, all one needed to know was the sequence of historical groups who occupied a site (Y. D. Sharma 1955). This method presumed that individual settlements could be examined in isolation and separate from their networks. Thus, once archaeologists had established a cultural sequence at a site, and they had recovered artefacts, the archaeological context had no additional value.

At the same time, the legislation aimed to regulate excavations by non-Survey archaeologists, and it addressed compensation for land owners and recovered antiquities<sup>22</sup> (Ghosh 1958: 3). It is unlikely a coincidence that growing amounts of archaeological material was preferentially preserved over immovable archaeological sites at the same time that the national government invested in land redistribution, mining, and more intensive agriculture. This may explain why policy makers maintained a distinction between protection for antiquities and that for archaeological sites (Pappu et al. 2010).

### **Organization of the archaeological community**

Following in the wake of India's independence, the All-India Advisory Board for Archaeology, created by Mortimer Wheeler to promote natural science in Indian archaeology, was reorganized as the Central Advisory Board of

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<sup>22</sup> Ghosh (1958: 3) remarks that the legislation "in national interest, simultaneously lays down that in assessing the amount of the compensation for the antiquities, any increase in their value by reason of their being of historical or archaeological importance will not be taken into consideration".

Archaeology. Wheeler was the last European Director General of the Survey (1944-1948) and he was knighted for his contributions to archaeology in 1952. He influenced the practice of Indian archaeology by familiarizing archaeologists with methods that had been developed in Britain before the Second World War (Clark 1979). This included planned excavations with clear objectives, and careful data recording, especially when it came to relating artefacts to their stratigraphic context (Ray 2008). Wheeler encouraged the study of geography and paleoenvironments (Clark 1989). During his four-year tenure, he emphasized the value of scholarly publications and initiated the Survey's in-house journal, *Ancient India*. Wheeler (1946) encouraged collaborations between the Survey and a growing number of university departments of archaeology.

Wheeler's Adharchandra Mookerjee lecture in 1944 at Calcutta University sheds light on this issue. Coming from a Europe engulfed in flames<sup>23</sup>, Wheeler (1946: 16) knew intimately the consequences of "spurious patriotism" and he warned against the "deforming disease". This situation saw insular "schools" interpret specific passages from historical texts to serve "pet theories" (Wheeler 1946: 16) and these institutions were as often found in India as in Europe. Wheeler cautioned that neither politics nor propaganda be allowed to pass as science and strongly advocated collaborative research.

Yet Wheeler was not alone in promoting the natural sciences. In his paper, presented to the Archaeological Society of South India, Dr. S. Paramasivan,

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<sup>23</sup> Before directing the Survey, Wheeler had actively trained and led an anti-aircraft battery into combat on the frontlines in Egypt and Italian Tripolitania. It was during preparations for the crucial invasion of Mussolini's Italy that Wheeler received the offer to work in India. In 1943, Allied forces were in the midst of armed conflict with the dictatorships of Nazi Germany and Fascist Italy.

Archaeological Chemist at the Government Museum in Madras, pointed out that prehistory required not only training in archaeological methods, but also working knowledge in geology, ethnology, comparative anatomy, palaeontology, zoology, botany and chemistry (1944: 303).

In Independent India, the Survey, reorganized as the central department of archaeology,<sup>24</sup> (Roy 1961: 129) and university departments invested in these approaches. These efforts were aided by radiocarbon dating facilities at the Tata Institute for Fundamental Research<sup>25</sup> in Bombay, Bombay state, and plant and pollen studies at the Birbal Sahni Institute of Paleobotany in Lucknow, Uttar Pradesh (Chakrabarti 1982: 338).

Since the late 1940s, universities and state departments of archaeology had carried out archaeological research (Chakrabarti 2003). The central government invested in university and state departments of archaeology at the same time it engaged in large-scale development projects. Many Indian archaeologists worked in university departments of Ancient History and Culture, yet there were exceptions. In 1939, patrons of Deccan College in Poona, Bombay Presidency recognized the value of archaeology in understanding the Indian past and they supported the creation of the first professorship in Proto- and Ancient Indian

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<sup>24</sup> The central Department was reorganized as the Archaeological Survey of India in the late 1960s.

<sup>25</sup> The Tata Institute, founded in 1945 by Homi J. Bhabha, had state and private sponsorship. For more on its organization, see Anderson (1975). The Sahni Institute opened in the early 1950s and it also had both state and private sponsorship. In his report on archaeological sciences in India, George Rapp (1983: 10) remarked that the Sahni Institute had “developed Indian palynology [pollen analysis] to the point where it ranks among the best in the world”. For more on the relationship between natural science and Indian archaeology, see Agrawal and Chakrabarti (1979: 392) where they discuss problems, and propose a “grass-roots” history of ancient India.

History (Panja 2002: 5). Hasmukh D. Sankalia held the position in Deccan College's Department of History up until 1968.

In his Presidential Address at the Archaeological Section of the All-India Oriental conference, Sankalia (1952) stressed the need for cooperation and collaboration between state departments and twenty-six university departments which carried out archaeological studies. He highlighted the problems in Indian history, which archaeology could resolve, and I will discuss these in a later section.

During his tenure as Director General (1953-1968), Amalananda Ghosh expanded the central department's services by creating a national School of Archaeology. He argued that university departments often focused on "bookish aspects" or epigraphy and numismatics rather than on field archaeology (1962: 2). He had remarked that some universities "impart academic training in what they conceive as archaeology" (NAI 1957). Although he does not say so, Ghosh believed, as Wheeler had, that the collection of archaeological data characterized the discipline. Thus, for Ghosh, the School was a necessary guard against the "risks of laicization" (1962: 1).

There are competing views on Wheeler's tenure and contributions to Indian archaeology. Some scholars remark that by emphasizing scientific techniques and planned field excavations, Wheeler prepared archaeology "for its transition to modernity in the post-Partition period" (Chakrabarti 1982: 337), whereas others suggest that Wheeler was a colonial archaeologist, who imposed the "notion of European chronology" onto "people who lacked one" (Chadha 2002: 398). Still other scholars point out that Indian archaeologists continue to "operate within the

traditional culture-historical framework” of the colonial period (Paddayya 1995: 131). Yet this does not explain why a foreign, indeed, European archaeologist had an interest in recovering Indian heritage, nor does it shed light on why Indian archaeologists employ these methods.

### **National archaeology in postwar India**

Pressing geopolitical concerns influenced the study of ancient India. Following in the wake of independence, Indian archaeology was cut off from monuments and archaeological sites which archaeologists had excavated west of the Indus River. At the same time, N. P. Chakravarti who had taken over from Wheeler as Director General, remarked that the Native States “had no separate historical or cultural traditions” (1949a: 1). Rather, he remarked, archaeological material recovered there was “an integral part of the larger ancient culture of India” (ibid.). This meant that the Republic’s newly-acquired territories, including PEPSU, were part of the ancient Hindu civilization. These views are best understood within the context of escalating social and political tensions with West Pakistan.

As a result of armed conflict and intensifying hostilities between the newly-created Dominions, Indian archaeologists could no longer reach or study many archaeological sites. This included Mohenjodaro and Harappa, the Indus sites excavated in the 1920s, and Taxila, an archaeological site dated to ancient Gandhara, that both John Marshall<sup>26</sup> and Mortimer Wheeler had excavated

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<sup>26</sup> John H. Marshall was Director General of Archaeology from 1902 to 1928. He led excavations at Mohenjodaro in the 1920s. For more on Marshall, see Gupta, chapter 3; also Lahiri (1997).



(Wheeler 1946: 1). Indian archaeologists had also lost access to many artefacts stored at local museums in East and West Pakistan<sup>27</sup>.

Scholars have competing views on archaeology in Independent India. Some scholars remark that Wheeler's "momentum" propelled the collection of archaeological data by university and government departments of archaeology throughout the 1950s (Paddayya 1995: 131). Others suggest that the loss to Pakistan of Indian heritage resulted in a "great vacuum", which encouraged Indian archaeologists to carry out "intense archaeological pursuits" (Thakran 2000: 47). Still others suggest that archaeological field studies at that time "shifted the locus of the Harappan civilization away from the Indus Valley" to the Ganges in the east, and to Saurashtra towards the Gulf of Cambay (Chadha 2011: 66). Yet this does not explain N. P. Chakravarti's claims that Native States had no separate historical and cultural traditions, nor do these views suggest why Indian archaeologists carried out field studies in the territories closest to the newly created West Pakistan border.

For more than a century, the identity of Indo-Europeans had been an organizing principle for prehistoric research in Europe and in Asia. Indian scholars often thought in terms of historical groups and some scholars often conflated biology and language. These views continued to be seen in post-independence works such as S. K. Chatterji (1951). In his chapter on "Race

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<sup>27</sup> In his assessment of Indian archaeology, British archaeologist, Leonard Woolley had recommended the closure of all local museums, and the relocation of artefacts to a 'national museum' in New Delhi and to other museums (1939: 30- 32). Since such a museum did not yet exist in New Delhi, it is likely that some collections were distributed to larger museums, although local depositories seemed to have remained open at Taxila, Mohenjodaro and Harappa. This is supported by documents relating to the Government of India's post-independence efforts to acquire from their Pakistani counterparts, artefacts on display at their museums (NAI 1950).

movements and prehistoric culture”, Suniti Kumar Chatterji (1951: 144), Professor of Linguistics and Phonetics at the University of Calcutta, remarked that “the Nordic Aryan-speaking group of India, who gave to India its Aryan speech, and by their organization, imagination and adaptability helped to bring about a great cultural synthesis leading to the foundation of the Hindu civilization of India”. Moreover, S. K. Chatterji believed that the “Nordics seem to have been characterized in the Eurasian steppe lands and they entered India some time during the second half of the second millennium B.C.” (1951: 144). Some scholars presumed cultural continuity between contemporary and prehistoric societies. Because some scholars believed that prehistoric societies were simple and static, and because they explained change as a result of external factors, scholars thought of the archaeological record in terms of an archive of successive cultures (Y. D. Sharma 1955).

Up until archaeological field studies at Mohenjodaro and Harappa in the 1920s, the long-standing questions on Indian antiquities ranged from the origin of civilization, the impact on the Indian peninsula from the migration of Aryans from the north and west, to prehistory or the time before the Greeks came. The accepted history of India told of an Aryan migration not very long ago into the Indian peninsula. Riding through the north and west, the northern Indo-Aryan pushed southward the Dravidian inhabitants. Thus, among southern Dravidians were found static and unchanged the most archaic institutions. Stone tools and megaliths that British administrators had recorded since the early nineteenth century in the peninsula were assumed to demarcate the geographical extent of

these groups. The northern Indo-Aryan had changed, and developed, as a result of subsequent migrations, and so, history began in the north.

Scholars had collected coins, and had recorded inscriptions, stone pillars, Buddhist brick *stupas*, and rock-cut temples in parts of India. From these, they constructed a relative historical chronology from Alexander's invasion onwards. Indian scholars had thought in terms of powerful dynasties which ruled ancient India, and managed large territories (R. Mitra 1881). They classified successive empires from the most recent as, British, Mohammedan, Jaina, and Buddhist. They took pride in Asoka, the Mauryan king, and in the Gupta empire (Sahni 1927). But what had come before the Buddhist ruins?

At Mohenjodaro, Survey Officer Rakhaladas Banerji recovered 'pre-Buddhist' remains, and he attributed them to the Hindu period (Gupta chapter 3). Some Indian archaeologists had interpreted the Indus Valley civilization as the "Vedic Age" (Dikshit 1951). In the terminal years of Crown administration, the key questions archaeologists asked were, by priority, (1) the relationship between the Indus Valley civilization of the third millennium B.C. and the Indian civilization of fourth century B.C., including the influence of Aryans; and (2) the place of southern India in Indian archaeology (Wheeler 1949: 5-7)<sup>28</sup>. Wheeler had believed that the "Dark Age" or "hiatus" between the Indus Valley civilization and the 'historical one' would be recovered by archaeological efforts (1949: 5).

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<sup>28</sup> On this point, see Boast (2002), where he discusses Leonard Woolley's 1939 report, and its influence on Wheeler's tenure and contributions. He argues that Wheeler's plan for the Survey was "lifted almost in its entirety from Woolley's report" (2002: 165). Yet Boast does not shed light on how Woolley's report was received at the time, or how, if the report was indeed withdrawn, did Wheeler come to be hired, and why Indian archaeologists accepted the recommendations.

In his assessment of Indian archaeology, Chakravarti (1949b: 14) remarked on abundant archaeological data in southern India for prehistory, or the period in which “no historian would feel interested”. Thus, many Indian archaeologists in ‘new’ India aimed to “supply the missing link” between the Indus Valley civilization, and the early historical one (ibid.). This was of greatest interest for archaeologists who worked closely with departments of ancient Indian history.

Throughout the 1950s and 1960s, Sankalia and his department at Deccan College excavated archaeological sites to ‘bridge the gulf between history and prehistory’ (Sankalia et al. 1953: 345). Sankalia viewed Indian history and prehistory in an historical continuum. He believed that the Paleolithic, Mesolithic, Neolithic, Chalcolithic and Bronze Age had to be viewed in light of Indian tradition or the *Puranas* and *Vedas* (Sankalia et al. 1953: 343). He remarked that archaeology in India had three aims: to “reveal the country’s long prehistoric past”, be a “handmaid of, and corrective to, a past with a long tradition of unwritten literature”, and last, to “show how far the pre- and protohistoric cultures can be related to the preliterates who continue to survive in many parts of India” (1969: 29). This view maintained pre-Independence interests in the identity of Aryans.

Indian archaeologists were cognizant that the “route along which the Aryans and in later centuries, others came to India and the places of early Aryan settlements are now outside the borders of India” (Chakravarti 1949b: 13). Armed conflict along the newly-created frontline and growing tensions with West Pakistan spurred Indian archaeology to understand the historical relationship between the Copper Age and the Iron Age in northern India (Subbarao 1958).

Because scholars thought in terms of a widespread homogenous culture, and because they believed in the Vedic origins of civilization in the Indus Valley and a subsequent Aryan migration into the Ganges Valley, Indian archaeologists established culture-sequences to recover historical territories.

Indian archaeologist B. B. Lal remarked that the deep chronology at Bala Hisar, now in West Pakistan, showed “the presence of Kushan relics near the top” and he believed that stratigraphically below these artefacts, archaeologists would recover “evidence about the Aryans” (1949a: 37). Because he believed that Aryans with iron technologies had migrated into the Ganges Valley, he thought that a deep, continuous culture-sequence like that at Bala Hisar could not be recovered at archaeological sites in India<sup>29</sup> (ibid.). Some Indian scholars had believed that the Ganges Valley was settled only after the development of iron technologies and that the spread of cultural innovations from there was well-known from written sources (Lal 1949b; Agrawal 1967). This was an organizing principle in postwar Indian archaeology.

At the same time, because Indian archaeologists did not have access to sites west of the Sutlej, and because scholars believed they would not gain access to them in the foreseeable future, Lal proposed a strategy to resolve this research constraint. He suggested that archaeologists investigate Ganges Valley sites referred to in Sanskrit texts, and Indus Valley sites in close proximity to the West Pakistan-India border (Lal 1949a: 37). Because Lal believed that migration

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<sup>29</sup> In his examination of post-Independence archaeology, R. C. Thakran (2000: 48) remarks that “no site could produce both [Harappan cultural remains and Painted Grey Ware] simultaneously from the same site/s, yet their very occurrence from the same area brightened chances of such an occurrence”. Yet Thakran does not explain why Indian archaeologists believed this was so and why archaeologists believed co-occurrence was significant.

explained change, and because he associated the Indus Valley civilization with archaeological sites closest to the newly-created frontline, he expected the earliest dated sites there. Although he does not say so, he expected intermediate sites in the territories between “both the ends” (1949a: 39). Lal thought his efforts would “produce a connected history of India’s past” (ibid.).

Influenced by Hindu nationalism, Lal excavated Hastinapura, a place referred to in the *Mahabharata*,<sup>30</sup> and he had associated the ‘Painted Grey Ware’ culture<sup>31</sup> at the site, with the epic. He had also identified ‘Ochre coloured ware’ as a pre-iron, seemingly Copper Age culture at Hastinapura. Lal remarked that because iron slag and Painted Grey Ware pottery lay stratigraphically below a ‘flood’ deposit and because the Sanskrit texts referred to a flood that destroyed the ancient city, the culture could be securely dated to the Iron Age (1954: 12A). Lal attributed the material culture to Aryans. Prior to the availability of radiocarbon dates for the site, he relied on Pargiter’s (1922) chronology for estimate dates. Lal excavated several sites in the Ganges Valley, and up to the Sutlej River, based on place names in written sources, including Mathura. This approach encouraged Indian archaeologists to develop a chronology based on pottery.

There are competing views on B. B. Lal’s contributions to Indian archaeology. Some scholars have argued that Lal’s correlation of archaeology with written sources “has served as a prelude to the Aryan appropriation of the Indus culture”

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<sup>30</sup>This is a popular narrative and is considered an ‘epic’. Scholars who study pre-modern India generally examine the internal coherence of these philosophies and remark that the text had multiple authors (Nicholson 2010). They generally accept that the epics are recent relative to the *Rg Veda*. Some scholars believe the epics do not contain sufficient information to shed light on the social, political and historical context of their creation (Nicholson 2010).

<sup>31</sup> Archaeologists first identified this culture in 1940 at Ahichchhatra, an archaeological site in the Ganges Valley (Lal 1954).

(Habib 1997: 23). They place emphasis on carbon-14 dates from specific archaeological sites and suggest that when absolute dates did not support claims for an early Copper Age in the Ganges Valley, Lal dismissed them (Habib 1997: 19). Other scholars implicate Lal for his role in *Hindutva* or neo-Hindu nationalist claims that below a standing medieval mosque in Ayodhya, there lay the remains of an ancient temple (Bhan 1998: 8; 10). They trace Lal's 'tradition-based archaeology' to his work at Hastinapura. Still others remark that "scientific archaeology of tradition and belief" which Lal and other archaeologists, including H. D. Sankalia<sup>32</sup> practiced in Nehru's secular India suggests the degree to which "national scholarly authorities were embroiled" in these "cultural claims" (Guha-Thakurta 2004: xix). While these views shed light on state financing of archaeology, they do not deepen our understanding of the changing relationship between science and society, nor do they shed light on the worldviews of archaeologists.

Since the early twentieth century, scholars had increasingly filled depositories in India with artefacts they had collected during field surveys or that had been brought to their attention by members of local communities. Some archaeologists increasingly examined collections in Indian museums, including artefacts that had been recovered without their archaeological context. As the central department's Archaeological Chemist, Lal had access to artefacts collected in the Ganges Valley over many years and deposited in local museums. He was most interested in copper implements and he had analyzed 'copper hoards' from museum collections. He concluded that the copper-ore used to smelt these implements was

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<sup>32</sup> Sankalia and his department excavated extensively in Gujarat and Maharashtra in the 1960s.

of Indian origin (1951: 24-25). This had suggested a local Gangetic, rather than a foreign source for these raw materials, which challenged conventional ideas about the origin of these technologies.

Western scholars had attributed copper and iron implements to foreign Vedic Aryans (Piggott 1945). Yet because none of the copper implements that Lal had examined were recovered in their archaeological context, archaeologists were unable to associate the tools with pottery, or establish relative dates for their manufacture. Lal thought that this material culture pre-dated the Aryans and he attempted to correlate the copper tools with specific pottery. He relied on written sources and ethnography to date the implements. He remarked that aboriginal people or *nishadas* referred to in Sanskrit texts could have produced the copper implements (1951: 39). Yet because scholars believed that aboriginal people lacked creativity and were incapable of innovation, Lal rejected this explanation (1951: 39).

Many Indian archaeologists believed, as Indian historians had, that territoriality and political activities originated with 'food production', and that the spread of plant domestication, like the spread of Sanskrit and the descended modern languages of northern India, had a branching phylogeny. Scholars often assumed a uniform rate of expansion (Subbarao 1958). At the same time, because Sanskrit texts were thought to explain social and political organization, and because scholars often believed that tradition had not changed, all that needed to be known was the origin of agriculture. This was of greatest interest to Indian historians who studied caste relations as a proxy for pre-class Indian society (Kosambi 1956).



The study of caste and 'tribal' relations aimed to shed light on social and economic factors in Indian society, and often encouraged the science of ethnography (Karve 1965). This Marxist-influenced view promoted the examination of social and economic relations. Scholars often thought of culture in terms of a homogenous and essentialist entity (Malik 1968). Because Indian scholars believed in the Vedic origins of civilization, they often accepted social inequality as continuity from the prehistoric past, replicating itself in the present, and in the future. This historical chain of increasing biological and cultural superiority constrained understandings of social change in Indian society, as was discussed in chapter 2.

As a result of rapidly accumulated archaeological material, and its study through the 1950s, Indian archaeologists became increasingly aware of variations in the geographical distribution of artefacts. Because Indian archaeologists believed that creative and dynamic groups had migrated into the northwest of India, and because they believed aboriginal peoples were 'fossil cultures' that represented the most remote stage of human history, archaeologists often examined ecological and geographical 'barriers' that prevented or slowed culture change (Subbarao 1958: xi). They thought in terms of the distribution and spread of cultural innovations from the northwest of India, through corridors to the eastern and southern parts of the peninsula (Subbarao 1958: 1). They often believed that more advanced peoples had pushed aside aboriginal and less developed peoples. For some archaeologists, 'Stone Age communities' were as omnipresent in Independent India, as they were almost two millennia ago, when the Hindu civilization of the *Puranas* had flourished (Subbarao 1958: 143). Thus,

Indian archaeologists often believed that their efforts would encourage development of these otherwise-static, fossil cultures that were ‘outside’ Indian society (1958: 24).

In his *Personality of India: pre- and proto-historic foundation of India and Pakistan*<sup>33</sup> Bendapudi Subbarao (1958) synthesized accumulated archaeological data to explain ‘differential development’ or how an urban civilization co-existed with ‘Stone Age’ communities. Subbarao was Professor of Archaeology and Head of the Department at Maharaja Sayajirao University of Baroda, Baroda in Bombay state. He had trained with Wheeler before taking up the newly created position at the University in 1950.

Subbarao emphasized geographic factors as an explanation for cultural variation. He believed that cultural variation had resulted from “conflict between centripetal and centrifugal forces engendered by geography” (1958: 2). He saw Indian unity in “common cultural and social heritage”, and explained that this was made possible by a “transcontinental communication system” (ibid.). The progress of Indian culture, Subbarao argued, was determined by ecological factors, including aridity, and cultural ones, such as isolation and attraction (Figure 2) (1958: 145).

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<sup>33</sup> This was the second edition. The first was published in 1956. Wheeler wrote forwards for both. Subbarao paid homage to Cyril Fox's *The Personality of Britain: its influence on inhabitant and invader in prehistoric and early historic times* (1932). Yet Subbarao's volume differed in its aims and its methods.

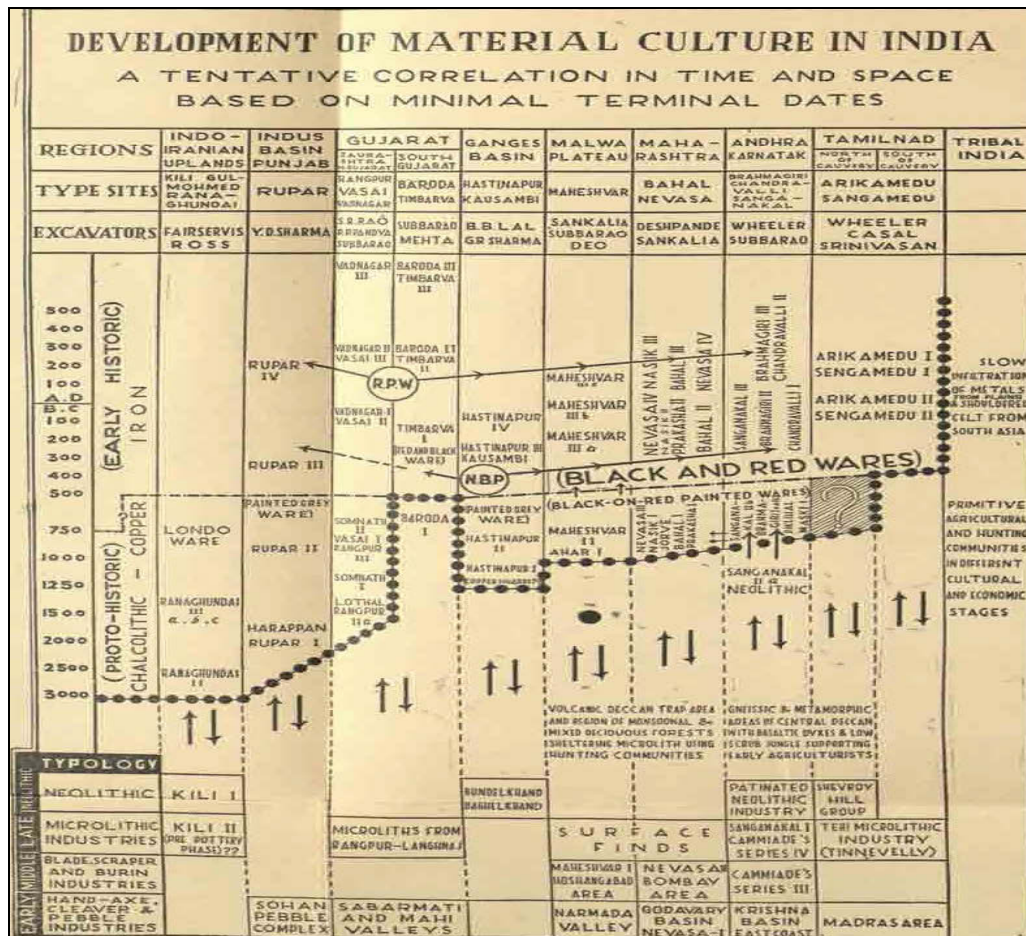


Figure 2 illustrates Bendapudi Subbarao's archaeological cultures and cultural achievements in different 'provinces'. Note the tentative place of aboriginals or 'tribal India'. From Subbarao, 1958, p. 24.

Subbarao believed that the study of "Tribal India" had direct bearing on contemporary life because aboriginal peoples had 'Stone Age' economies, and because the "so-called tribal areas [were] also the chief sources of raw materials like minerals and timber" (1958: 143). He explained that in the past, this situation had promoted a "harmonious development of the higher cultures of the plains and the lower cultures of the hills and forests" (1958: 144).

Moreover, he observed that Indian tribes did not make stone implements, and that pottery which archaeologists had recovered from archaeological sites,

differed from those that local communities use. Although Subbarao does not say so, he believed that the hills and forests that Indian aboriginal peoples had occupied were not their historical territories. Rather, he explained that Indian tribals had “retained traditions of movements and displacement” (ibid.)

Subbarao believed, as some Indian historians had, that migratory groups that entered India were soon absorbed into the Indian way of life, such that only very few could be isolated and identified archaeologically. For Subbarao, the most important of these were the Aryans, who established themselves in northern India (1958: 18; 24). Subbarao saw ancient Indian history as characterized by the slow replacement of small scale cultivators, hunters and fishers by large scale agriculturalists. Indian scholars and policy makers often accepted this view of Indian prehistory because it naturalized social inequality and justified rapid development in newly acquired territories. This culture-historical approach, which emphasizes change as a result of external factors and denigrates aboriginal peoples as static and unchanging, is akin to methods that British scholars employed to justify colonialism during the mid-nineteenth and early-twentieth century (Trigger 2006: 261). It is not surprising, then, that to some observers Indian archaeology seemed to have continued, up until the 1990s, in the established “culture-history program”, “without significant modification” (Johansen 2003: 194).

### ***Political crisis and the practice of Indian archaeology***

Much of the 1960s and the 1970s were marked by growing political divisions within India. Following Nehru's death, Indian troops battled with their West Pakistani counterparts in 1965. This social and political uncertainty was heightened when Lal Bahadur Shastri, who had taken over as prime minister, died in Tashkent at the conclusion of Soviet-organized ceasefire negotiations with Pakistan (Kothari 1967). Internally, Indira Gandhi, who took over as leader of the Congress, faced growing dissatisfaction amongst India's ethnic and linguistic minorities, particularly in Punjab and in the northeast with tribals (Cook 1968). It is not surprising, then, that the failure to form ministries in multiple states saw a widening rift within the Congress with regards to its organization and direction (Palmer 1967).

Indian politicians put these concerns aside as it became increasingly clear that civil war had broken out in East Pakistan in early 1971. Political instability and a festering civil war in East Pakistan saw many Bengali-speakers fleeing across the border into India's eastern states of West Bengal and Assam. Recognizing its geopolitical interest, New Delhi aided East Pakistan's efforts to declare independence from West Pakistan. The Indian government provided East Pakistan funds, arms and personnel (Marwaha 1979).

These rapid social and political changes did little to ease deepening dissatisfaction and discord in many parts of India. The Indian middle class grew increasingly frustrated with inequality and rampant corruption, including charges brought against the prime minister (Park 1975: 1000). Its faith in technology as

the sole source of social progress waned as it became apparent that economic development had not wiped out poverty or *gharibi hatao* as Gandhi had campaigned. Rather, to some observers, economic inequality had increased (Blair 1980: 242). These frustrations saw protestors calling for Indira Gandhi's resignation.

As a result of these escalating tensions, and fearing a collapse of the national government, on June 26, 1975, the President of India, in consultation with the prime minister, declared a state of emergency. Citing internal disturbance, local authorities arrested leading opposition politicians, along with students, professors, journalists, and lawyers in major urban centers and jailed them indefinitely (Morris-Hones 1975). V. C. Shukla, the new Minister of Information, appointed within two days of the emergency, censored the press and expelled foreign correspondents (Park 1975: 1006).

Within a week of the declaration, Gandhi had banned opposition political organizations. After almost nineteen months of one-party governance, Gandhi ended the emergency and called for the release of opposition politicians. During her nineteenth-month long 'disciplined democracy', the Akali Dal had organized public protests in Punjab to save democracy from Gandhi's 'dictatorship' (Telford 1992).

Moreover, the Janata Party, created and elected in 1977, formed India's first non-Congress national government. The roughly twenty-four months that Morarji Desai served as prime minister, mark the lengthiest period up until 1998, when the position was held by a member of a political organization other than the Congress. The coalition gained support because most Janata Party members,

including many one-time Congress members, had opposed Indira Gandhi's declaration of emergency (Weiner 1977). These developments underscored growing social awareness amongst India's middle class. It was precisely amid these uncertainties that Indian archaeology took a surprising turn.

### **Iron Age, society and the 'second urbanization'**

The first two decades of postwar Indian archaeology were marked by growing numbers of archaeologists, and the rapid accumulation of archaeological data (Thakran 2000: 48-56). *The Antiquities and Art Treasures Act* (1972) expanded on prior legislation, and authorized Survey officers to enter, search any place and seize antiquities or art treasures for safekeeping, pending trial. The Act also gave the Survey exclusive rights to define what constituted an 'antiquity', as well as authority to estimate its commercial value. These measures impacted local communities where archaeologists often carried out field studies. Officers now had discretionary powers when it came to the collection of archaeological material, and to compensate local communities for antiquities.

At the same time, Indian archaeology grew increasingly self-conscious and curious about the methodological foundations of the discipline. These growing interests spurred scholars to create the Indian Archaeological Society in Varanasi<sup>34</sup> (Narain et al. 1967: vii). Ironically, the scholarly organization aimed to encourage collaboration between "archaeologists in the field and natural scientists working in the laboratory" (ibid.) at the very moment that scholars in allied

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<sup>34</sup> Historian A. K. Narain and archaeologist H. D. Sankalia were amongst the organization's founders. The Society, now based in New Delhi, has published *Puratattva* since 1967. In 1971, the Society had 180 members, and they included archaeologists from the Survey, museums, and university departments, as well as independent researchers.

disciplines increasingly questioned the primacy of technology as a source for social progress (Gough 1973: 3-4).

The Society's journal, *Puratattva*, gave archaeologists a forum to discuss both the collection and interpretation of archaeological data. Indian archaeologists maintained their interests in Sanskrit texts and their relations with scholars specializing in ancient Indian history. They increasingly made explicit their views on technology and society (Agrawal 1967). These developments influenced the study of ancient India.

Indian archaeologists often thought of technology in terms of control over natural resources and the environment and its influence on the economic life of a society (Margabandhu 1971: 1202). Influenced by ideas of class society, some scholars characterized ancient India in terms of two urbanizations: the first was the copper metallurgy economy of the Indus Valley civilization and the second, the iron-based society of the Ganges Valley (Agrawal 1967: 22). However, scholars did not agree on the relationship between the two ancient societies – was the former an ancestor to the latter or did the Indus Valley civilization die without a legacy? And if it did not leave descendents, how did the cultures of the Ganges Valley develop?

It is no surprise then that in their final season of investigations at Sanghol, S. S. Talwar and R. S. Bisht had two objectives: (1) to ascertain the relationship between “Late Harappan settlement and the Painted Grey Ware”; and (2) to expose the *stupa*, and brick structures which they had provisionally dated to the early historical period (1978: 28). The researchers reported fortifications and an extensive defense system at the site and corroborated their recovery with written



sources (1974: 30). Thus, because the researchers believed that Sanskrit texts explained social and political organization, and because the archaeological record was an archive of successive cultures all that needed to be known was the technological stage of each culture. At the same time, Talwar and Bisht made short notice of medieval and historic occupations at the site.

In *The Iron Age in India*, archaeologist N. R. Banerjee (1965: 76) attributed iron technology to the “users of the Painted Grey Ware”. He reasoned that the urban civilization in the Indus Valley, with its “well-planned and [storied] houses of bricks”, as well as drains and baths, was unlike the pastoral and agricultural life described in the *Rg Veda* and thus, Harappan culture could not be associated with the Aryans. This meant that ‘early’ Aryans had settled somewhere on the Indus River, but did not contribute to the ancient civilization. Yet, because some archaeologists believed that innovations developed elsewhere were brought into India, and because they believed in the cultural and biological superiority of Aryans, they attributed iron technology to ‘later’ Aryan groups. Banerjee associated these groups with the Puranic tradition, and the *Mahabharata*.

Moreover, Banerjee remarked that iron and microliths had been found in association with each other at sites in northern India (1965: 219). He argued that this was “an evolutionary trend from the chalcolithic to the Iron Age”, as well as “from the north-east towards the south” of India (ibid.). Thus, Indian archaeologists assumed, as some Indian historians had, that northern India was the source of cultural innovations for the rest of India. An archaeologist at the Tata Institute for Fundamental Research, D. P. Agrawal (1967: 23) explained that the necessary “surplus to usher...urbanization” was possible only when iron

technologies were used on a “mass-scale”. This view emphasized technology as a prime mover in social progress.

Some Indian archaeologists, who had intellectual interests in early historic India, grew increasingly aware that field collection which had emphasized culture-sequences alone was inadequate for the study of houses and town planning (Margabandhu 1971: 80). Whereas this approach had enabled archaeologists to identify individual sites, and establish pottery sequences over large regions in India, scholars lacked archaeological data to shed light on the development of towns, settlement hierarchies and state formation. Ghosh (1972: 35) remarked that “in the absence of large-scale horizontal excavations, our knowledge of the Painted Grey Ware and Northern Black Polished Ware<sup>35</sup> cultures is not extensive”. These questions generally demanded archaeologists collect data through both horizontal and vertical excavation. At the same time, scholars maintained their interests in a north-centric Indian past.

Because archaeologists often collected charcoal samples for radiocarbon dating, they had established a chronology for excavated sites and associated material remains (Agrawal and Kusumgar 1966). For example, Agrawal and his colleagues published several articles between 1965 and 1978 with radiocarbon dates for Indian sites. These publications included for each sample, the site name, geographic coordinates, historical description, excavator, pottery or culture, sample type, trench number, locus, layer, and depth at which sample was collected. However, in the absence of trench notebooks, archaeologists generally cannot understand the archaeological context of a collection.

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<sup>35</sup> This pottery was dated to the historic, and it was exclusive to northern India.

Agrawal's (1966) article in the journal *Current Science* presented a "synthesis" of accumulated data in light of C-14 dates and discussed the 'Aryan problem'. This was of greatest interest to scholars who studied numismatics, art history and architectural studies. They often increasingly studied material culture that archaeologists had recovered.

Moreover, some scholars believed that villages were self-sufficient and unchanging (Margabandhu 1971: 35). Because they thought that villages were the basic unit of society and because these social units did not change, they emphasized the role of technology in the colonization of new regions, and the emergence of towns and cities (Margabandhu 1971: 1318). This assumed that the complexity of social institutions varied by an increasing density of villages, rather than with demographic scale of settlement, including population size, structure and distribution. For example, in his examination of the material culture dated to 400 B.C and 300 A. D., C. Margabandhu (1971: 169) assumed cultural continuity and emphasized an "elaborate social structure" in ancient India. Although Margabandhu does not say so, he assumed, as some Indian historians had, that there was little or no conflict in ancient India (Kosambi 1956: 36). This view gave the impression that Indian society was timeless and stagnant.

Some Indian archaeologists grew increasingly aware that a deterministic view of technology did not adequately explain the complexity of the archaeological record (Chakrabarti 1973). Did the "techno-economic base" of village-farming communities between the end of the Indus Valley civilization and 600 B.C., cause the second urbanization? In his examination of 'urban revolution' in the Indian context, archaeologist Dilip K. Chakrabarti argued that whereas iron technology

had aided agricultural surplus, the surplus could not have been “effectively mobilized” in urban settlements without a “new series of institutions like that of state and kingship” (1973: 29). He placed emphasis on social and political factors in the development of complex societies. Whereas traditional explanations of change had emphasized the role of technology in ancient Indian society, Chakrabarti emphasized political activities, including trade and defense as factors that ensured “social stability” in early societies (1973: 32; 1974: 89).

Chakrabarti believed that conceptual issues regarding the urban revolution had not been examined in view of the Indian scenario. He argued that Indus Valley “urbanism had an antecedent rural history behind it” and that “pre-Harappans” had a well established ‘village-base’<sup>36</sup> throughout territories where the civilization had flourished (1973: 32). Moreover, he explained the civilization had not left “an urban legacy” and thus, up until fortified urban settlements in 600 B.C, India was “a land of non-literate, village-farming communities” (1973: 30). The “base of the modern Indian village”, then, Chakrabarti argued, was laid at that time and it was intensified through iron use. He believed that fortified settlements were also politically important centers (1974: 88).

Chakrabarti contended that “political consolidation”, more so than economic factors alone, influenced the process of urban growth in early historic India (ibid.). He assumed, as some Indian historians had, that political activities began with agriculture. This approach presented archaeologists with a framework to

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<sup>36</sup> On this point, H. D. Sankalia’s work on ‘chalcolithic’ settlements in central and western India is significant (1962). He argued that the study of epigraphy and monuments had provided the basis for writing the “political, social, cultural and art history of India” (1962:5) but had not offered “a continuous history of the origin of man and his development through the ages” (ibid.). Chakrabarti likely knew about Sankalia’s work.

investigate ancient political systems. These internalist views challenged traditional understandings of the archaeological record. Whereas scholars had employed external factors like migration to explain change, some Indian archaeologists increasingly examined the influence of social and political factors in their study of complex societies.

Furthermore, because Indian archaeologists tended to think of Aryan northern India as the source of cultural innovations for the rest of India, and because they thought of Dravidian southern India as static and unchanging, Indian archaeologists often overlooked iron use in other parts of India. For example, on megalithic burials<sup>37</sup> in the southern peninsula, from which archaeologists had recovered iron implements, Banerjee (1965: 242) had explained that “the advent of iron is apparently later than its arrival in the Ganga plains”. Thus, the “prime responsibility for introducing iron in India and spreading it far and wide within the sub-continent can be squarely fixed on the Aryan endeavour” (ibid.). This view of the Indian past corresponded with the national narrative championed by some scholars and policy makers. Thus, Indian archaeologists made prehistory conform to Indian history.

### ***Social unrest in Punjab and the recovery of ancient India***

Growing political instability and social unrest in Punjab influenced Indian archaeology. Resistance to New Delhi’s authoritarian methods during the emergency had galvanized some Punjabi-speakers. The voices demanding Sikh

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<sup>37</sup> For more on Iron Age in southern India, see A. Sundara (1975), and on the Megalithic culture, B. Narasimhaiah (1980).

autonomy grew louder still when the Janata-led coalition fell and Indira Gandhi was re-elected (Leaf 1985a: 484). For example, the anthropologist Murray Leaf (1985a) discussed economic and political concerns of Punjab's rural communities, and unfavourable land reforms that Congress had implemented. He (1985a: 489) remarked that many in Punjab "widely believed, and still believe, that under the governments of Indira Gandhi they had been economically exploited by a kind of internal mercantile system, and that this exploitation had been increasing consistently since her election". These perceptions heightened in the wake of the declaration of the emergency and reinforced sensitivities amongst some local communities that they actually were being cheated by the (Congress) central government.

These tensions grew through the early 1980s and into the early 1990s. Punjab saw a new wave of social unrest, accompanied by growing political violence, including confrontations with police, excessive use of force against civilians, imprisonment without due process, and the assassination of journalists and politicians (Telford 1992: 984). These simmering tensions reached boiling when armed members of the community demanding Khalistan took refuge in the Golden Temple, an historic *gurdwara* in Amritsar.

Leading politicians in New Delhi grew increasingly frustrated with their inability to resolve these pressing concerns. They made the decision to storm the *gurdwara* and its grounds as a solution to end the growing violence and loss of human life. Yet Operation Bluestar, that saw Indian troops enter and take control of the Golden Temple, did not bring peace in Punjab. Nor did it quell demands for Khalistan (Hardgrave 1985: 134). Some scholars and policy makers believe that

Indira Gandhi's assassination in October 1984 by her Sikh bodyguards was a direct result of her support for the Golden Temple mission (Bryjak 1985: 32). In its wake, the nation's capital, New Delhi was gripped by civil unrest and widespread riots (Hardgrave 1985: 140).

The central government organized subsequent military interventions in Punjab up until 1990 (D. Gupta et al. 1988: 1679-1680). As a result of recurring armed conflict at places of worship, the Government of India brought into legislation in 1988, the *Religious Institutions (Prevention of Misuse) Act*. These measures made illegal political activities in any place of worship, including congregation or assembly that promote political ideas, and funding for political parties. The manager or the management now could be held responsible for any acts of violence planned or initiated on the premises of a place of worship. In Punjab, this impacted the management of *gurdwaras* as protected under the *Sikh Gurdwaras Act* (1925). The act had recognized and protected the exclusive rights of Sikhs to manage their shrines. It was in these heightened political uncertainties that archaeologists carried out archaeological investigations in Sanghol.

### **Archaeology in an anxious Punjab: investigations at Sanghol**

In "Cultural development in the eastern Punjab", American archaeologist Jim G. Schaffer (1986: 195-196) remarked that whereas archaeologists had recovered several Harappan settlements, few of these excavations had been in the "eastern" or Indian Punjab. He pointed out that (Indian) archaeologists had not carried out "systematic" archaeological field studies, and that the work they had done, was "almost haphazard" (1986: 196).

Amid rapid economic and social change, Indian archaeologists had, indeed, carried out field studies in Punjab. Through the mid-1960s and early 1970s, the central government had invested in intensive agriculture, and the ‘Green Revolution’ had produced favourable yields for farming households in the state. While this was especially the case for land owning families, some scholars believed the same could not have been said for families who rented land in ‘green Punjab’ (Ladejinsky 1969).

Other scholars suggested that the situation was more complex, and argued that investments in agricultural technologies, including grain varieties, controlled water supplies, and pesticide and fertilizer use, had costs that were not (yet) known, and that these would overshadow the initial, short-term gains (Falcon 1970). More extreme views of the agricultural technologies suggest a causal link between violence (“political breakdown”) and “ecological breakdown” (Shiva 1991: 24) in Punjab, and place onus on the “American paradigm of agriculture” in the Third World (Shiva 1991: 32). Still other researchers remarked that the Green Revolution was multifaceted, and that neither national nor regional data alone offered insight on the “realities of the revolution” (Leaf 1985b: 2).

Although there appears to be little scholarly consensus on the extent and impact of the Green Revolution on Indian society, the historian Ramachandra Guha (2007: 1008) suggests that prosperity did heighten awareness of widening social inequality amongst many Indians. Some Indians grew increasingly anxious (Mencher 1974) and soon questioned the role of technology in society, and the effectiveness of technological solutions for some societal problems. For example,



education<sup>38</sup>, especially for girls, and adult illiteracy posed significant challenges for policy makers who pointed to bountiful harvests and increases in wages for labourers (R. Guha 2007: 1062). This struck a chord with the educated Indian middle class who drew a correlation between educational opportunities and political power and thus cast doubt on technology as a source of social progress (for all).

But these concerns did not mean the Indian middle class rejected technology; rather, it had a heightened awareness that technologies varied not only in application but also how they might solve or aid pressing social issues. It is no surprise then that foreign policy concerns that marked the 1970s also showed growing investment in India's atomic capabilities, with the first successful nuclear test at Pokhran, Rajasthan in 1974. It was in this milieu that archaeologists renewed excavations in Sanghol.

Y. D. Sharma re-excavated Ropar and he had identified 'pre-Harappan' culture at the site (Y. D. Sharma and G. B. Sharma 1982: 71). Sharma and Sharma had synthesized their analysis of Bara<sup>39</sup> culture at Ropar and Sanghol. At Sanghol, they had confirmed an 'overlap' between Bara and the Painted Grey Ware culture. The researchers had recovered houses, 'industrial' kilns, and a potter's workshop. In their examination of the kiln at the site, the researchers observed a deep deposit of four metres (1982: 81). This suggested to the researchers that the potters had continuously used the kiln. They argued that the lowest part of this deposit,

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<sup>38</sup> R. Guha (2007: 1068) cites a figure of 18.4% for female literacy to 39.5% male literacy in 1971, and although there were regional variations, the figures did suggest an improvement from literacy levels in 1947.

<sup>39</sup> Bara is an archaeological site near Ropar in Punjab. Y. D. Sharma had excavated there in the 1950s.

roughly 1.8 metres, was Baran accumulation. They had estimated that it represented 200 years of use, or “four to five generations of potters” (ibid.). Sharma and Sharma employed absolute dating techniques to date the deposit. At the same time, the researchers explained that Bara pottery was “thickly distributed” in the Sutlej and Ghaggar basin, and that it “spread” from this hub to the Yamuna-Ganges valley (1982: 73). They believed that the Bara culture was a distinct and local development, and thus, they rejected claims that Bara was a “genealogical devolution of the mature Harappan” (1982: 72)<sup>40</sup>. They emphasized local development in Punjab. This was a key change in the worldviews of some Indian archaeologists.

The Punjab Department’s announcement in early 1985 of its recovery of sixty-nine pillars, thirteen coping stones and thirty-five crossbars in Sanghol (Punjab Department 1985: 3), mark an important moment in the history of Indian archaeology. When else had the Survey been invited by a state department of archaeology and the local community to carry out field studies? How, amid the visceral social unrest and political uncertainties, did Survey archaeologists collaborate with their counterparts in the Punjab Department to recover ancient India? How did these relations influence the interpretation of archaeological data?

More than two decades since excavations ended at Sanghol, some of these questions remain unexamined because Survey archaeologist and director of the collaborative field project, C. Margabandhu, has not yet published his final report,

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<sup>40</sup> In his report for Ropar, Y. D. Sharma (1955) had expressed quite a different view. At that time, he had remarked that Harappans from the Indus Valley had migrated and were the first group to settle at the site (1955: 122). He repudiated these views in the 1970s. See Sharma (1979) on ‘pre-Harappans’.

and neither has the Punjab Department. Till then, scholarly publications, unpublished excavation summaries and oral history shed light on the methods archaeologists employed at Sanghol. They suggest the interests of the researchers, their understanding of theoretical developments in archaeology, as well as their worldview.

In their initial excavation summary, Punjab Department archaeologists had emphasized the significance of their recovery, and stressed that the stone sculptures “seem to have been buried intentionally” (1985: 2). Their initial excavations focused on the exposing the entire *stupa* and understanding its relationship to the sculptures. They had explained that purposeful interment had saved these artefacts from “attacking hordes” (ibid.). Researchers often reiterate this account (Gill 2010: 148; Margabandhu 2010: 106).

The Punjab Department remarked on the importance of the sculptures for scholars who study Indian art, and dated the style of art between 1<sup>st</sup> and 2<sup>nd</sup> century A.D. or the Kushan period (1985: 3; 6). At the same time, archaeologist S. P. Gupta (1987) claimed that Sanghol was a “meeting place” for the ‘Gandhara and Mathura schools of art’<sup>41</sup>. He argued that the material culture recovered at Sanghol represented cultural exchange between the Indian and the Gandhara cultures. These views assign a higher epistemic value to written sources and often employ archaeology to corroborate those accounts.

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<sup>41</sup> On this issue, see Ray (2010: 10) where she remarks that the Kushans are often credited with “the proliferation of the Mathura School of Art at Mathura,” yet, recent scholarly work suggests that Mathura had a “fully developed school of art and architecture from the second century BC onwards”.

Retired Punjab Department archaeologist G. B. Sharma remarked that the sculptures showed that “the peoples of Punjab and of the Ganga-Yamuna valley then shared one and the same religion and one and the same art idiom” (1985: 19). He stressed that Sanghol was continuously occupied, during which time the *stupa* was constructed (Sharma and Kumar 1986: 6). Although he does not say so, he believed the sculptures and the *stupa* were constructed at the same time (Sharma and Kumar 1986: Plate VI), and that the ‘monastery and *stupa* complex’ were destroyed sometime in the 5th century A.D. by invading Central Asian tribes (Sharma and Kumar 1986: 7)<sup>42</sup>. This does not explain, however, whether the sculptures were produced at Sanghol, and where the local community had procured raw material for their craft.

The Punjab Department’s excavation summary for the 1986 season, when the Survey had joined the project, suggested different objectives. The Department emphasized the need for horizontal excavations to recover town planning and structures, to confirm the relationship between the Painted Grey Ware culture and preceding ones, and finally, to locate other *stupas* (1986: 1). It is likely that Margabandhu and Gaur knew of previous work on the ‘overlap’ between Painted Grey Ware and antecedent cultures (Sharma and Sharma 1982), since their efforts

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<sup>42</sup> I interviewed G. B. Sharma in Sanghol in 2009. I asked about the sculptures and whether he had expected them to find them. Sharma had believed that Sanghol and the *stupa* mound was an important place in ancient India but he did not know about the sculptures until the team had recovered them. This raises questions about scholarly understandings of architectural ‘symmetry’ and its relationship to the Buddhist tradition. This uncertainty is expressed by Sandrine Gill (2010: 145-146), where she suggests that the “basic *stupa* form varies from one region to another, from one building material to another, as also according to the size of the monument”. She emphasized the ‘unique’ and ‘deliberate’ deposition of the sculptures (Gill 2010: 148-150). For Sharma, the recovery was part of doing ‘systematic’ fieldwork in which the excavator pays attention to places with archaeological potential, and the luck of those who ‘keep at it’. Indeed, Sharma seems to have irked his colleagues at the Department by insisting that it continue fieldwork in Sanghol and not at other sites. The sculptures, then, were a ‘treasure’ that vindicated Sharma’s beliefs about the significance of Sanghol in ancient India.

seem to have been directed to houses and town planning. In their examination of town planning, Margabandhu and Gaur (1987: 75) argued that settlement had “well-differentiated social stratification”. They identified structures and classified them as fortifications, citadel, township and religious (ibid.). The researchers argued that “trade and increased productivity” created more capital, yet this did not address questions about distribution of wealth (1987: 76). Whereas the Punjab Department emphasized the relationship between the monastery and the *stupa*, Margabandhu and Gaur focused almost exclusively on the study of town planning at the site.

These initial publications suggest that each research team had different interests and aims. The knowledge producers asked different questions and employed different methods. Although Margabandhu’s report suggests collaboration between the Survey and Punjab Department, the two teams seem to have worked on different parts of the site and shared only movable antiquities<sup>43</sup>. The division of the archaeological collection, its written records, including photographs and maps, between research teams has implications for our understanding of the site and the archaeological collection as a whole. These approaches influence the interpretation of archaeological data.

In his examination of ‘plant economy’ at Sanghol, K. S. Saraswat (1997) analyzed archaeobotanical remains. During excavations between 1986 and 1990, he had collected twelve soil samples from Bara ‘levels’. He argued that Barans

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<sup>43</sup> I examined the collections stored at Quila Mubarak. I asked archaeologists at the Punjab Department this very question. I interviewed Gurdev Singh in Chandigarh in 2009, and he confirmed that his department and the Survey often worked on different parts of the site. They usually recorded, and divided, their antiquities at the end of the work day. In July 2010, Margabandhu sent a request to K. S. Sindhu and Gurdev Singh, asking they make themselves available to contribute to the Survey’s final report.

were “lineal descendents of highly advanced Early and Mature Harappans” (1997: 106). Saraswat identified thirty different plants that were used at Sanghol and he attributed most to ‘settlers’ (1997: 110). He concluded that ‘Mature Harappan cultural dynamics’ was a “prime mover of agricultural intensification” at Sanghol (1997: 98). Elsewhere, he and his colleague identified ‘fire-alters’ and they argued that ritual behaviour at Sanghol had Vedic roots (Saraswat and Pokharia 1997: 150). They claimed that these rituals were practiced by ancient Harappans, and they believed that archaeology recovered these practices. Although they do not say so, they believed in Vedic origins for the Indus-Saraswati civilization.

Influenced by Hindu nationalism, some Indian archaeologists have argued that the ancient Hindu civilization flourished along the now dried-Saraswati River (S. P. Gupta 1995). They have claimed that the Indus-Saraswati civilization, or *Sindhu Saraswati Sabhyata*, developed in the territories between the Indus River and Saraswati palaeochannel. Some scholars who study geology and geomorphology, and believe in Vedic origins of Hindu civilization, are interested in recovering the Saraswati paleochannel (Valdiya 2002). Because scholars believe that agriculture was a local development, and because they believe the ancient Hindus were farmers, they consider Aryans ‘indigenous’ to India (Lal 2008: 107).

For example, B. B. Lal had presumed this in his early work when he questioned the invasion at Harappa, an explanation that both V. Gordon Childe and Mortimer Wheeler had accepted. Lal had remarked, “early Aryans are known to have dwelt on the banks of the Sarasvati and later on to have moved to the upper reaches of the Ganga and Yamuna. Thus, if the cemetery H culture was to

represent the Aryan invaders, should not one expect the remains of this culture in the Sarasvati and upper Ganga-Yamuna valleys?” (1954: 151). This view assumed cultural continuity, and extended twentieth century understandings of Hindu traditions back five millennia.

There are competing views on the Vedic origins for the Indus-Saraswati civilization. Some scholars remark that by providing a new name for a “known phenomenon”, Indian archaeologists have established a “foundational myth” (Sudeshna Guha 2005: 404). They suggest that the “dismissal of historical consciousness” is apparent in the “absence of a coherent professional disavowal” of the “pseudo-Hindu culture in the third millennium B.C.” (Sudeshna Guha 2005: 422). Other scholars have argued that “colonial Indology” that promotes an “Aryan-non-Aryan dichotomy” is unacceptable to Indians because of its notion of invasion (Chakrabarti 2000: 667). They propose instead a “grassroots archaeological investigation” to “forge a broad-based Indian identity” (Chakrabarti 2000: 670). Still others suggest that the Survey’s Saraswati Heritage Project was the first state-sponsored program that aimed to “produce credible data of indigeneity” of the “Rig Veda Aryans” (Chadha 2011: 74). These views do not explain why Indian scholars explained change as a result of migration, why they believed that Hindu culture did not change over time or why archaeologists do not seek to better understand gender differences in Indian society.

## ***Conclusion***

This chapter examined the influence of political crisis on the practice of national archaeology. Some scholars argue that archaeology in non-Western settings, particularly in the Third World, developed in isolation. Yet these views obscure the influence of geopolitical factors in national contexts and the desire for internal social and political stability on the practice of archaeology. Moreover, approaches to the practice of archaeology in post-colonial societies sometimes emphasize the role of state-oriented organizations and government regulations. These views underestimate the influence of the relationship between local communities and the national government and the role of individuals in the preservation of cultural heritage and in the interpretation of archaeological data. To deepen our understanding of postwar Indian archaeology, and the impact of social and political factors on its practice, I examined the significance of Sanghol, a community and an archaeological site in Punjab, in light of the assassination of Prime Minister Indira Gandhi. Sanghol's unique place in Indian archaeology suggested a reorganization of the field such that Indian archaeologists challenged conventional views of the Indian past in which creative and dynamic groups brought innovations into India. Influenced by growing social awareness, Indian archaeologists increasingly explained change as a result of local development and local innovation.

In the wake of Indian independence in 1947, some Indian scholars wrote a national narrative that made prehistory conform to Indian history. Some scholars and policy makers often thought in terms of historical groups who brought



creativity and dynamism into India, and were soon absorbed into the Indian way of life. Scholars claimed fundamental unity of Indians, yet leading politicians who took over administration of India often considered themselves morally and mentally superior to India's ethnic and linguistic minorities.

Influenced by ideals of equality and fairness, a growing Western-educated middle class increasingly demanded rapid social change and greater political representation for its interests. The middle class increasingly challenged the Indian National Congress on its claims for moral and cultural superiority. In addition to caste, language, religion, class and gender interests influenced centre-state relations in the Republic of India.

At the same time, some scholars influenced by Hindu nationalism thought in terms of an unbroken Hindu scientific tradition dating several millennia. Because scholars and policy makers believed that Sanskrit and the descended languages of northern India were related to European ones, and because they believed in the Vedic origins of civilization, scholars promoted Hindi as a national language. Ironically, because scholars and policy makers often narrated a north-centric view of the Indian past, many ethnic and linguistic minorities grew anxious about a northern-dominated Independent India. This in turn promoted an inward looking perspective that emphasized ethnicity and local history.

Leading politicians often thought of poverty as the cause of society's ills. They often thought of the Indian past as a golden age when India was independent, peaceful, technologically sophisticated and united. They believed that India had become poor because of foreign rulers, and that economic and social sufficiency was the common goal for all Indians. Following in the wake of independence, the

central government invested in land redistribution for mining and the construction of large dams, irrigation canals and power plants. Amid these rapid economic and social changes, the government undertook measures to protect cultural heritage. This encouraged the accumulation of archaeological material.

Some Indian archaeologists assumed cultural continuity between contemporary and prehistoric groups when it came to the interpretation of archaeological data. They thought in terms of recovering cultural achievements of their ancestors. At the same time, scholars thought of aboriginal peoples as static and unchanging. They were thought synonymous with prehistoric cultures that had gone extinct. Some scholars believed that more advanced peoples had pushed aside aboriginal and less developed peoples. These ethnocentric views highlighted the progress of Hindus, and denigrated aboriginal people as simple. Thus, by assuming a simplistic past, some Indian scholars encouraged migration as an explanation for change. These approaches were accepted because they naturalized social inequality and justified rapid development in territories occupied by ethnic and linguistic minorities. This approach was similar to that employed by British scholars to justify colonialism during the mid-nineteenth and early twentieth century (Trigger 2006: 261), and gave observers the impression that Indian archaeology had continued without significant modification in the culture-historical approach.

By the late-1960s, India's middle class grew increasingly anxious as it became apparent that despite rapid economic development, social inequality had actually grown. The Indian middle class cast doubt on technology as a source of social progress for all as it became aware that significant disparities remained, for

example in educational opportunities for girls and adult illiteracy. However, this did not mean a rejection of technology. Rather, the middle class had a heightened awareness of variation in technological applications and capability to resolve specific social issues. This in turn encouraged some scholars to challenge traditional views of the Indian past and question the foreign origins of innovations. Some Indian archaeologists examined social and political factors that influenced ancient Indian society. Because many Indian archaeologists believed in the cultural and biological superiority of ancient Hindus, and because they thought of themselves as descendents of these early farmers, they sometimes neglected examination of internal dynamics as explanations for change. Their commitment to Vedic origins meant that archaeologists interpreted the archaeological record in terms of an archive of Hindu cultural achievements. These views are increasingly challenged by India's ethnic and linguistic minorities.

## ***References***

- Abraham, Itty. 1998. *The Making of the Indian Atomic Bomb: Science, Secrecy and the Postcolonial State*. New York: Zed Books.
- Agrawal, D. P. 1966. C14 dates, Banas culture and the Aryans. *Current Science* 5: 114-117.
- . 1967. Protohistoric chronology and technology and ecological factors: a synthesis. *Puratattva* 1: 17-23.
- Agrawal, D. P. and Sheela Kusumgar. 1966. Tata Institute Radiocarbon date list IV. *Radiocarbon* 8: 442-452.
- Agrawal, D. P. and Dilip K. Chakrabarti. 1979. Archaeology in India: a professional assessment. In *Essays in Indian protohistory*. D. P. Agrawal and Dilip K. Chakrabarti, eds. pp. 389-392. New Delhi: B.R. Publishing Corporation.
- Anderson, Robert S. 1975. *Building scientific institutions in India: Saha and Bhabha*. Montreal: Centre for Developing Area Studies, McGill University.
- Altekar, Anant S. 1925. Ancient towns and cities in Gujarat and Kathiawad. *The Indian Antiquary* 54: 9-20, 40-53.
- Arnold, David. 2000. *Science, Technology and Medicine in Colonial India*. Vol. 3, part 5 of *The New Cambridge History of India*. New York: Cambridge University Press.
- Banerjee, Nil R. 1965. *The Iron Age in India*. New Delhi: Munshiram Manoharlal.
- Banningan, John A. 1952. The Hindu Code Bill. *Far Eastern Survey* 21 (17): 173-

176.

Barrier, Norman. 1967. The Arya Samaj and Congress Politics in the Punjab, 1894-1908. *The Journal of Asian Studies* 26 (3): 363-379.

Basalla, G. 1967. The Spread of Western Science. *Science* 156 (3775): 611-622.

Baxter, Craig. 1969. *The Jana Sangh: A Biography of an Indian Political Party*. Philadelphia: University of Pennsylvania Press.

Bernbeck, R. and S. Pollock. 1996. Ayodhya, Archaeology, and Identity. *Current Anthropology* 37(1): S138-S142.

Bhan, Suraj. 1997. Recent trends in Indian archaeology. *Social Scientist* 25 (1/2): 3-15.

Blair, Harry W. 1980. Mrs Gandhi's Emergency, the Indian Elections of 1977, Pluralism and Marxism: problems and paradigms. *Modern Asian Studies* 14 (2): 237-271.

Boast, Robin. 2002. Mortimer Wheeler's science of order: the tradition of accuracy at Arikamedu. *Antiquity* 76: 165-170.

Brown, W. Norman. 1964. South Asia Studies: A History. *The Annals of the American Academy of Political and Social Science* 356 (1): 54-62.

Bryjak, George J. 1985. The economics of assassination: the Punjab crisis and the death of Indira Gandhi. *Asian Affairs* 12 (1): 25-39.

Chadha, Ashish. 2002. Visions of discipline: Sir Mortimer Wheeler and the archaeological method in India (1944-1948). *Journal of Social Archaeology* 2: 378-401.

———. 2011. Conjuring a river, imaging civilization: Saraswati, archaeology and science in India. *Contributions to Indian Sociology* 45: 55-83.

- Chakrabarti, Dilip K. 1973. Concept of urban revolution in the Indian context. *Puratattva* 6: 27-32.
- . 1974. Some theoretical aspects of early Indian urban growth. *Puratattva* 7: 87-89.
- . 1982. The development of archaeology in the Indian subcontinent. *World Archaeology* 13 (3): 326-344.
- . 2000. Colonial Indology and identity, *Antiquity* 74: 667-671.
- . 2003. *Archaeology in the Third World: A History of Indian Archaeology since 1947*. New Delhi: D. K. Printworld Private Limited.
- Chakravarti, N. P. 1949a. The story of Indian archaeology. In *Archaeology in India*. N. P. Chakravarti, ed. pp. 1-15. New Delhi: Ministry of Education.
- . 1949b. Notes. *Ancient India* 5: 1-3.
- Chatterjee, Partha. 1995. Alternative Histories, Alternative Nations: Nationalism and Modern Historiography in Bengal. In *Making Alternative Histories: The Practice of Archaeology and History in Non-Western Setting*. Peter R. Schmidt and Thomas C. Patterson, eds. pp. 229-253. Santa Fe, NM: School of American Research Press.
- Chatterji, Joya. 1994. *Bengal Divided: Hindu Communalism and Partition, 1932–1947*. New York: Cambridge University Press.
- Chatterji, Suniti K. 1951. Race-movements and prehistoric culture. In *The Vedic Age*. Vol 1 of 11 of *The History and Culture of the Indian People*. Ramesh C. Majumdar and Achut D. Pusalker, eds. pp. 141-168. London: George Allen & Unwin Ltd.

- Choudhury, Golam W. 1972. Bangladesh: Why It Happened. *International Affairs* 48 (2): 242-249.
- Clark, J. Grahame D. 1979. *Sir Mortimer and Indian archaeology*. New Delhi: Archaeological Survey of India, Government of India.
- . 1989. *Prehistory at Cambridge and beyond*. New York: Cambridge University Press.
- Cook, C. P. 1968. India: The Crisis in Assam. *The World Today* 24 (10): 444-448.
- Cremona, Michael A. 2003. *Human devolution: a Vedic alternative to Darwin's theory*. Los Angeles: Bhaktivedanta Book Pub.
- . 2008. Excavating the eternal: an indigenous archaeological tradition in India. *Antiquity* 82: 178-188.
- Dikshit, K. N. 1951. Archaeological explorations and excavations. In *The Vedic Age*. Vol. 1 of 11 of *The History and Culture of the Indian People*. Ramesh C. Majumdar and Achut D. Pusalker, eds. pp. 65-78. London: George Allen & Unwin Ltd.
- Directorate of Cultural Affairs, Archaeology and Museums. 1985. Excavations (1984-85). Punjab, Chandigarh, India.
- Directorate of Cultural Affairs, Archaeology and Museums. 1986. Excavations at Sanghol, District Ludhiana, Punjab, 85-86. Punjab, Chandigarh, India.
- “Divisions of India according with the first schedule of the Constitution (1950)”. 1953. [map] 1:643 600. In *An Advanced History of India*. Ramesh C. Majumdar, H. C. Raychaudhuri and Kalinkinkar Datta, eds. 1953. London: Macmillan and Co., Limited. Retrieved from [http://en.wikipedia.org/wiki/File:Divisions\\_of\\_India\\_and\\_Pakistan,\\_1950.jpg](http://en.wikipedia.org/wiki/File:Divisions_of_India_and_Pakistan,_1950.jpg) (March 2012).

- Doel, Ronald E. and Kristine C. Harper. 2006. Prometheus unleashed: Science as a diplomatic weapon in the Lyndon B. Johnson Administration. *Osiris* 21 (1): 66-85.
- Dutt, Romesh C. 1889. *A History of Civilization in Ancient India, Based on Sanscrit Literature*. 3 vols. Calcutta-London:Thacker, Spink and Co.; Trübner and Co.
- . 1893. *A History of Civilization in Ancient India, Based on Sanscrit Literature*. 3 vols. Calcutta-London:Thacker, Spink and Co.; Trübner and Co.
- Falcon, Walter P. 1970. Green Revolution: Generations of problems. *American Journal of Agricultural Economics* 52 (5): 698-710.
- Fox, Cyril. 1932. *The Personality of Britain: its influence on inhabitant and invader in prehistoric and early historic times*. Cardiff: The National Museum of Wales and the Press Board of the University of Wales.
- Ghosh, Amalananda. 1958. Notes. *Ancient India* 14: 1-3.
- . 1962. Notes. *Ancient India* 16: 1-3.
- . 1972. Comments on 'Concept of urban revolution'. *Puratattva* 6: 34-36.
- Ghosh, Amalananda and K. C. Panigrahi. 1946. Pottery of Achichchhatra (U.P.). *Ancient India* 1: 37-59.
- Gill, Sandrine. 2010. Celestial women in a ring around the Buddhist stupa: the case of Sanghol. In *Sanghol and the Archaeology of Punjab*. Himanshu P. Ray, ed. pp. 143-165. New Delhi: Aryan Books International.
- Gonda, Jan. 1975. *A history of Indian literature: Veda and Upanishads*. Vol. 1. Wiesbaden: Harrassowitz.



- Gordon, Stewart. *The Marathas 1600-1818*. The New Cambridge History of India, II, 4. New York: Cambridge University Press.
- Gough, Kathleen. 1973. Imperialism and revolutionary potential in South Asia. In *Imperialism and revolution in South Asia*. Kathleen Gough and Hari P. Sharma, eds. pp. 3-42. New York: Monthly Review Press.
- Guha, Ramachandra. 2007. *India after Gandhi: the history of the world's largest democracy*. London: Pan Books (e-book MOBI format).
- Guha, Sudeshna. 2005. Negotiating evidence: history, archaeology and the Indus civilization. *Modern Asian Studies* 39 (2): 399-426.
- Guha, Sumit. 1998. Lower strata, older races, and aboriginal peoples: racial anthropology and mythical history past and present. *The Journal of Asian Studies* 57 (2): 423-441.
- Guha-Thakurta, Tapati. 2004. *Monuments, objects and histories: Institutions of Art in colonial and postcolonial India*. New York: Columbia University Press.
- . 2007. 'Our gods, their museums': the contrary careers of India's art objects. *Art History* 30 (4): 628-657.
- Gupta, Dipankar, Sumanta Banerjee, Dinesh Mohan and Gautam Navlakha. 1988. Punjab: communalized beyond politics. *Economic and Political Weekly* 23 (33): 1677-1684.
- Gupta, Swaraj P. 1987. Sanghol: the meeting place of works of art of Gandhara and Mathura schools. In *Investigating Indian art: proceedings of a Symposium on the Development of Early Buddhist and Hindu iconography, held at the Museum of Indian Art Berlin in May 1986*. Marianne Yaldiz and

- Wibke Lobo, eds., pp. 89-113. Berlin: Museum für Indische Kunst - Staatliche Museen Preussischer Kulturbesitz.
- . 1995. *The 'Lost' Saraswati and the Indus civilization*. Jodhpur: Kusumanjali Prakashan.
- Gupta, Swaraj P. and Shashi P. Asthana. 2002. *Elements of Indian art, including Temple architecture, Iconography and Iconometry*. New Delhi: D. K. Printworld (P) Ltd.
- Habib, Irfan. 1997. Unreason and archaeology: the 'Painted Grey-Ware' and beyond. *Social Scientist* 25 (1/2): 16-24.
- Hardgrave, Robert L. 1985. India in 1984: Confrontation, Assassination, and Succession. *Asian Survey* 25 (2): 131-144.
- Jacobson, Jerome. 1986. Editor's Preface. In *Studies in the archaeology of India and Pakistan*. Jerome Jacobson, ed. pp. vii-xiii. New Delhi: American Institute of Indian Studies.
- Jha, Vivekanand. 1991. Social stratification in ancient India: some reflections. *Social Scientist* 19 (3/4): 19-40.
- Johansen, Peter. 2003. Recasting the Foundations: new approaches to regional understandings of South Asian archaeology and the problem of culture history. *Asian Perspectives* 42 (2): 192-206.
- Jones, Kenneth W. 1973. Ham Hindu Nahin: Arya-Sikh relations, 1877-1905. *The Journal of Asian Studies* 32 (3): 457-475.
- Karve, Iravati. 1965. *Kinship organization in India*. 2<sup>nd</sup> ed. Bombay: Asia Publishing House.

- Keith, A. Berriedale. 1914. The Brahmanic and Kshatriya Tradition. *Journal of the Royal Asiatic Society of Great Britain and Ireland* January: 118-126.
- Kevles, Daniel J. 1995. *The Physicists: The History of a Scientific Community in Modern America*. New York: Harvard University Press.
- Khan, Yasmin. 2007. *The Great Partition: the making of India and Pakistan*. New Haven: Yale University Press.
- Kosambi, Damodar D. 1955. The Basis of ancient Indian history (I). *Journal of the American Oriental Society* 75 (1): 35-45.
- . 1956. *An Introduction to the study of Indian history*. Bombay: Popular Book Depot.
- Kothari, Rajni. 1967. India: The Congress System on Trial. *Asian Survey* 7 (2): 83-96.
- Krishnaswami, V. D. 1949. Megalithic types of South India. *Ancient India* 5: 35-45.
- Ladejinsky, Wolf. 1969. The Green Revolution in Punjab: A Field Trip. *Economic and Political Weekly* 4 (26): 73-82.
- Lahiri, Nayanjot. 1997. John Marshall's Appointment as Director-General of the Archaeological Survey of India: A Survey of the Papers Pertaining to His Selection. *South Asian Studies* 13 (1): 127-139.
- . 2006. Archaeological theory: a perspective from outside the Western academy. *Puratattva* 26: 1-11.
- Lal, Braj B. 1949a. Explorations and Excavations: the Prehistoric and Protohistoric Period. In *Archaeology of India*. N. P. Chakravarti, ed. pp. 17-50. New Delhi: Ministry of Education.

- . 1949b. Sisupalgarh 1948: an early historical fort in eastern India. *Ancient India* 5: 62-105.
- . 1951. Further Copper hoards from the Gangetic Basin and a review of the problem. *Ancient India* 7: 20-39.
- . 1953. Protohistoric Investigation. *Ancient India* 9: 80-102.
- . 1954. Excavation at Hastinapura and other explorations in the Upper Ganga and Sutlej Basins 1950-52. *Ancient India* 10/11: 5-151.
- . 2008. The Sarasvati: the mother of Indian civilization. In *Vedic River Sarasvati and Hindu civilization*. S. Kalyanaraman, ed. pp. 95-117. New Delhi: Aryan Books International.
- Leaf, Murray J. 1985a. The Punjab Crisis. *Asian Survey* 25 (5): 475-498.
- . 1985b. *Song of Hope: the Green Revolution in a Panjab village*. New Brunswick: Rutgers University Press.
- Majumdar, Ramesh C., Hem C. Raychaudhuri and Kalinkinkar Datta. 1953. *An Advanced History of India*. London: Macmillan and Co., Limited.
- Malik, Subash C. 1968. *Indian civilization: the formative period; a study of archaeology as anthropology*. Simla: Indian Institute of Advanced Study.
- Margabandhu, C. 1971. Material culture of Central and Western India and the Deccan from circa the third century B.C. to the third century A.D. (based on the evidence of excavated remains). PhD dissertation, Nagpur University, India.
- . 2010. Planning and development of the Kushan settlement at Sanghol. In *Sanghol and the Archaeology of Punjab*. Himanshu P. Ray, ed. pp. 106-127. New Delhi: Aryan Books International.

- Margabandhu, C. and G. S. Gaur. 1987. Some fresh evidence from Sanghol excavations, 1986. *Puratattva* 16: 73-79.
- Marriott, McKim. 1955. *Village India - Studies in the Little Communities*. Chicago: University of Chicago Press.
- Marshall, John H. 1960. *The Buddhist Art of Gandhara: The Story of the Early School; Its Birth, Growth and Decline*. Memoirs of the Department of Archaeology in Pakistan, Number 1. Cambridge: University Press.
- Marwaha, Onkar. 1979. India's Military Intervention in East Pakistan, 1971–1972. *Modern Asian Studies* 13: 549-580.
- Mencher, Joan P. 1974. Conflicts and Contradictions in the 'Green Revolution': The Case of Tamil Nadu. *Economic and Political Weekly* 9 (6/8): 309-323.
- Michon, Daniel. 2010. The excavations at Sanghol in context. In *Sanghol and the Archaeology of Punjab*. Himanshu P. Ray, ed. pp. 69-105. New Delhi: Aryan Books International.
- Ministry of Education and Culture. 1950. Division of Lahore Museum exhibits, Director of Archaeology. F.3-106/50-A.2. Archived material, National Archives of India, New Delhi, India.
- Ministry of Education. 1957. Opening Training School of Archaeology. F.1-40/57-C.1. Archived material, National Archives of India, New Delhi, India.
- Ministry of Culture. 1962. Protection of an ancient site called 'Sanghol' in Ludhiana Distt. Punjab. Transfer List 62-M/1962/Monuments. Archived material, National Archives of India, New Delhi, India.

- Mitra, Rajendra. 1881. *Indo-Aryans: contributions towards the elucidation of their ancient and medieval history*, 2 Vols. London-Calcutta: Edward Stanford; W. Newman and Co.
- Mookerji, Radhakumud. 1914. *The Fundamental Unity of India: from Hindu sources*. New York: Longmans, Green and Co.
- Morgenthau, Hans. 1962. A Political Theory of Foreign Aid. *The American Political Science Review* 56 (2): 301-309.
- Morris-Jones, Wyndraeth H. 1975. Whose Emergency — India's or Indira's? *The World Today* 31 (11): 451-461.
- Munshi, Kanaiyalal M. 1951. Foreword. In *The Vedic Age*. Vol 1 of 11 of *The History and Culture of the Indian People*. Ramesh C. Majumdar and Achut D. Pusalker, eds. pp. 7-12. London: George Allen & Unwin Ltd.
- Nanda, Meera. 2003. *Prophets Facing Backward: Postmodern critiques of science and Hindu nationalism in India*. New Brunswick: Rutgers University Press.
- Narain, Awadh K., M. Seshadri, and S. B. Deo. 1967. Editor's Note. *Puratattva* 1: vii.
- Narasimhaiah, B. 1980. *Neolithic and Megalithic culture in Tamil Nadu*. New Delhi: Sundip Prakashan.
- Nehru, Jawaharlal. 1938. The Unity of India. *Foreign Affairs* 16 (2): 231-243.
- Nicholson, Andrew. 2010. *Unifying Hinduism: Philosophy and Identity in Indian Intellectual History*. New York: University of Columbia Press.
- Omvedt, Gail. 1974. Non-Brahmans and Nationalists in Poona. *Economic and Political Weekly* 9 (6/8): 201-216.

- Paddayya, K. 1995. Theoretical perspectives in Indian archaeology: an historical review. In *Theory in Archaeology: a world perspective*. Peter J. Ucko, ed. pp. 109-147. New York: Routledge.
- Palmer, Norman D. 1967. India's Fourth General Election. *Asian Survey* 7 (5): 275-291.
- Pande, B. M. 2010. Along the footprints of past: review of Sanghol and the archaeology of the Punjab, by Himanshu P. Ray, ed. Reprint from *Daily Pioneer* Sept 9. Retrieved from <http://tech.dir.groups.yahoo.com/group/IndiaArchaeology/message/10579> (accessed March, 2012).
- Panja, Sheena. 2002. The 'Third Space': the Creation of archaeological knowledge in post-Independence India. *Studies in History* 18 (1): 1-22.
- Pappu, Shanti, K. Akhilesh, S. Ravindranath and U. Raj. 2010. Applications of satellite remote sensing for research and heritage management in Indian prehistory. *Journal of Archaeological Science* 37: 2316-2331.
- Paramasivan, S. 1944. Classification of pre-historic sites in India. *Current Science* 12: 303-307.
- Pargiter, Fredrick E. 1922. *Ancient Indian Historical Tradition*. London: Oxford University Press.
- Park, Richard L. 1975. Political Crisis in India, 1975. *Asian Survey* 15 (11): 996-1013.
- Piggott, Stuart. 1945. *Some ancient cities of India*. New York: G. Cumberlege, Oxford University Press.
- Prebish, Charles. 2008. Cooking the Buddhist Books: The Implications of the New Dating of the Buddha for the History of Early Indian Buddhism. *Journal*

- of Buddhist Ethics* 15: 1-22. Retrieved from <http://blogs.dickinson.edu/buddhistethics/category/volume-15-2008/> (January 2012).
- Rahman, A. [1968] 2008. Science Policy in India. In *Ciba Foundation Symposium - Decision Making in National Science Policy*. Anthony V. S. de Reuck, Maurice Goldsmith and Julie Knight, eds. pp. ch.14. London: Churchill.
- Rana, Aspy P. 1976. *The imperatives of nonalignment: A conceptual study of India's foreign policy strategy in the Nehru period*. New Delhi: Macmillan Co. of India.
- Rapp, George. 1983. *Archaeological science in India: status, potential, and recommendations*. New Delhi: Ford Foundation.
- Ratnagar, Shereen. 2008. Kosambi's Archaeology. *Economic and Political Weekly* 43 (30): 71-77.
- Ray, Himanshu P. 2008. *Colonial archaeology in South Asia*. New York: Oxford University Press.
- . 2010. Introduction. In *Sanghol and the Archaeology of Punjab*. Himanshu P. Ray, ed. pp. 1-19. New Delhi: Aryan Books International.
- Religious Institutions (Prevention of Misuse) Act*. 1988. Government of India. Retrieved from [www.lawyersclubindia.com/bare\\_acts/details\\_section.asp?mod\\_id=30691](http://www.lawyersclubindia.com/bare_acts/details_section.asp?mod_id=30691) (March 2012).
- Roy, Sourindranath. 1961. *The story of Indian archaeology, 1784-1947*. New Delhi: Archaeological Survey of India.
- Sahni, Daya R. 1927. Kausambi. *Journal of the Royal Asiatic Society* 59: 689-698.



- Sankalia, Hasmukh D. 1952. *Archaeology and Indian universities*. Poona: Deccan College.
- . 1962. *Indian archaeology today*. Bombay: Asia Publishing House.
- . 1969. Problems in Indian archaeology, and methods and techniques adopted to tackle them. *World Archaeology* 1 (1): 29-40.
- Sankalia, Hasmukh D., B. Subbarao and S. B. Deo. 1953. Archaeological sequence of central India. *Southwestern Journal of Anthropology* 9 (4): 343-356.
- Saraswat, K. S. 1997. Plant economy of Barans at ancient Sanghol (Ca. 1900-1400 B.C.), Punjab. *Pragdhara* 7: 97-114.
- Saraswat, K. S. and A. K. Pokharia. 1997. On the remains of botanical material used in fire-sacrifice ritualized during Kushana Period at Sanghol (Punjab). *Pragdhara* 8: 149-181.
- Schmidt, Peter R. and Thomas C. Patterson. 1995. Introduction: from constructing to making alternative histories. In *Making Alternative Histories: the practice of Archaeology and History in non-Western settings*. Peter R. Schmidt and Thomas C. Patterson, eds. pp. 1-24. Santa Fe: School of American Research Press.
- Shaffer, Jim G. 1986. Cultural development in the eastern Punjab. In *Studies in the archaeology of India and Pakistan*. Jerome Jacobson, ed. pp. 195-235. New Delhi: American Institute of Indian Studies.
- Sharma, Ganga B. 1985. The Excavations at Sanghol. *Kushana sculptures from Sanghol: a recent discovery*. Swaraj P. Gupta, ed. pp. 17-19. New Delhi:

- Publications Division, Ministry of Information and Broadcasting, Government of India.
- Sharma, Ganga B. and Manmohan Kumar. 1986. *Coins, seals and sealings from Sanghol*. Chandigarh: Department of Cultural Affairs, Archaeology & Museums, Punjab.
- Sharma, Yajna D. 1955. Past pattern in living as unfolded by excavations at Rupar. *Lalit Kala Akademi* 1-2: 121-129.
- . 1979. The pre-Harappans in Punjab. *Puratattva* 11: 32-38.
- Sharma, Yajna D. and Ganga B. Sharma. 1982. Bara culture and its housing remains with special reference to Sanghol. In *Indian archaeology: new perspectives*. R. K. Sharma, ed. pp. 71-82. New Delhi: Agam Kala Prakashan.
- Shiva, Vandana. 1991. *The violence of the Green Revolution: Third World agriculture, ecology and politics*. London: Zed Books.
- Singh, Upinder. 2008. *A history of ancient and early medieval India: from the Stone Age to the 12th century*. Toronto: Pearson Education Canada, Ltd.
- Sinha, Surajit. 1958. Tribal cultures of peninsular India as a dimension of Little Tradition in the study of Indian civilization: a preliminary statement. *The Journal of American Folklore* 71 (281): 504-518.
- Smith, Vincent A. 1919. *The Oxford history of India, from the earliest times to the end of 1911*. Oxford: Clarendon Press.
- Starr, Richard F. S. 1941. *Indus Valley Painted Pottery - A Comparative Study of the Designs on the Painted Wares of the Harappa Culture*. Princeton: Princeton University Press.

- Subbarao, Bendapudi. 1958. *The personality of India: pre and proto-historic foundation of India and Pakistan*. M. S. University Archaeology Series No.3. Baroda: Sadhana Press.
- Sundara, A. 1975. *The early chamber tombs of South India: a study of the Iron Age Megalithic monuments of north Karnataka*. New Delhi: University Publishers.
- Talwar, S. S. 1975. *A glimpse of Punjab archaeology at Sanghol and Dholbaha*. Punjab History Conference, 7th Session, Department of Punjab Historical Studies, Punjabi University, Patiala. Patiala: Phulkian Press.
- Talwar, S. S. and R. S. Bisht. 1974. Excavation at Sanghol, District Ludhiana. In *Indian archaeology - a review 1970-1971*. M. N. Deshpande, ed., pp. 30-31. New Delhi: Archaeological Survey of India.
- . 1978. Excavation at Sanghol, District Ludhiana. In *Indian archaeology - a review 1972-1973*. M. N. Deshpande, ed., pp. 28. New Delhi: Archaeological Survey of India.
- Telford, Hamish. 1992. The political economy of Punjab: creating space for Sikh militancy. *Asian Survey* 32 (11): 969-987.
- Thakran, R. C. 2000. Implications of Partition on protohistoric investigations in the Ghaggar-Ganga basins. *Social Scientist* 28 (1/2): 42-67.
- Thapar, Romila. 1984. *Ancient Indian social history: some interpretations*. Hyderabad: Orient Longman Limited.
- . 1996. The Theory of Aryan Race and India: history and politics. *Social Scientist* 24 (1/3): 3-29.

- The Ancient and Historical Monuments and Archaeological Sites and Remains (Declaration of National Importance) Act.* 1951. Government of India. Retrieved from [http://asi.nic.in/asi\\_legislations.asp](http://asi.nic.in/asi_legislations.asp) (March 2012).
- The Antiquities Export Control Act, 1947.* 1947. Government of India. Retrieved from [http://asi.nic.in/asi\\_legislations.asp](http://asi.nic.in/asi_legislations.asp) (March 2012).
- The Antiquities and Art Treasures Act.* 1972. Government of India. Retrieved from [http://asi.nic.in/asi\\_legislations.asp](http://asi.nic.in/asi_legislations.asp) (March 2012).
- The Sikh Gurdwaras Act.* 1925. Government of India. Retrieved from [www.helpline.law.com/docs/THE%20SIKH%20GURDWARAS%20%28SUPPLEMENTARY%29%20ACT,%201925](http://www.helpline.law.com/docs/THE%20SIKH%20GURDWARAS%20%28SUPPLEMENTARY%29%20ACT,%201925) (March 2012).
- Trigger, Bruce G. 2006. *A history of archaeological thought*. 2<sup>nd</sup> ed. New York: Cambridge University Press.
- Valdiya, Khadg S. 2002. *Saraswati: the river that disappeared*. Hyderabad: Orient Longman.
- Weiner, Myron. 1977. The 1977 Parliamentary Elections in India. *Asian Survey* 17(7): 619-626.
- Wheeler, R. E. Mortimer. 1946. *Archaeology in India today*. Calcutta: Calcutta University Press.
- . 1949. Archaeological fieldwork in India: planning ahead. *Ancient India* 5: 4-11.
- Wolpert, Stanley. 2006. *A New History of India*. 5<sup>th</sup> ed. New York: Oxford University Press.
- Woolley, C. Leonard. 1939. *A report on the work of the Archaeological Survey of India*. New Delhi: Archaeological Survey of India.

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### **Oral Interviews**

Ganga Bishan Sharma, interviewed by Neha Gupta, November 23, 2009 in

Sanghol, Punjab, India. Interview records [130 minutes; English, Hindi, Punjabi] held privately by Neha Gupta.

Hira Singh, interviewed by Neha Gupta, December 4, 2009 in Patiala, Punjab,

India. Interview records [17 minutes; Hindi, Punjabi] held privately by Neha Gupta.

Gurdev Singh, interviewed by Neha Gupta, December 5, 2009 in Chandigarh,

Punjab, India. Interview records [44 minutes; Hindi, Punjabi] held privately by Neha Gupta.

## Conclusion

This thesis aimed to better understand change and continuity in the practice of archaeology in multi-ethnic and multi-lingual India. Indian archaeology, when viewed in light of relations between local communities and the national government, and in terms of archaeological practices that developed in colonial India, suggested change, as well as continuity. To some observers, Indian archaeology has seemed monolithic and a colonial legacy, as is seen in works such as Johnson-Roehr (2008) and Ray (2008). These views were examined using time-sensitive geographic information systems (GIS), and historical methods. This methodology helped in examining when and where archaeological field studies take place, by whom, and how changes in the social and political organization of Indian society influenced the interpretation of archaeological data.

Can an awareness of the interests of local communities in archaeology illuminate how and why a local issue of ownership of the grounds of the Babri Masjid became a national one? Does the national government in fact determine the scope and focus of Indian archaeology? Is the national department for archaeology, the Survey, the sole and exclusive knowledge producer when it comes to the collection and interpretation of archaeological data?

Careful study of archaeological investigations reported in *Indian archaeology - a review*, the Survey's journal, for the years between 1993 and 2000 showed that university and state departments of archaeology carried out a greater proportion of field studies per year than did the Survey. Contrary to conventional thinking, the

Survey did not monopolize Indian archaeology. This supported Chakrabarti's (2003) remarks that scholars cannot ignore archaeological research carried out by universities in postwar India. A close examination of the spatial pattern of archaeological investigations in the same duration demonstrated that a greater proportion were conducted in territories north of the Narmada River than those south of it. This suggested a northern focus when it came to the collection of archaeological data and generally agreed with K. Rajan's (2010) observation that postwar Indian archaeology has tended to be north-centric and has overlooked archaeological research in southern India.

The spatial pattern also suggests potentially new lines of research. Archaeological field studies along India's northern and western frontline with Pakistan were conducted almost exclusively by the Survey. This may reflect the national department's preferential access to these geopolitically sensitive territories or government restrictions on the composition of archaeological teams. The role of these factors is poorly understood. We also do not know, for example, the influence of foreign policy concerns on the practice of postwar Indian archaeology. How do tensions and armed conflict along the frontline impact the duration and research extent of archaeological field studies in these sensitive regions, or how restrictions on public access to these sites shape the field methods that archaeologists employ? We also do not know whether records of these investigations, including the archaeologists' notebooks, maps and photographs, are subject to review or are available for examination under India's *The Right to Information Act* (2005). How does the scenario differ when a state department, rather than the Survey, works in proximity to international borders, as seen with

the Uttar Pradesh state department of archaeology, which carried out research in territories along India's border with Nepal and China? And how do changing geopolitical relations influence the interpretation of archaeological data?

By examining the spatial pattern of archaeological investigations as a unique class of historical data, archaeologists gain perspective on the social and political factors that shape archaeological research. For instance, in northern India, archaeologists conducted the greatest proportion of archaeological investigations in the territories along the upper Ganges River and at its confluence with the Yamuna River. Conversely, knowledge producers carried out very few and sporadic archaeological field studies along the lower Ganges River and in India's eastern territories. These variations in archaeological research opened a space to understand how archaeologists' beliefs about the world and the nature of things influenced the practice of archaeology. In the Indian case, many archaeologists believed that northern India was the source of cultural innovations for other parts of India. The Ganges Valley, in particular, was thought of as the heart of ancient Hindu society, and the place of origin for agriculture and iron technologies, which continues to be seen in works such as Tewari et al. (2008). In the past, archaeologists accepted that innovations developed elsewhere were brought into India. As a result of growing Hindu nationalism, most, although not all, Indian archaeologists favour views in which innovations were local developments.

This spatially-explicit view demonstrated that multiple knowledge producers carried out field studies, and that these investigations were neither evenly distributed throughout India, nor uniformly conducted over time. Rather, knowledge producers investigated specific places at particular times. The time-



sensitive approach allowed characterization of archaeology in national contexts, and an examination of long-range trends in its practice. In the Indian scenario, the national department, as well as university and state departments of archaeology, carried out field investigations. These knowledge producers sometimes conducted collaborative archaeological studies, which suggest that their interests can overlap. The strong variability in the spatial pattern also suggests that interests of Indian archaeologists are unlikely to be determined by the Survey. Yet this does not mean that knowledge producers worked in isolation from each other, or that they were discrete and closed in terms of training, personnel and scholarly exchange. In fact, graduates from university departments are often employed in state departments and the Survey, and archaeologists from the latter can cross over to university departments. Indian archaeologists often attend the same conferences within India and keep abreast with the latest analytical techniques. Some scholars continue to seek training abroad, particularly in Western Europe.

This research also raises issues on gender differences in the practice of Indian archaeology. What is the influence on Indian archaeology of still significant differences in male to female literacy levels in many parts of India? There are few detailed studies on the proportion of women archaeologists employed in the Survey, and university and state departments. Whereas there is growing anecdotal evidence to suggest discrimination against women seeking archaeological training, this issue has yet to be systemically examined in the Indian context.

The GIS framework helps us better understand the interests and research aims of archaeological teams, the methods they employed and the evidence they accepted as credible. Because archaeological field studies often take place in

rural, marginalized local communities, and because archaeologists are members of highly structured social groups, their investigations underscore the changing relationship between these communities and state-oriented institutions. This highlighted the importance of spatial issues, as well as long-range trends in the practice of archaeology.

By re-conceptualizing local interest in archaeology, the study drew attention to often sensitive relations between local communities and the national government as a means to understand disagreements in the preservation of cultural heritage and in the interpretation of archaeological data. This brought into focus the influence of values and beliefs on the practice of Indian archaeology in colonial and independent India. Ideas about ‘fundamental unity’ throughout India and Hindu nationalism, which archaeologists interpret in terms of the Vedic origins of Hindu civilization and cultural continuity between contemporary and prehistoric societies, continue to be seen in works such as Walimbe (2007), which effectively exclude all non-Hindus from social dynamics and social history. These views of the Indian past are often accepted by Western scholars in works such as Boivin (2007), which presume a caste-based prehistory and conflate language, biology and material culture in explanations of the archaeological record in India. India’s ethnic and linguistic minorities increasingly demand their social and political liberties and are challenging these understandings of the Indian past.

A key challenge in understanding theoretical developments in archaeology has been its relationship to closely related disciplines and society. Some archaeologists have argued that there is an “insignificance of archaeology” (Chakrabarti 2003: 208) and that few organizations other than the Survey are

interested in protecting Indian heritage. These views of Indian archaeology are often accepted by Western researchers, for example in works such as Sinopoli (2006), which assume that events at Ayodhya were isolated incidents with no past or precedents to understand what they meant. This neglect of the social context of archaeological practice has severely limited our understandings of progress in the interpretation of archaeological data in postwar India.

Recent trends in the historical and social studies of science have suggested a growing interest in archaeology as seen in works such as Naylor (2005), Smith (2008) and Burns (2008; 2010). These interests are concurrent with concerns about environmental change which has spurred intellectual curiosity in the production of knowledge in the ‘untamed’ field<sup>1</sup> (Kuklick and Kohler 1996), rather than in the ‘confined’ laboratory (Latour and Woolgar 1986). As the historian of science Robert E. Kohler remarks on the case of natural history in the nineteenth century, “armchair and expeditionary science” were not distinct and different (Kohler 2002: 2-3). Rather, they were “two ways” of answering “essentially the same questions” using the same material (Kohler 2002: 2-3).

In recent years, however, some scholars see ‘laboratory science’ as a homogenous and sanitized culture of professional researchers and they often think of ‘field science’ as a hotbed of ambiguous relations between professionals – ranging from anthropologists and geographers to oceanographers and public health scientists – and non-professionals (Kuklick and Kohler 1996: 5). They

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<sup>1</sup> The ‘field’ is not self-evident – historian Jeremy Vetter (2010: 2) sees the field as ‘anywhere’ outside the laboratory, where scholars produce ‘knowledge in place’. This stands in contrast with the laboratory’s production of ‘placeless’ or universal knowledge. But Nielsen et al. (2012: 11) conceptualize fieldwork as a way for scholars to draw out “boundaries of their field in disciplinary, institutional and territorial terms”.

believe that these social behaviours are more pronounced when ‘Westerners’ carry out field studies in the “undeveloped world” (Kuklick and Kohler 1996: 4). These concerns are concomitant with efforts of ‘field scholars’ to match the precision of tools and technologies employed by laboratory scholars (Vetter 2010: 2). Yet despite their explicit concern with ‘place’, cultural geographic approaches can overlook the influence of social and political factors on the practice of science.

What does this mean for the discipline of archaeology, which employs field and laboratory methods, *and* is practiced in the non-Western world? Is there more to know on the social context of archaeology than the apparent diffusion of European science? Is science in the non-Western world practiced in an intellectual and social vacuum?

In Babri’s shadow, scholars often draw attention to the political uses of Indian archaeology, and often cite the role of *Hindutva* or neo-Hindu nationalists in the demolition of the mosque (Guha 2005). In a social milieu in which archaeology is characterized as a tool for political abuse by one interest group or another (Selvakumar 2010), what justification can archaeologists offer for their discipline? The history of archaeological practice, in fact, offers a way to understand the unthinkable which has happened, and this perspective offers insight on what archaeologists believed and why, and what mattered most in Indian society and how these ideas made real impacts.

In the 1910s and 1920s, a growing Western-educated Indian middle class increasingly demanded *swaraj*, or self-rule. Imperial reorganization of Crown possessions came in the wake of growing non-British European interest in India,

as well as intense competition for sovereignty in territories west of the Indus and east of the Ganges River. It was amid nationalist movements that British and Indian archaeologists recovered the first traces of the Indus Valley civilization. Careful examination of interpretations of the archaeological sites at that time shed light on the worldviews of the investigators, their research aims, as well as the methods, tools and technologies British and Indian scholars employed. Scholars interpreted archaeological data in ways which helped social groups achieve their goals at particular time.

Western scholars had interpreted the Indus Valley civilization as a mere offshoot of a more advanced Sumerian one at Ur. This understanding of the Indian past accorded with views that explained change as a result of migration of Aryans, who brought creativity and dynamism into India. It is not surprising, then, that in a highly charged nationalistic milieu, Indian scholars reinterpreted these views in terms of the Vedic origins of Hindu civilization.

British scholars favoured a simplistic culture historical view of the Indian past as a means to justify colonialism and assert their moral and cultural superiority over 'natives', which continues to be seen in works such as Renfrew (1987), which neglect local ecological conditions, settlement patterns and regional history. Indian scholars rejected views of the Indian past that obscured local creativity and dynamism, and favoured a view that assumed cultural continuity between contemporary and prehistoric societies, and neglected examination of internal dynamics for change which can be seen in recent works such as Saraswat and Pokharia (1997). Amid nationalist movements in the 1920s, this Indian or

nationalistic view served the social and political interests of Indians who sought independence from the British Crown.

The importance of the role of government must be stated. The excavations at Mohenjodaro and Harappa, as well as archaeological surveys at the time, were financed by the colonial Government of India, and field studies were carried out by officers of the Archaeological Survey as members of highly structured social groups. Thus, the aims of individual researchers must be examined in relation to those of the archaeological team as a whole. Field reports in the department's journal, scholarly works and publications in popular journals and newspapers offer insight on the interests and concerns of archaeologists at that time. In light of spectacular archaeological recoveries by Leonard Woolley at Ur in the Kingdom of Iraq, John Marshall, Director General of Archaeology (1902-1928), chose to introduce his department's work in the pages of the *Illustrated London News* and the *Times of London*, as well as in leading Indian newspapers. Ironically, educated classes in India reacted to the announcement with contempt for the colonial government.

Prior to Marshall's announcement and in the wake of the loss of human life at Jallianwalla Bagh in 1919 in the northern city of Amritsar – where Imperial troops had fired upon civilians protesting the infringement of their social and political liberties – growing numbers of Indians became dissatisfied with Crown administration of India and they increasingly challenged British claims for moral and cultural superiority. Influenced by ideals of equality and fairness, middle class Indians demanded rapid social change. These values were intimately tied to

the success of the Indian National Congress in garnering support for Indian independence.

When Indian archaeology is re-examined in view of social and political concerns of middle class Indians, archaeological practice exhibits complexity. Critical examination of colonial histories deepens understandings of the factors that shaped the practice of archaeology. In the case of Indian archaeology, competing aims of Indian and British investigators played out on a tense and rapidly changing geopolitical scene. What the history of Indian archaeology presents, then, is an account in which scholars and politicians have not only made use of ‘discoveries’ to justify colonialism but also to challenge it, and these complex processes are acknowledged by many scholars in works such as Trigger (1984).

In this context, Selvakumar’s (2010: 475) distinction between ‘professional archaeologists’ and those who have “purely political or other motives” is obscured when it comes to the interpretation of archaeological data. He remarks rightly that interpretations are influenced by archaeologists’ class or ethnic biases, yet understandings of the past are not solely a reflection of these factors. Archaeological practices are also products of specific economic, social and political conditions at a particular time, as well as of overlapping and competing archaeological traditions.

What scholars in the Indian context sometimes overlook is the influence of ideas of ‘fundamental unity’ and Hindu nationalism in the terminal years of Crown administration on the practice of Indian archaeology. This oversight is reflected in perceptions of ‘national archaeology’, which is assumed to have been

practiced in a social and political vacuum up until the demolition of Babri Masjid in 1992. This view can be seen in works such as Ray (2008) in which beliefs and values of Indian archaeologists seemingly had little or no bearing on the practice of postwar archaeology such that contemporary archaeological practices are best understood as colonial legacies.

A contribution of the present research is its examination of national archaeologies which developed following the Second World War, as changing geopolitical relations saw the creation of newly-non-aligned states in a modern world-system. In newly-independent states, such as India, foreign policy concerns, and the desire to maintain internal social and political stability shaped the practice of archaeology. Newly acquired territories gave national governments access to new resources. The number of archaeologists increased as new university and state departments of archaeology opened. The building of dams, power plants, factories, roads and airports saw land redistribution and often entailed the displacement of local communities. Spurred by a pre-independence wave of anti-imperialism and nationalism, the Indian middle class generally supported rapid economic, social and political change.

In the Indian context, because many scholars believed that they were recovering cultural achievements of historical groups, and because they thought the Vedas described social and political organization, some archaeologists often neglected examination of internal dynamics as explanations for change. They had assumed cultural continuity between contemporary and prehistoric societies. Some archaeologists interpreted archaeological data as a record of caste relations between Aryans and pre-Aryans, an interpretation that continues to be seen in



works such as Allchin and Allchin (1982) which assume social groups are discrete, endogamous and hierarchically organized, and that caste, more than any other social ideology, characterized Indian society. This caste-based view of the India past effectively excluded all non-Hindus from society and social dynamics.

At the same time, some Indian archaeologists thought in terms of the distribution and spread of cultural innovations from the northwest of India, and through corridors to the eastern and southern parts of the peninsula. They believed that more advanced peoples had pushed aside aboriginal and less developed peoples. This was of greatest interest to Marxist-influenced Indian historians, such as Kosambi (1956), who studied caste relations as a proxy for pre-class Indian society. Moreover, for some archaeologists, such as Subbarao (1958), ancient Indian history was characterized by a replacement of small scale cultivators, hunters and fishers by large scale agriculturalists. Because they believed that migratory groups who entered India were soon absorbed into the Indian way of life, only the most important of these groups could be isolated and identified archaeologically.

This culture historical approach, which emphasized change as a result of external factors and denigrated aboriginal peoples as simple and static, was akin to methods that British scholars had employed to justify colonialism during the mid-nineteenth and early twentieth century (Trigger 2006: 261). In the Republic of India, many Indian scholars and policy makers accepted this view of Indian prehistory because it justified rapid development in newly-acquired territories, and continues to be seen in works such as Pant (2008) in which aboriginal peoples in India are seen as analogous to simple prehistoric cultures.

Some Western scholars remark that Indian archaeology is best characterized as being culture-historical (Johansen 2003) and suggest that the collection and interpretation of archaeological data in India has taken place in the absence of a theoretical framework (Boivin 2005: 232). This lack of social and political awareness, they believe, contributed to the demolition of the Babri Masjid in 1992. These perceptions of Indian archaeology influence understandings of its relations with other disciplines in postwar India. Some scholars see archaeology as being isolated from anthropology and history, and think Indian archaeology has yet to 'shed its innocence'<sup>2</sup> (Paddayya and Bellwood 2002: 303), which assumes that archaeologists share common problems. This view negates national styles of archaeology in favour of an international theory of archaeology, as is seen in works such as Boivin (2005). This is the source of tension between some Western and Indian archaeologists.

Some Indian archaeologists remark that Indian archaeology is an adjunct to ancient historical studies (Chakrabarti 1982: 339), and that scholars often thought of prehistory as demonstrating early stages of human history. Most Indian historians believed that the prehistoric past was simple, and they often explained change in terms of the migration of creative and dynamic groups who brought innovations into India. It is no surprise, then, that in post-1947 India, some Indian historians wrote a national narrative that saw history and prehistory in an historical continuum. For example, Majumdar et al. (1953) presented Indian history in terms of increasing social complexity, from Stone Age, Copper Age to

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<sup>2</sup> In this co-authored publication, Indian archaeologist K. Paddayya wrote on the Indian scenario and he refers to David Clarke's (1973) assessment of the aims of archaeology and the importance of disciplinary 'self-consciousness' for theoretical development.

Iron Age. Most Indian historians considered aboriginal peoples or ‘tribals’ synonymous with the Stone Age, and many Indian archaeologists believed that territoriality and political activities began with large-scale agriculture.

At the same time, some Marxist-inspired historians, such as Kosambi (1956), drew attention to social and economic factors, and employed archaeology and ethnography in their study of productive relations. These views of the Indian past encouraged the study of relations between Indian or caste society and ‘tribal’ society and differed from traditional ones which had emphasized dynasties and political change. Indian archaeologists, such as Ratnagar (2008) are increasingly examining the impact of these views on their discipline and relations between Indian archaeology and history.

Archaeologists, particularly those in the non-Western world, have increasingly challenged views that obscure the influence of social and political factors on archaeology, including ideas about race, language and culture, as are discussed in Chakrabarti (1997). Some archaeologists, such as U. Singh (2004), are increasingly interested in the colonial roots of their discipline, and draw attention to the relationship between imperialism and state-sponsored collection of data on ‘natives’. They also examine the role of political ideology, such as nationalism, on the practice of archaeology and often emphasize the uses and abuse of archaeology for political uses, as discussed in works such as Ratnagar (2004). These efforts sometimes overlook the influence of foreign policy concerns, political crisis and conflict on the practice of archaeology.

Throughout much of the 1960s and 1970s, the Republic of India was rocked by growing political divisions that threatened the stability of the national

government. These social and political uncertainties were escalated in the wake of armed conflict with neighbouring West Pakistan in 1965, and then again in 1971. Internally, the Indian middle class grew increasingly dissatisfied and frustrated with inequality and rampant corruption. Yet through the mid-1960s and 1970s, the central government maintained diplomatic relations with Western governments and it invested in intensive agriculture (Doel and Harper 2006)<sup>3</sup>. By the late 1960s, the ‘Green Revolution’ had produced favourable yields in many parts of India.

As the middle class grew aware of the uneven distribution of wealth, and the persistence of poverty despite rapid development, it questioned its faith in technology as a source of social progress (Blair 1980). This did not mean that the Indian middle class rejected technology; rather, many Indians questioned the kinds of social problems that technology could resolve. They increasingly turned toward social and political factors that influenced Indian society. In the face of growing conflict in some parts of India, Indians became frustrated and called for the Prime Minister’s resignation. It was precisely in this context that Indira Gandhi declared a state of emergency in June 1975, and in which Indians elected their first non-Indian National Congress government in 1977. The Janata Party gained support from former Congress members who had opposed the declaration of emergency. These developments underscored growing Hindu nationalism. It

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<sup>3</sup> Historians of science Ronald Doel and Kristine Harper discuss American foreign policy and the deployment of science and technology as ‘weapons’ of diplomacy during the Lyndon Johnson administration (1964-1968). They shed light on President Johnson’s secret mission to ‘fix’ India’s food production challenges through weather control.

was amid these sensitivities that Indian archaeology turned its attention to the methodological foundations of the discipline.

Some Indian archaeologists, such as Chakrabarti (1973), increasingly questioned deterministic views of technology as they grew aware that economic factors did not adequately explain the complexity of the archaeological record. They sought to better understand the historical relationship between the copper-based Indus Valley civilization and the iron-based 'second urbanization' in the Ganges Valley. They also argued that factors such as political consolidation, trade and defense were more important than economic ones in the growth of urban civilization in early historic India.

This view of the Indian past examined the influence of social and political factors in the development of complex societies, and it differed from traditional views in which scholars had employed migration to explain change. This approach provided a framework for the investigation of ancient political systems and it challenged traditional understandings of the archaeological record. These were significant theoretical developments in Indian archaeology prior to the demolition of the Babri Masjid in 1992.

Moreover, rapid economic development in many parts of India in recent years has entailed the displacement of local communities. Whereas large-scale construction projects often provide employment for some local people, the perception of inequality in educational opportunities (and accompanying political power) remains a source of tension between the national government and local communities. At the same time, India's ethnic and linguistic groups are increasingly demanding their social and political rights. They question traditional views of the

Indian past which emphasize the cultural achievements of Hindus and obscure all other social groups. These social and political factors influence the relationship between Indian archaeology and history, as well as archaeology's relationship with Indian society.

It is clear that, with the growing social awareness of the Indian middle class, the practice of archaeology in India, far from being static and unchanging, has undergone significant re-orientation in recent decades. Thus, when viewed in relationship with the interests of the Indian middle class, the practice of archaeology provides insights into the motivations of its practitioners, its changing relationship with other disciplines, and the ideas that made impacts in Indian society.

## ***References***

- Allchin, Bridget and Raymond Allchin. 1982. *The rise of civilization in India and Pakistan*. New York: Cambridge University Press.
- Blair, Harry W. 1980. Mrs Gandhi's Emergency, the Indian Elections of 1977, Pluralism and Marxism: problems and paradigms. *Modern Asian Studies* 14 (2): 237-271.
- Boivin, Nicole. 2005. Orientalism, ideology and identity: examining caste in South Asian archaeology. *Journal of Social Archaeology* 5 (2): 225-252.
- . 2007. Anthropological, historical, archaeological and genetic perspectives on the origins of caste in South Asia. In *The Evolution and History of Human Populations in South Asia: Inter-disciplinary Studies in Archaeology, Biological Anthropology, Linguistics and Genetics*. Michael D. Petraglia and Bridget Allchin, eds., pp. 341-361. AA Dordrecht: Springer.
- Burns, J. Conor. 2008. Networking Ohio Valley Archaeology in the 1880s: The Social Dynamics of Peabody and Smithsonian Centralization. *Histories of Anthropology Annual* 4: 1-33.
- . 2010. Negotiating the agricultural frontier in nineteenth-century Southern Ohio Archaeology. In *Knowing global environments: new historical perspectives on the field sciences*. Jeremy Vetter, ed., pp. 59-86. New Brunswick, N.J.: Rutgers University Press.
- Chakrabarti, Dilip K. 1973. Concept of urban revolution in the Indian context. *Puratattva* 6: 27-32.

- . 1982. The development of archaeology in the Indian subcontinent. *World Archaeology* 13 (3): 326-344.
- . 1997. *Colonial Indology: sociopolitics of the ancient Indian past*. New Delhi: Munshiram Manoharlal Publications.
- . 2003. *Archaeology in the Third World: A History of Indian Archaeology since 1947*. New Delhi: D. K. Printworld Private Limited.
- Clarke, David L. 1973. Archaeology: the loss of innocence. *Antiquity* 47: 6-18.
- Doel, Ronald E. and Kristine C. Harper. 2006. Prometheus unleashed: Science as a diplomatic weapon in the Lyndon B. Johnson Administration. *Osiris* 21 (1): 66-85.
- Guha, Sudeshna. 2005. Negotiating evidence: history, archaeology and the Indus Civilization. *Modern Asian Studies* 39 (2): 399-426.
- Johansen, Peter. 2003. Recasting the Foundations: new approaches to regional understandings of South Asian archaeology and the problem of culture history. *Asian Perspectives* 42 (2): 192-206.
- Johnson-Roehr, Susan. 2008. The Archaeological Survey of India and communal violence in post-independence India. *International Journal of Heritage Studies* 14 (6): 506-523.
- Kohler, Robert E. 2002. *Landscapes and Labscapes: exploring the Lab-Field border in Biology*. Chicago: The University of Chicago Press.
- Kosambi, Damodar D. 1956. *An Introduction to the study of Indian history*. Bombay: Popular Book Depot.
- Kuklick, Henrika and Robert E. Kohler. 1996. Introduction to Science in the Field. *Osiris* 11: 1-14.



- Latour, Bruno and Steve Woolgar. 1986. *Laboratory life: the social construction of scientific facts*. Princeton, N.J.: Princeton University Press.
- Majumdar, Ramesh C., Hem C. Raychaudhuri and Kalinkinkar Datta. 1953. *An Advanced History of India*. London: Macmillan and Co., Limited.
- Naylor, Simon. 2003. Collecting quoits: field cultures in the history of Cornish antiquarianism. *Cultural Geographies* 10 (3): 309-333.
- Nielsen, Kristian H., Michael Harbsmeier and Christopher J. Ries. 2012. Introduction. In *Scientists and Scholars in the Field: studies in the History of Fieldwork and Expeditions*. K. H. Nielsen, M. Harbsmeier and C. J. Ries, eds., pp. 9-28. Aarhus: Aarhus University Press.
- Paddayya, K. and Peter Bellwood. 2002. South and southeast Asia. In *Archaeology: the widening debate*. Barry W. Cunliffe, Wendy Davies, and Colin Renfrew, eds., pp. 295-335. Oxford: Oxford University Press.
- Pant, P. C. 2008. First farmers in global perspective: some considerations. *Pragdhara* 18: 5-8.
- Rajan, K. 2009. History of archaeological research in Tamil Nadu. In *Archaeology in India: individuals, ideas and institutions*. Gautum Sengupta and Kaushik Gangopadhyay, eds., pp. 197-226. New Delhi: Munishiram Manoharlal Publishers Pvt. Ltd.: 197-226.
- Ratnagar, Shereen. 2004. Archaeology at the heart of a political confrontation. *Current Anthropology* 45 (2): 239-259.
- . 2008. Kosambi's Archaeology. *Economic and Political Weekly* 43 (30): 71-77.

- Ray, Himanshu P. 2008. *Colonial Archaeology in South Asia: the legacy of Sir Mortimer Wheeler*. New York: Oxford University Press.
- Renfrew, Colin. 1987. *Archaeology and Language: The Puzzle of Indo-European Origins*. New York: Cambridge University Press.
- Saraswat, K. S. and A. K. Pokharia. 1997. On the remains of botanical material used in fire-sacrifice ritualized during Kushana Period at Sanghol (Punjab). *Pragdhara* 8: 149-181.
- Selvakumar, V. 2010. The use and relevance of archaeology in the post-modern world: views from India. *World Archaeology* 42 (3): 468-480.
- Singh, Upinder. 2004. *The discovery of ancient India: early archaeologists and the beginnings of archaeology*. New Delhi: Permanent Black.
- Sinopoli, Carla. 2006. Imperial landscapes of South Asia. In *Archaeology of Asia*. Miriam T. Stark, ed., pp. 324-349. Malden, MA: Blackwell Publishing.
- Smith, Hilary A. 2008. Using the past to serve the present: Chinese archaeology and the making of a historical science. In *A New History of Anthropology*. Henrika Kuklick, ed., pp. 207-222. Malden: Blackwell Publishing Ltd.
- Subbarao, Bendapudi. 1958. *The personality of India: pre and proto-historic foundation of India and Pakistan*. M.S. University Archaeology Series No.3. Baroda: Sadhana Press.
- Tewari, Rajesh, R. K. Srivastava, K. S. Saraswat, I. B. Singh and K. K. Singh. 2008. Early Farming at Lahuradewa. *Pragdhara* 18: 347-373.
- The Right to Information Act*. 2005. Government of India. Retrieved from <http://righttoinformation.gov.in/> (January 2012).

- Trigger, Bruce G. 1984. Alternative archaeologies: nationalist, colonialist, imperialist. *Man* 19 (3): 355-370.
- . 2006. *A history of archaeological thought*. 2nd ed. New York: Cambridge University Press.
- Walimbe, S. R. 2007. Population movements in the Indian subcontinent during the protohistoric period: Physical anthropological assessment. In *The Evolution and History of Human Populations in South Asia: Inter-disciplinary Studies in Archaeology, Biological Anthropology, Linguistics and Genetics*. Michael D. Petraglia and Bridget Allchin, eds., pp. 297-319. AA Dordrecht: Springer.
- Vetter, Jeremy. 2010. Introduction. In *Knowing global environments: new historical perspectives on the field sciences*. Jeremy Vetter, ed., pp. 1-16. New Brunswick, N.J.: Rutgers University Press.