Journal of Social Archaeology

Visions of discipline

Sir Mortimer Wheeler and the archaeological method in India (1944–1948)

ASHISH CHADHA

Department of Cultural and Social Anthropology, Stanford University, USA

ABSTRACT

Focusing on the epistemological homology between the construction of archaeological knowledge, archaeological evidence and the nature of archaeological representation, I examine the visual archive produced by Sir Mortimer Wheeler in India between 1944–48, to analyze the ideological ramification of the archaeological project. The discursive nature of Wheeler's representations was deeply embedded in the disciplinarian ideologies of the colonial project, the scientific project and the military project. This article analyzes Wheeler's methodical attempt at conflating the three projects by disciplining archaeology as a scientific practice in a colonial space. I argue that this was articulated by appropriating the ideas of 'epistemic marker' and 'ethnic marker' as visual tropes to transform the visual representations produced in a colonial context into a scientific discourse, aimed at transforming the discipline.

■ INTRODUCTION

Sir Mortimer Wheeler's first skirmish with the great mounds of the Indus civilization's urban settlement of Harappa occurred in the early hours of a May morning in 1944. The newly appointed Director General of the Archaeological Survey of India, after being warned by an 'anxious colleague' to complete the inspection by 7:30 a.m., 'after which it will be too hot', led his 'little procession' towards the 'sandy heaps', and then 'within ten minutes', as he recounted a few years later, 'I stopped and rubbed my eyes as I gazed upon the tallest mound, scarcely trusting my vision. Six hours later, my embarrassed staff and I were still toiling with picks and knives under the blazing sun, the mad sahib (I am afraid) setting a relentless pace' (Wheeler, 1956: 190; 1976: 68). This article critically examines the representation of this 'vision' of a colonial administrator/ archaeologist/academician through the texts that Wheeler published in particular, and the nature of the visual lexicography that is employed in the disciplinarian discourse of archaeology in general. Focusing on the epistemological homology between the construction of archaeological knowledge, archaeological evidence and the nature of archaeological representation, I scrutinize the nature of visual representations that Wheeler produced.

The formalistic syntax of the visual discourse that Wheeler employed was deeply embedded in the disciplinarian ideologies of the colonial project, the scientific project and the military project (see Cohn, 1996; Prakash, 1992; 1999). The discursive practices of these ideologies were reflected by and imbricated in the archaeological knowledge that Wheeler constructed: its mode of production, its means of representation and its location of consumption. Through this article, I attempt to explore the relationship of these ideologies embedded in Wheeler's visual representations and their impact on the method, practice and epistemology of the archaeological project and its formation as a scientific discipline in India. I situate my inquiry in the visual archive of the archaeological work that Wheeler produced in India. These constitute the graphic sites where the ideological agendas of the colonial, scientific and military discourses collapse to invoke a discipline that had a deep impact on the trajectory that

South Asian archaeology took, both in India and Pakistan after the partition in 1947 (see Chakrabarti, 1988; Clark, 1979; Lal and Gupta, 1984; Paddayya, 1995; Wheeler, 1976).

Wheeler's archive of visual representation is an inter-textual site for the examination of the historical role played by the methods and practices he introduced in archaeology and the significant impact it has had in the South Asian context where his method continues to have wide currency. Informed by several bodies of theoretical writing, my paper is a critical historiography. It investigates the ideologies that form the disciplinar(y)ian discourse of archaeology: post-colonial theory, sociology of science and finally, critical literature on photography in art history and anthropology.

The collection of visual records of India's past that Wheeler produced, can be read as a site for the performances of power and knowledge in the Foucauldian sense (Foucault, 1980), instrumental in the complicated construction of the disciplinary discourse of archaeology. The 'panoptical' technologies of disciplinary control (Foucault, 1979) are utilized by colonial mechanisms/institutions, mediated through the scientific method, to produce graphic images of power and domination. These representations are intricately instrumental in the construction of a post-colonial identity of the past. Here, multiple gazes intersect – the colonial and the scientific gazes are conflated by the anthropological and voyeuristic gaze to produce 'scopic regimes' which are visual practices to objectify and control the other (see Fabian, 1983; Mitchell, 1988; Pratt, 1992). A product of the multiple gazes becomes a technique of power and surveillance. Operating in the discursive territory of the scientific project to constitute the 'other', in archaeology, through the application of the apparatus of mechanical reproduction, a cartographic project is set forth to control the colonized space by appropriating Cartesian perspectivalism. This perspective, explains Martin Jay, is the 'reigning visual model of modernity', which best articulates 'the "natural" experience of sight valorized by the scientific worldview' (Jay, 1988: 115). Wheeler's visual representations are an explicit example of such a scopic regime, situated in the legacy of the 'exploratory gaze' – an epistemological strategy embedded in the imperial enterprise that transforms the subjugated space into the universal, quantifiable and divisible body that can only be comprehended in a Cartesian universe (Ryan, 1996: 4–6). This is a practice that resembles the methods of scientific production of knowledge especially in the earth sciences, where nature is ordered, controlled and transformed into a laboratory, in order to produce adequate knowledge. Here, the undomesticated natural world is bounded in Cartesian co-ordinates to manufacture results useful in the colonial/scientific project (Latour, 1999: 24–80). In this article, I argue that Wheeler's visual representation of India's past becomes a location for the creation of a fractured knowledge through objectification of a colonized landscape embedded in, and mediated through, the scopic regimes of modernity. Entrenched in the discursive control of the scientific, anthropological and the voyeuristic gazes, in order to produce

visual representations of archaeological knowledge, this vision is not an objective image of the past, but an ideological representation of subjugation.

■ DISCIPLINING INDIAN ARCHAEOLOGY

For Mortimer Wheeler, the news of his appointment as the Director General of Archaeology in India was a 'complete bombshell', an apt metaphor to be used by a Brigadier in the 42nd Light Anti-Aircraft Regiment of the British army. Recalling the day in early August 1943, Wheeler writes in his memoirs:

> In the sunset the end of day's planning operations of the forthcoming British and American invasion of Italy had drawn to its just close, when the Corps Commander, General Sir Brian Horrocks, dashed across towards my doorway with a signal in his hand and the remark, 'I say, have you seen this – they want you as – [reading] 'Director General of Archaeology in India!' – Why, you must be rather a king-pin at this sort of thing! You know, I thought you were a regular soldier! (Wheeler, 1976: 9)

Wheeler was summoned to head 'the largest and the most complex archaeological machine in the world' (Wheeler, 1956: 179) which had 'notoriously at that time fallen into complete disrepute' (Wheeler, 1976: 10). This disrepute stemmed from the disorganized state of the Archaeological Survey of India (ASI), perpetuated by the inability of weak successors (after the retirement of Sir John Marshall in 1926) to keep the disintegrating colonial agency cohesive. This led to the appointment of a one-man committee of Sir Leonard Woolley to investigate the nature of the decay, who in his critical report of 1939, among other recommendations, suggested outside intervention (Woolley, 1993[1939]). It was to such a call that Wheeler heeded when he came to the Indian sub-continent for a four-year mission in February 1944 (Boast, 2002: 165; Paddayya, 1995: 134).

Working under a time constraint, Wheeler reorganized the ASI because 'in that theoretical four years, nearly everything had to be done' as it was not 'merely a matter of reshaping, refinancing, revitalizing' but 'the dead wood of obsolete and erroneous ideas [that] had to be uprooted' (Wheeler, 1956: 186). There was a need 'to stir the activities of the Indian Archaeological Survey from its unworthy condition of lethargy and archaism to a new and modernized phase of archaeological research and methodology' (Wheeler, 1976: 32). His role in restructuring the ASI and the enormity of his contribution towards disciplining Indian archaeology in four years (1944–1948) has been described as a series of developments that would have taken the erstwhile bureaucracy 40 years (Paddayya, 1995). Wheeler's tenure paved the way for the firm establishment of Indian archaeology. He was responsible for altering the discipline from an administrative practice confined to maintaining and conserving monuments, running a few

museums, collecting epigraphs and conducting arbitrary excavations followed by intermittent publications, into an academic exercise. This was done through the creation of university departments, a national museum, the founding of a journal, *Ancient India* (now discontinued). During his tenure Indian archaeological practice was rejuvenated with the introduction of new strategies and by organizing problem-oriented fieldwork (Paddayya, 1995). The most crucial event of this transformation was the organization of the Taxila School of Archaeology in 1944, to train young students in 'the neglected arts of India's archeological technology' (Wheeler, 1976: 32). This 'tiny academic episode' (Wheeler, 1976: 32) was the first organized school of field archaeology in South Asia and it played an influential role in the making of post-colonial Indian archaeology: students from this training camp emerged to head various archaeological departments throughout the country and to run the ASI for the following decades (Chakrabarti, 1988: 176). At Taxila and the other sites where he worked, such as Arikamedu, Brahmagiri, and Harappa and later at Charsada in Pakistan, Wheeler inscribed on Indian archaeology ideas of scientific excavation, the importance of stratigraphy and other archaeological methods that became the basis for the production of knowledge.

■ ARCHAEOLOGICAL METHOD AS A MILITARY EXERCISE

During the period between the two World Wars, Wheeler developed the techniques and ideas that were to be utilized to their fullest in the Indian context, and had a profound impact on the post-colonial performance and articulation of archaeology as a discipline. Influenced by the work of General Pitt Rivers (Lucas, 2001: 36), who at the end of the nineteenth century had advocated the need for excavating ancient sites in a scientific manner, Wheeler transformed the archaeological endeavor into a militaristic exercise. He was driven by the need to turn the archaeological process into a professional practice that would produce scientific knowledge with rigor and precision. The militaristic orientation worked as a metaphor, aspiring to be comprehensive and scientific, with the primary aim to discipline the archeological practice and the process. In order to create a chain of command that would produce knowledge, Wheeler argued for a 'basic factor of labor-control or in the quaint terminology of the army, "Man-management"' which was 'very much the same thing' (Wheeler, 1954: 173). He further explains that:

> . . . in one vital respect at least there is an analogy between archaeological and military field-work that is recurrent and illuminating. The analogy rests – strangely enough as between the dead and the deadly – in the under-lying *humanity* of both the disciplines. The soldier, for his part, is fighting not against a block of colored squares on a war-map; he is fighting against a fellow being, with different but discoverable idiosyncrasies which must be

> understood and allowed for in every reaction and manoeuvre. Equally . . .
> the archaeological excavator is not digging up *things,* he is digging up *people.*
> (Wheeler, 1954: 16–17)

This militaristic metaphor is seen in Wheeler's thoughts and works as a recurring theme that is obvious in his articulation of archaeological method and theory. Wheeler utilized this trope for transforming an incipient disciplinary discourse, still viewed as a pseudo-scientific antiquarian's delight, into an empirical and scientific laboratory, capable of providing knowledge about mankind. Wheeler collapsed the ideas of scientific thought and military strategy into a single discourse that emerges as a constant subtext to all his archaeological approaches to the past. As he categorically points out:

> It is no accident that leaders in their interpretation [of ancient fortification] have so often been soldiers; General Roy, for example, in the eighteenth century; General Pitt Rivers, Napoleon III's colleagues, and the distinguished officers who manned the German *Limes* Commission in the nineteenth. Our hill-forts, as Leland long ago remarked, are the works of 'men of warre'; and their study demands the virile spark of the mind militant. (Wheeler, 1954: 18)

For Wheeler, the archaeological project suffered from lethargy: a malaise that could only be cured by making it a more professional mechanism of knowledge production, akin to the scientific enterprise. This is evident in his concern with 'methodical digging for systematic information, not with the upturning of earth in a hunt for the bones of saints and giants or the armoury of heroes, or just plainly for treasure' (Wheeler, 1954: 20). The genealogy of these concepts can be traced to Pitt Rivers (Wheeler, 1954: 13). Pitt Rivers developed strategies for comprehensive excavations, which stressed the importance of digging uniform and symmetrical trenches, divided by balks for maintaining stratigraphy and recording the finds three dimensionally, according to their stratigraphical contexts (Lucas, 2001: 39; Trigger, 1989: 199).

Wheeler began shaping the rudiments of these ideas soon after the First World War, when he commenced work on the Roman and Iron Age sites in Essex and Wales (Lucas, 2001: 37). He was driven by the need for gathering more data because the 'knowledge of human achievement outside the historical field was dependent upon fresh and methodological discovery, and that fresh discovery in great measure meant fresh digging' (Wheeler, 1956: 66). At the excavation of the prehistoric fortification of Maiden Castle in Dorset between 1934–37, Wheeler, for the first time, utilized the technique of area excavation in regularized trenches with baulks, along with the practice of meticulous mapping and recording of all significant features (Lucas, 2001: 39). He used stratigraphy, a concept introduced into the archaeological domain from geology, widely in his excavations (Harris, 1989; Wheeler, 1947c: 143). This was a technique that was introduced by Pitt Rivers as an important means of retrieving accurate and comprehensive

scientific knowledge from an excavation, driven by the fundamental search for chronology in the discipline of archaeology and the necessity for establishing the sequence of ancient cultures (Lucas, 2001: 34; Trigger, 1989: 199; Wheeler, 1958: 55). Wheeler was an able inheritor of Pitt Rivers' principles, not only because of the shared military background, but also because of the insistence on discipline, rigor and professionalism that both infused into archaeology. These ideas were reflected in Wheeler's professional need for an accurate recording of the archaeological sequences, the finds and the structures in accordance with their stratigraphical indexes, in order to make the knowledge production process a scrupulous exercise.

The methodology of transforming ancient sites into locations for the production of scientific knowledge gained popular currency as the 'Wheeler method', and was made into a concrete practice in the trenches of India, and even today, these methods are taught to students in the field schools. Wheeler's most important contribution to this technique was dividing the archaeological site in grids and inscribing it with Cartesian co-ordinates in the form of baulks. This divided the earlier chaotic location of knowledge production into a scientific laboratory between archaeological baulks, whereby the generated information could be confined, controlled and codified. In this archaeological laboratory, facts about pasts could be accurately documented and scientifically retrieved by keeping a detailed three-dimensional record of the finds. The carved out laboratory space in the earth, with the baulks, provided stratigraphical indices whereby evidence about the retrieved past could be further systematized according to Cartesian co-ordinates. The military metaphor played an important role in this method as here the archaeologist, as a professional solider, apprehends the archaeological site as a war zone, in which his superiority has to be displayed and his domination exhibited. In the first among a series of Staff Memoranda that Wheeler wrote as the Director General of the ASI, he explained the principles of his method in the following way: 'the excavation of a site, like the ordering of the battle, must be thought and co-ordinated by a single present and directing mind. Otherwise chaos, waste, inefficiency is inevitable'.[1]

Though Wheeler pursued the project of making archaeology a scientific project, he accepts its inherent limitations: 'as scientists, our life is founded on selection and decision. We like to think that selection and decision are objective and impersonal. What fools we are!' (Wheeler, 1950: 122). His schemes were attempts to make the excavation a rigorous process whereby the information gained through this permanently destructive procedure is not lost forever. He believed that 'archaeology is primarily a fact-finding discipline' and an archaeologist is:

> . . . primarily a fact-finder, but his facts are the material records of human achievement; he is also, by that token, a humanist, and his secondary task is that of revivifying or humanizing his materials with a controlled imagination that inevitably partakes of the qualities of art and philosophy. (Wheeler, 1954: 228–9)

It is this oscillation between the archaeologist as the scientific technician who gathered unsoiled data and the archaeologist as the humanist interpreter that informs Wheeler's archaeology. His main objective was to grasp the idea of Man, 'a subject which, being Men ourselves, we can never fully objectify. Our science is of all sciences the most subjective and selective' (Wheeler, 1950: 122). It is an epistemic and philosophical sway that marks Wheeler's work, which on one hand is dictated by disciplining the chaotic practice (Wheeler, 1954: 80) of excavation and, on the other, inscribes an idea of the past on the site and its people. It is in colonial India that both these projects reached a logical conclusion in which Wheeler not only controlled and patronizingly trained the natives, but also continued the Indological project of inscribing on the colonial masses a past unknown to them (Wheeler, 1947b, 1947–1948b, 1950, 1959, 1962a, 1962b, 1966b, 1968; Wheeler et al., 1946).

■ PHOTOGRAPHING DISCIPLINE

Among Wheeler's most famous images that had a deep impact on the disciplinarian trajectory of archaeology in India were two photographs that he produced, published together in his pedagogic text *Archaeology from the Earth* (Wheeler, 1954: Plate 4a). About the first (Figure 1), he writes: 'The first is an official photograph of a well-known excavation in the East, conducted by an archaeologist of considerable repute and long field-experience. Nevertheless, a mere novice might guess, and guess correctly, that chaos reigns' (Wheeler, 1954: 80). The rhetorical strategy implies a civilizing mission that Wheeler wants to impose upon the process of excavation and its practitioners who are not conscious of the 'scientific' enterprise they are participating in. Wheeler achieves this by utilizing a subtext of double metaphor, which is played against the notion of an archaeologist of repute who is unable to conduct scientific practice, but is also an incapable colonial administrator who cannot control the natives. Alongside, the imposition of a scientific ideal is further collapsed with the colonial project in intricate and pedagogically instructive text, for instance, in the form of the Technical Section strategically located in the ASI journal *Ancient India*, (Chakrabarti, 1988: 177; Wheeler, 1947c, 1947–1948c). This was explicitly done 'for the information of archaeologists in India' (Wheeler, 1946a: 77). In an introduction to one such Technical Section, he notes:

> This section may be prefaced by two quotations. The first is from the annual report of the archaeological department of one of the leading Indian States, and describes the recent excavation of some important megalithic tombs. It is as follows: 'Where necessary, the dolmens were blasted, the circles of stones were removed and cistvaens constructed with large flat slabs, were made available for study'. As evidence of impartiality, the second quotation is taken from the annual report of the Archaeological Survey of India: 'The maximum number of laborers employed at any one given time (in an

excavation controlled by one supervisor) was something over thirteen
hundred'. These quotations are eloquent of all that an archaeological
excavation should not be. (Wheeler, 1947–1948c: 311)

The genesis of the Technical Sections was situated in the Staff Memoranda,
meant for internal circulation, that Wheeler dispatched throughout the early
part of his Directorship between 1944 and 1945. Seven in number, these were
his first attempts at disciplining the staff, the officers and the workers of the
ASI. It is in these succinctly titled Memos – 'Conservations', 'Research',
'Museums', 'Directives for Young Officers' and others – that he coalesced
the objective of putting to order a colonial organization in disarray by
extolling the virtues of science and discipline: 'Once more you are a scientist,
one with the initiative to acquire and enlarge knowledge. You are no longer
a school-boy waiting to be taught. You are an *officer*, and the weight of your
command will be proportionate to the effective weight of your knowledge
and experience. Learn!'.[2] For Wheeler, science is like a war, it:

> is a whole-time preoccupation. It has nothing to do with office hours. There is
> no such thing as 'science from 10.30am to 5.30 pm'. Those are hours between
> which the administrating scientist has least time for his science. The real work
> begins when his routine work ceases. And archaeology is a branch of science.[3]

To produce a sharp contrast, the photograph of the chaotic excavation is
juxtaposed against a photograph of a scientific excavation (Figure 2), with
not only a representation of a controlled means of knowledge production,
but also one of controlling the knowledge producer. Under the caption
'Discipline: excavation at Arikamedu, South India, 1945' (Wheeler, 1954:
Plate 4b), Wheeler comments:

> The second illustration, from the same subcontinent, unblushingly
> represents an excavation from my own, on the principle that the professor
> may properly be expected to practice. It shows a site neatly parcelled out

Figure 1   The chaos of an undisciplined excavation

into readily controllable areas; small groups of workmen are directed by
supervisors (distinguishable in the photographs by their sun-helmets); the
basket carriers are working in orderly procession along clear pathways; and
in the middle distance in the right, the survey-party is conveniently at work
at a table shaded by an essential umbrella. (Wheeler, 1954: 80)

This photograph has a canonical aura about it; in this gaze, the disciplinar-
ian project of Wheeler dissolves into the colonial authority. The means of
knowledge production, with its emphasis on epistemic certainty, is brought
about by taming and controlling the un-orderly within the sites of know-
ledge production, as well as the knowledge producer. It is not only the field
that is transformed into a location of knowledge production tamed by
cellular grids, but also the undisciplined colonized workers. They are
beyond the control of the incapable colonial master and are the graphic
cause of the chaos of the earlier photograph. Their bodies need to be
tempered and disciplined by the strict masters who direct the colonized
bodies under the comfort of the shade. A statement appearing at the
bottom of the same photograph in another text clarifies the relation
between the location of the knowledge production, the knowledge
producer and the knowledge produced.

> The erratic cutting of our French predecessors on the scene was
> methodically superseded and extended by school-trained grids and
> graduated stratigraphy in the busy hands of students already trained to
> anticipate just this sort of situation – the emergence of familiar western
> products in meaningful association with the still-unknown and variable
> output of the east. (Wheeler, 1976: 44)

Thus this photograph transforms into a document that merges the scien-
tific, the colonial and the military discourses in one instance, and in the
process, explicitly exposes the 'epistemic murk' (Taussig, 1987: 1) of the

Figure 2   The disciplined excavation under Wheeler at Arikamedu, 1945

discipline. In the attempts to increase the efficacy of the data gathering process through epistemic control, is inherent the colonial project of civilizing the native.

■ TRANSFORMATIVE ROLE OF THE EPISTEMIC MARKER

Wheeler intricately linked the process of knowledge production to the process of knowledge consumption. He believed that regular publication was as important as systematic excavation:

> 'A discovery dates only from the time of the record of it, and not from the time of its being found in the soil.' This classic sentence of Pitt-Rivers proclaims fairly and squarely the ultimate moral and scientific duty of the field-archaeologist. It may be amplified by the familiar corollary that the unrecorded excavation is the unforgivable destruction of evidence; and the more complete and scientific the excavation, the greater the measure of destruction. (Wheeler, 1954: 209)

The nature of Wheeler's representational strategies was apparent from his prolific publications. He infused his texts with detailed photographic imagery and illustrations which were designed to impart to the reader the nature of the site, its history and chronology, and also provide a penetrating gaze into the mammoth task that he undertook: 'The first task in the compilation of an excavation report is adequate illustration. In this matter there is little to add, in principle, to Sir Flinders Petrie's assertion half a century ago that "nowadays the main structure of a book on any descriptive science is its plates" ' (Wheeler, 1954: 209). Using an image syntax articulated through photographs and illustrations, Wheeler correlated the scientific nature of the archaeological project with the project of inscribing a discourse of knowledge representation on the discipline.

Like most archaeologists of his time, the photographic record formed an essential part of Wheeler's representational oeuvre, and played a central role in the discursive practice of his numerous published texts (Wheeler, 1947b, 1947–1948b, 1950, 1962a, 1962b, 1966a, 1966b, 1968, 1976; Wheeler et al., 1946). Wheeler transformed photographs as epistemic documents that had the ability to provide empirical knowledge about the past, which was constructed as science. This was done by the introduction of an epistemic marker, the scale: 'Every archaeological photograph should include a scale, either in the form of a graduated rule or rod or in that of a human figure. (Adult human skeletons provide their own scale with as much accuracy as may be expected from a photograph.)' (Wheeler, 1954: 201). The use of the scale as an epistemic marker in archaeological photographs is a common means of transforming an arbitrary sign of the past into scientific knowledge that inscribes an epistemic certainty, which cannot be challenged. This is exacerbated in archaeological excavation, as

it is a destructive means of knowledge production that can never be challenged or tested at that particular trench or location. In this process, the photographic document with an epistemic marker transforms the moment of discovery into empirical evidence and inscribes on it a concreteness, which may not be questioned. Thus, the scale becomes the most important signifier of an archaeological photograph and Wheeler underscores its importance: 'The scale should normally be parallel with the plane of the camera-plate; if the latter is tilted the graduated scale should be correspondingly tilted, other-wise the graduations are in perspective and of variable length' (Wheeler, 1954: 201). The centrality of the scale and its importance in the transformation of an arbitrary subject is so overwhelming that Wheeler is forced to add a note of caution: 'On the other hand, the scale should not monopolize the attention of the spectator. A central scale, is for this reason usually bad' (Wheeler, 1954: 202).

Wheeler continued an earlier practice and actively utilized human figures as scales in order to produce an epistemologically sound representation of the past and to legitimize his practice (Figure 3). However, Wheeler does ponder over the nature of such an epistemic marker: 'Where the scale is a human being, as is often desirable in large subjects, the individual thus honored must remember that he is a mere accessory, just so many feet of bone and muscle' (Wheeler, 1954: 202). The human figure is thus transformed by Wheeler from a producer of knowledge – an active member of the means of knowledge production – to a passive accessory of the knowledge production project because: '(1) the figure shall not occupy a disproportionately large portion of the picture and (2) that the figure shall not look at the camera but shall ostensibly be employed in as impersonal a manner as possible' (Wheeler, 1954: 202). It is not coincidental that Wheeler never appears as the human epistemic marker in any of the images that were produced during his excavations in India. Invariably it is the nondescript workman/woman, the subaltern, who plays the dual role of the human epistemic marker and the ethnic marker – an anthropological motif crucial to the visual representation of colonial archaeological projects. The tradition of utilizing the subaltern human marker was widely practiced in Indian archaeology before Wheeler, but he provides the marker with an epistemological meaning, which also had scientific credence. The subalterns in the colonial archaeological projects were daily wage earners, unskilled laborers, usually recruited from villages adjoining the excavated site, who executed the majority of the physical work of digging, removing and cleaning the excavated area.

The subaltern laborers, both men and women, were objectified in the representational lexicon of archaeological knowledge by Wheeler, and utilized as an ethnic marker to legitimize the colonial undertaking of inscribing on the subalterns their past. This past is discovered by colonial authority, but unknown to the subalterns. They are incapable of discovering it themselves – it is only through the participation in the colonial project

that they can engage with it. The encounter with their glorious heritage, the experience with their ancient ancestors, is only possible through an inter-mediary – the colonial knowledge-producing agency – the Archaeological Survey of India (ASI). The subaltern subjects were subverted because, in spite of being given a place of pride in the knowledge production process, they were simultaneously appropriated to authenticate the Enlightenment project of civilizing the native. They are always shown in these photographs as the industrious workmen or women, attired in native robes and clothes, who experience the past provided to them and are deeply engaged with it while doing menial labor – cleaning. This representation of the natives by fixing them with work that they did, in their traditional attire, along with their tools of trade, was a marker of typicality that signified their ethnicity (Pinney, 1997: 53).

Wheeler's visual vocabulary borrowed these tropes from the depiction of native workers in the service of the Raj, where they performed the role not of a primitive symbol but rather of a tame and adaptive labor force (Pinney, 1997: 57). The representation of the prototypical natives with occupational gear and clothing, participating in the colonial task, had wide currency, as these images were mass-produced in the form of phototype postcards. The native bodies were thus not only objectified in Wheeler's images, but these representations played the dual role of inscribing the colonial discourse with the legitimacy that it lacked and also of being simultaneously inscribed by the same project. In the process, the subaltern workmen/women were reduced to motifs in a photographic document and were nothing but a necessary nuisance that had to be controlled and disci-plined for the efficacy of the archaeological project:

> I have seen, towards the end of the day, the lines of young native basket-carriers, upon whose speed and regularity depends in great measure the general *tempo* of an Eastern excavation, falter and chatter and play truant in spite of the despairing efforts of the strong-minded foreman. Basket carriers are never the most responsible members of the party, and they are necessarily numerous and elusive. (Wheeler, 1954: 175–6)

Wheeler undermined the identity of the subaltern men and women by objectifying them as an auxiliary item to the scientific discourse. Subaltern subjects were simultaneously disciplined not just by the appropriation of their bodies as the primary means to carry out the knowledge production process, but by the utilization of their bodies as symbols to humanize the representation of knowledge and make it an authentic and legitimate discourse.

The juxtaposition of the human body and the measuring scale in archae-ology produces a scientific representation of the past, which has a colonial genealogy. It can be traced to the practice of the colonial anthropometric project of measuring the cranial features of the human subject as means of objectifying it as a scientific fact (see Hamilton and Hargreaves, 2001;

Sekula, 1989; Spencer, 1992; Tanner, 1981). The racial process of codifying and disciplining the body of the primitive native is evidenced in photographs taken in the late nineteenth century in India, where the primitive native was represented as the *object* of scientific discourse (see Pinney, 1992; 1997; Risley, 1969 [1915]; Ryan, 1997). The photograph became a performative space, akin to the museum for colonial science, to stage its articulation of power through which the scientific gaze compared, identified, differentiated and categorized the native subject. Colonial ethnologists like Edgar Thurston, the superintendent of the Madras Central Museum, stalked the museum in pursuit of his anthropometrical interests by keeping his calipers and other scientific instruments ready to measure native visitors (Prakash, 1992: 156). Native subjects, thus apprehended, were represented in anthropometrical photographs where the measuring scale as the anthropometrist's talisman (Pinney, 1997: 48) was used not only as a studio prop but was also transformed into a symbolic scientific instrument. It not only provided useful information, but played the role of scientifically controlling the native body. Innate in Wheeler's practice of using the native and the scale was the subtext of disciplining the native and using him as an epistemic marker in order to validate his own position as the colonial master capable of controlling the native through the discourse of science that was already prevalent in colonial India. The measuring scale

Figure 3   The careful use of native subaltern as epistemic markers

as a pseudo-scientific device was substituted as a studio prop by the girded backdrop of graph paper in these photographs of the native (Pinney, 1997: 51). A reflection of such a grid occurs in the excavation methods of Wheeler, which was marked by the characteristic cellular trenches that were inscribed on the earth to gain more control of the process of generating scientific knowledge (Wheeler, 1946a: Plate IIb).

■ INSCRIPTION THROUGH THE ETHNIC MARKER

The epistemological relationship between archaeological representation and archaeological knowledge is brought into sharp focus in the ideas that Wheeler propagated about the importance of stratigraphy. He is credited with giving the concept of stratigraphy an important space in the archaeo-logical project by transforming it into a methodological tool and endowing it with a temporal valence (Drewett, 1999: 11; Lucas, 2001: 37). Before he came to India, he had already perfected the technique, but it was during the years in India that he employed stratigraphy as an important principle to provide a temporal framework to all his excavations, to 'construct careful time-tables or sequence-tables of ancient cultures in various parts of India' (Wheeler, 1947c: 2). Stratigraphy, along with his ideas on large scale area excavations, was emphasized as a crucial component of field-archaeology, and became the chief focus of his training school at Taxila (Chakrabarti, 1988: 176):

> Without any depreciation of the high value of the archaeological fieldwork carried out in India by past generations of scholars, Indian and European, the time has come to recognize bluntly, but in a properly constructive sprit, certain shortcomings for which remedy is overdue. Of these, the most important is the omission to appreciate adequately the signification of stratification, which is fundamental to the science of archaeology as it is to the parent discipline of geology. (Wheeler, 1947c: 143)

For Wheeler, the importance of stratification emerges from his need for chronology because 'mere dates are still of primary and ultimate and unrelenting importance. And by dates I mean not simply those nebulous phases and sequences, those date substitutes, with which archaeologists often enough try to bluff us. I mean time in hard figures. I mean Bradshaw' (Wheeler, 1954: 38). And in India, this played an important role because of the gaps he ascertained in chronology that needed to be established by relating to the known cultural history of the Graeco-Roman world (Boast, 2002: 167; Clark, 1979: 25), for which he devised tactical strategies in his characteristic militaristic fashion:

> Like fieldwork of another profession, archaeological fieldwork may be classified broadly in two aspects: the strategic and the tactical. By strategy is meant, in this context, the choice of the objective, the selection of the

problem and of the sites or regions best calculated to solve that problem. By tactics is meant the detailed method of attacking the selected sites or region. (Wheeler, 1949: 4)

The introduction of stratigraphy along with other excavation strategies, characteristic of the 'Wheeler Method', performed a dual role. First, it was a scientific tool that was used to negotiate the vast mass of archaeological knowledge that needed to be organized and codified and brought under the control of chronology established by the known Graeco-Roman records. Second, it was a means to professionalize the Indian archaeological practice that was in disorder, by introducing new levels of scientific awareness (Chakrabarti, 1988: 88) because:

> To dig a site merely because it 'looks good' or because it might produce useful information would be comparable to carrying out a surgical operation at random on a patient in the hope of finding somewhere the cause of an undiagnosed disease. It was thus that the primitive surgeon used to cut a hole in a man's skull in the hope of letting out the headache. It is thus that ancient sites – megalithic tombs for example – have been constantly opened up in the hope of letting out their secrets. Not thus is the orderly way of science. (Wheeler, 1949: 4)

In his work in India, Wheeler produced numerous illustrations depicting stratigraphy, which represented 'the successive phases in the archaeological "history" of a site' (Wheeler, 1954: 59). They were prepared by differentiating strata on the basis of 'variation in colours or material and content' which usually 'particularly under the bleaching influences of an African or Asian sun, present difficulty to an experienced eye' (Wheeler, 1954: 60). Of these, I focus only on a particular type that were produced as overwhelmingly large folding plans, which at a glance gave the stratigraphical chronology of the excavation (Wheeler, 1947b: 66; 1962a: 22; 1968: 31, 44). These diagrams (Figure 4) were neatly illustrated with clearly demarcated strata and layers and they transformed the 'observation in different lights and different times of the day' into illustrations of scientific knowledge. These diagrammatic constructions were attempts to 'read the sections – to discriminate without prejudice, between the more significant and less significant differentiation of the strata' (Wheeler, 1954: 60). Thus, after the first step in the 'Wheeler Method' had been transcribed over the mound, with cellular grids as adequate techniques of scientific knowledge production, the second step was initiated through stratification. Cultural layers were identified, codified and also utilized to 'interpret them, to understand the sentence and transliterate it' (Wheeler, 1954: 60) in order to sufficiently inscribe the dug earth with a chronology. This knowledge was given a firm and fixed shape in two dimensional illustrations, embellished with Wheeler's motif of the subaltern workers, once again represented as the disciplined, industrious and proud native playing the dual role of the epistemic and the ethnic marker. They usually occupy the fringe of the dramatic display, reduced to diminutive figures in the vast stratigraphical performance put together by

the colonial masters. Awed by the past inscribed upon them, they are finally controlled and reduced to symbols in a diagram like the other symbols in depicting stratigraphical sections: 'for the easy and conventional representations' as 'they have no special merit but [are] reasonably expressive' (Wheeler, 1954: 77). The dead, non-human stratigraphical illustration is given life: 'an intelligently drawn section is far more than a diagram; it is, as I say, a picture, representing not merely the skeleton but also something of the vital flesh and blood of its subject' (Wheeler, 1954: 76).

In these illustrations of stratigraphy, Wheeler is appropriating key Enlightenment aesthetic notions of the picturesque and the sublime that dominated most of the earlier representations of Indian art and architecture throughout the eighteenth and nineteenth century. Colonial travelers, artists and administrators, overwhelmed by the natural surroundings and the architectural richness of the country, created romantic images of India which had a lasting influence on the way Indian art, architecture and antiquities were represented to the European world (see Driks, 1994; Mitter, 1977; Ray, 1998). The aesthetics of these images were dominated by eighteenth century European tastes and ideas, shaped by romantic sensibilities (see Drew, 1987; Labbe, 1998) and erotica, which viewed the images of native people as collectible objects (Dennis, 1994: 23). The emergence of these ideas was linked to the discoveries of ancient monuments in Greece and the European Middle Ages and led to a revivalist fervor in art and aesthetics which was affected by the notion of the picturesque and sublime (Mitter, 1977: 120). Picturesque has been deigned as the nineteenth century's modality of viewing the universe that was situated in the period of transition from classical formalism to a state of romantic disorder which challenged the Renaissance ideas of beauty and aesthetics (see Bermingham, 1987; Labbe, 1998; Malcolm, 1989). It is an artificially and socially constructed mode of viewing landscape, where nature is objectified and transformed into the basis of scientific and aesthetic appropriation (Ryan, 1996: 59). On the other hand, the idea of the sublime was linked to a growing interest in nature, evoking a sensation of pleasure in the beholder due to the inability of the human mind to comprehend it (see Hipple, 1957; Labbe, 1998; Twitchell, 1983). This, in turn, was aroused by the monumental size of the subject (Mitter, 1977: 121). In India, this notion is closely connected to early antiquarian ideas of colonial officials, administrators and travelers who first encountered the traditional monuments, architecture and edifices. These were illustrated with a typical romantic treatment, exploiting the idea of the picturesque and the sublime to create images of famous monuments for consumption by a European audience. These earliest depictions of archaeological sites of India in the West presented the monumentality of the site in a dramatic fashion, which was brought about by situating the performance of the monument in a vast space, contrasting it with the image of the native, attired in a native costume, diminutively performing his role as the ethnic marker (Dirks, 1994; Mitter, 1977; Ray, 1998).

   In Wheeler's diagrammatic representation of the stratigraphy in India in
the form of folding plans, especially of the huge Indus valley sites of
Harappa (Wheeler, 1947b: 66; 1968: 31), Mohenjo-daro (Wheeler, 1968: 44)
and the early historic site Charsada (Wheeler, 1966b: 22), he uses a similar
visual rhetoric to magnify the monumentality of the site. He contrasts these
representations with the diminutive figures of the subaltern workers in
native costumes as they are forced to stand at the corner of these folding
large plans, in the symbolic role of the ethnic marker. The subtext implied
in these representations, very much like the photographs discussed earlier,
is that of double inscription. The inscription of the past on native bodies
that they are unaware of and therefore in need to be civilized into its
knowledge, and the inscription of the archaeological project by these same
bodies to authenticate and legitimize the patronizing, civilizing project
of the colonial archaeologist. The ethnic markers are the subaltern
workmen/women, the laborers with the basket or picks forced on them,
appreciating the workmanship that they have created for their master and
for themselves. About these subalterns, Wheeler notes: 'A word of warning:
a lazy workman will always try to exchange his large pick for one of these
small ones, so that he may squat and peck idly at the surface with a
minimum of effort' (Wheeler, 1947–1948c: 319). Wheeler managed them by
utilizing his typical military management strategy. He employed a 'strong
minded foreman on the carrier-line permanently . . . [as] in one way or the
other, the battle between the supervisor and his carrier will be incessant,
but is an essential element in the day's work. A little occasional humor will
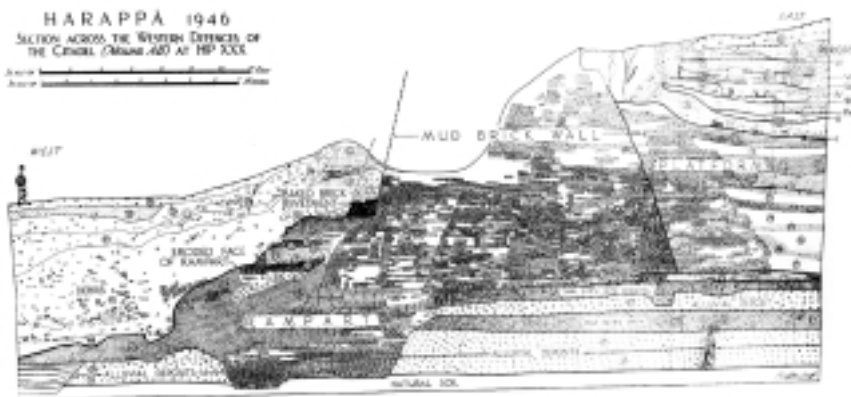lighten the task and speed the basket' (Wheeler, 1947–1948c: 313).

Figure 4   The diminutive subaltern motif, as ethnic markers occupying
fringes of a stratigraphic representation

■ CONCLUSION

The intervention of Sir Mortimer Wheeler has had a longstanding impact on the way knowledge is produced about India's past, especially in contemporary post-colonial India (see Chakrabarti, 1989; Clark, 1979; Paddayya, 1995). He transformed a decaying institution of colonial power into a professional organization, competent in pursuing the colonial project of codifying, classifying and endowing the colonial subject with a past. It was a methodological strategy that emphasized the ASI's status as a superior imperial body, applying military and scientific procedures to produce an objective reality of the past, with its chronology linearly defined and its temporal negotiations clearly delineated. In Wheeler's intervention, the colonial, the military and the scientific projects collapsed to form a disciplinarian discourse that resulted in a widespread domination of the past as a cultural category. This method still finds currency as the most appropriate method of producing archaeological knowledge in India today.

The impact of Wheeler's visual lexicon has been far reaching in the post-colonial archaeological representation of India's past, in its continued practice till today. In the photographic documentation of the ASI's numerous excavations, the epistemic marker and the ethnic marker are nearly ubiquitous. They possess similar characteristics as discussed above and perform the same roles of double inscription. Here, I provide a few examples from the post-independence period: the first is from the official report of the excavation of Lothal, conducted by the ASI between 1955–62 and published after a delay in 1979 (Rao, 1979). The subaltern workers are seen in most of the 127 photographic plates of the report, which depict landscapes or architectural structures. The human epistemic markers are shown digging, carrying dirt, pointing at stratigraphic layers, standing in deep trenches, posing, squatting and cleaning the dirt, also appearing as an epistemic motif in an illustration of a stratigraphic section (Rao, 1979). Another example is from a UNESCO volume on Indian archaeology – reviewing the archaeological discoveries in post-independence India, which has images of important sites excavated by the ASI – Antichak, Bhagwanpura, Burzahom, Delhi-Purana Quilla, Kalibangan, Lothal, Maski, Mathura and Sringaverapura (Thapar, 1985). Most of the photographs of these sites have the subaltern workers playing the role of an epistemic marker. And the latest example is on the cover of the *Indian Archaeology Review*, the annual publication of the ASI (Bisht et al., 2000). This photograph, along with the examples mentioned above, had epistemic markers working in the midst of vast sites, which were divided into the distinctive Cartesian grid of the Wheeler Method. Thus, the visual vocabulary used by the ASI still expresses the ideological subtext of the colonial mission of inscribing the landscape with its statist power and continues the project of producing the past for the natives. The relationship between the ASI and the subalterns in post-colonial India might not be as ideologically accentuated, but the

display is equally condescending as the subalterns have been transformed from the native into the illiterate. The scientific gaze of the postcolonial archaeologists still attempts to objectify the landscape through the *same* colonial apparatus of knowledge production, steeped in a similar ideological framework employing identical methods of extraction, codification and dissemination of archaeological knowledge. Like most institutions of colonial governance, the change that occurred in the ASI after the transference of power in 1947 was merely symbolic, devoid of any change in the ideological structure of the system, its reach, and its power to inscribe a scientific and an 'objective past' on the people of India.

The human epistemic and ethnic marker is an expression of the 'body politic' in the disciplinarian discourse of archaeology, where the bodies of the subaltern are the sites for the articulation of the nexus of power and knowledge in a Foucauldian sense. The bodies of the native or the illiterate are dominated and subjugated by an ideological apparatus and transformed into objects of knowledge (Foucault, 1979: 26). Here, the ASI as a colonial institution (and Wheeler as part of it) operates as an ideological apparatus exerting its power over the subaltern bodies by appropriating their symbolic valence and attributing them with an epistemological significance. This process subverts the subaltern bodies for the knowledge production objective of the colonial project, and simultaneously legitimizes its oppressive power. The body of the subaltern is directly involved in a political field as an epistemological category, where the power relations between the dominant and the oppressed are performed in the knowledge production process. The ASI not only exploits the subaltern bodies as a labor force crucial to the archaeological excavation, but also transforms them into a representational idiom, through which it articulates its power over the knowledge about India's past. The domination of the ASI is exercised by investing in the subaltern an epistemological valence that is exploited by manipulating it for validating its power to generate knowledge. The photographic archive of Indian archaeology thus is a discursive system in which the scientific, the colonial and the archaeological process collapse to produce a narrative of domination, exploitation and legitimization. Here the political function of the archaeological project coalesces with the epistemological meaning of the colonial project, where, through the application of scientific technologies, colonial identities are normalized and domesticated.

Wheeler's intervention was a transformative interlude in the trajectory of a colonial body whose roots lay in the knowledge production project that the British commenced, soon after they established a firm political grip over this vast colony in the first half of the nineteenth century (Lahiri, 2000). Wheeler was successful in modifying the role of a colonial agency like the ASI, in order to produce the knowledge of a colony in a professional and scientific manner. It was one of the numerous organizations meant to provide information for the colony's adequate governance by rigorously

producing *scientific* facts about India – its people, its history and its geography. The genealogy of the ASI as a colonial knowledge production agency that provided information about the colonial subjects is situated between what Bernard Cohn calls the 'historical modality' and the 'survey modality' (Cohn, 1996: 5). He lists these categories as some of the numerous 'investigative modalities' of knowledge production mechanisms which were invented by Imperial ideology and later perfected in colonies in order to produce facts that could be categorized and classified in order to control and govern their subjects Other such modalities include the 'observational/travel modality', 'enumerative modality', 'museological modality' and 'surveillance modality' (Cohn, 1996). For Cohn the 'historical modality' is a means of knowledge production, instrumental in 'the ideological construction of Indian civilizations' whereas the 'survey modality' was involved in 'mapping and bounding to describe and classify the territory's zoology, geology, botany, ethnography, economic products, history and sociology' (Cohn, 1996: 7). The ASI was born out of the combination of both these modalities. On one hand, it was an instrument of survey that discovered, excavated and classified India's past, and on the other it was an agency that provided concrete evidence for the construction of an ideologically loaded history of India's past through the analysis of architectural remains and epigraphical inscriptions.

Wheeler, along with the ASI, took the colonial project of civilizing the native to its logical conclusion, where the colonial machinery was not only involved in a process of controlling the native bodies, but was involved in colonizing minds. An ideological past with a deeply embedded notion of European chronology was provided to a people who lacked one, with the help of military and scientific methods. This civilizing ideology was responsible for instigating a process within colonized society, especially in a post-colonial context, to alter its cultural priorities according to the disciplinarian discourse that was dictated by the colonizers.

Acknowledgements

Notes

1 AACD (ASI Archive Collection, New Delhi), File No. 33/24/44; 1944. From 'Message from Dr R.E. Mortimer Wheeler, Director General of Archaeology to the staff of the Archaeological Survey of India', Simila, May 1944, p. 3.
2 AACD, File No. 33/24/44; 1944. From the Staff Memorandum No. 5, 'Directive for Young Officers', Simila, April 1945.
3 AACD, File No. 33/24/44; 1944. From the Staff Memorandum No. 5, 'Directive for Young Officers', Simila, April 1945.

References

Bermingham, A. (1987) *Landscape and Ideology: The English Rustic Tradition 1740–1860.* London: Thames and Hudson.

Bisht, R.S., C. Dorje and A. Banerji, eds (2000) *Indian Archaeology 1993–94 – A Review.* New Delhi: Archaeological Survey of India.

Boast, R. (2002) 'Mortimer Wheeler's Science of Order: The Tradition of Accuracy at Arikamedu', *Antiquity* 76: 165–70.

Chakrabarti, D.K. (1988) *A History of Indian Archaeology from the Beginning to 1947.* New Delhi: Munshiram Manoharlal.

Chakrabarti, D.K. (1989) *Theoretical Issues in Indian Archaeology.* New Delhi: Munshiram Manoharlal.

Chakrabarti, D.K. (2000) 'Colonial Indology and Identity', *Antiquity* 74: 667–71.

Clark, G. (1979) *Sir Mortimer and Indian Archaeology.* New Delhi: Archaeological Survey of India.

Cohn, B.S. (1996) *Colonialism and its Form of Knowledge: The British in India.* Princeton: Princeton University Press.

Dennis, K. (1994) 'Ethno-Pornography: Veiling the Dark Continent'. *History of Photography* 18: 22–8.

Drew, J. (1987) *India and the Romantic Imagination.* Delhi: Oxford University Press.

Drewett, P. (1999) *Field Archaeology: An Introduction.* London: UCL Press.

Dirks, N. (1994) 'Guiltless Spoliations: Picturesque Beauty, Colonial Knowledge, and Colin Mackenzie's Survey of India', in C. Asher and T. Metcalf (eds) *Perceptions of South Asia's Visual Past,* pp. 211–32. New Delhi: Oxford and IBH.

Fabian, J. (1983) *Time and the Other: How Anthropology Makes Its Other.* New York: Columbia University Press.

Foucault, M. (1973[1966]) *The Order of Things: Archaeology of the Human Sciences.* New York: Vintage.

Foucault, M. (1979[1975]) *Discipline and Punish.* New York: Vintage Books.

Foucault, M. (1980[1977]) 'The Eye of Power', in M. Foucault, *Power/Knowledge: Selected Interviews and Other Writings, 1972–1977*, pp. 146–65. New York: Pantheon.

Hamilton, P. and P. Hargreaves (2001) *The Beautiful and the Damned: The Creation of Identity in Nineteenth Century Photography.* London: Lund Humphries.

Hipple, W.J. (1957) *The Beautiful, the Sublime, and the Picturesque in Eighteenth Century British Aesthetic Theory.* Carbondale: Southern Illinois University Press.

Labbe, J.M. (1998) *Romantic Visualities: Landscape, Gender and Romanticism.* Hampshire: Macmillan Press.

Lahiri, N. (2000) 'Archaeology and Identity in Colonial India', *Antiquity* 74: 687–92.

Lal, B.B. and S.P. Gupta (1984) *Frontiers of the Indus Civilization: Sir Mortimer Wheeler Commemorative Volume.* New Delhi: Indian Archaeological Society.

Latour, B. (1999) *Pandora's Hope.* Cambridge, MA: Harvard University Press.

Lucas, G. (2001) *Critical Approaches to Fieldwork: Contemporary and Historical Practice.* London: Routledge.

Malcolm, A. (1989) *The Search for the Picturesque: Landscape Aesthetics and Tourism in Britian, 1760–1800.* Aldershot: Scholar Press.

Mitchell, T. (1988) *Colonising Egypt.* Cambridge: Cambridge University Press.

Mitter, P. (1977) *Much Maligned Monster: A History of European Reactions to Indian Art.* Chicago: University of Chicago Press.

Paddayya, K. (1995) 'Theoretical Perspectives in Indian Archaeology', in P. Ucko (ed.) *Theory in Archaeology: A World Perspective*, pp. 110–49. London: Routledge.

Pinney, C. (1992) 'The Parallel Histories of Anthropology and Photography', in E. Edwards (ed.) *Anthropology and Photography, 1860–1920*, pp. 74–95. New Haven and London: Yale University Press and Royal Anthropological Institute.

Pinney, C. (1997) *Camera Indica: The Social Life of Indian Photographs*. London: Reaktion Books.

Prakash, G. (1992) 'Science "Gone Native" in Colonial India', *Representations* 40: 153–78.

Prakash, G. (1999) *Another Reason: Science and the Imagination in Modern India.* Princeton: Princeton University Press.

Pratt, M.L. (1992) *Imperial Eyes: Travel Writing and Transculturation*. London: Routledge.

Rao, S.R. (1979) *Lothal: A Harappan Port Town (1955–62). Memoirs of the Archaeological Survey of India,* No. 78, Vol. 1. New Delhi: Archaeological Survey of India.

Ray, R. (1998) 'The Memsahib's Brush: Anglo-Indian Women and the Art of the Picturesque, 1830–1880', in J.F. Codell and D.S. Macleod (eds) *Orientalism Transposed: The Impact of the Colonies on British Culture*, pp. 89–116. Hampshire: Ashgate.

Risley, H. (1969[1915]) *The People of India*. New Delhi: Oriental Books Reprint Corporation.

Ryan, J. (1997) *Picturing Empire: Photography and the Visualization of the British Empire*. London: Reaktion Books.

Ryan, S. (1996) *The Cartographic Eye.* Cambridge: Cambridge University Press.

Schwab, R. (1984) *The Oriental Renaissance: Europe's Rediscovery of India and the East 1680–1880.* New York: Columbia University Press.

Sekula, Alan (1989) 'The Body and the Archive', in R. Bolten (ed*.) The Contest of Meaning: Critical Histories of Photography*, pp. 343–89. Cambridge, MA: MIT Press.

Spencer, F. (1992) 'Some Notes on the Attempt to Apply Photography to Anthropometry during the Second Half of the Nineteenth Century', in E. Edwards (ed.) *Anthropology and Photography, 1860–1920*, pp. 74–95. New Haven and London: Yale University Press and Royal Anthropological Institute.

Tanner, J.M. (1981) *A History of the Study of Human Growth*. Cambridge: Cambridge University Press.

Taussig, M. (1987) *Shamanism, Colonialism and the Wild Man: A Study in Terror and Healing*. Chicago: University of Chicago Press.

Thapar, B.K. (1985) *Recent Archaeological Discoveries in India*. Paris: UNECSO.

Trigger, B. (1989) *A History of Archaeological Thought*. Cambridge: Cambridge University Press.

Twitchell, J. (1983) *Romantic Horizons: Aspects of the Sublime in English Poetry and Painting, 1770–1850*. Columbia: University of Missouri Press.

Wheeler, R.E.M. (1947b) 'Harappa 1946: The Defenses and Cemetery R 37'. *Ancient India* 3: 58–130.

Wheeler, R.E.M. (1947c) 'Technical Section: The Recording of Archaeological Strata'. *Ancient India* 3: 143–50.

Wheeler, R.E.M. (1947–1948a) 'Notes'. *Ancient India* 4: 1–3.

Wheeler, R.E.M. (1947–1948b) 'Brahmagiri and Chandravalli 1947: Megalithic and other Cultures in Mysore State'. *Ancient India* 4: 180–310.

Wheeler, R.E.M. (1947–1948c) 'Technical Section: Further Notes on Digging and Recording'. *Ancient India* 4: 311–21.

Wheeler, R.E.M. (1949) 'Archaeological Fieldwork in India: Planning Ahead'. *Ancient India* 5: 4–11.

Wheeler, R.E.M. (1950) *Five Thousand Years of Pakistan: An Archaeological Outline*. London: Royal India and Pakistan Society.

Wheeler, R.E.M. (1954) *Archaeology from the Earth*. Baltimore: Penguin Books.

Wheeler, R.E.M. (1956) *Still Digging*. New York: E.P. Dutton and Co.

Wheeler, R.E.M. (1959) *Early India and Pakistan to Ashoka*. New York: Frederick A. Praeger.

Wheeler, R.E.M. (1962a) *Charsada: A Metropolis of the North-West Frontier*. Oxford: Oxford University Press.

Wheeler, R.E.M. (1962b) *The Indus Civilization*. Cambridge: The Syndics of the Cambridge University Press.

Wheeler, R.E.M. (1966a) *Alms for Oblivion: An Antiquary's Scrapbook*. London: Weidenfeld and Nicolson.

Wheeler, R.E.M. (1966b) *Civilizations of the Indus Valley and Beyond*. New York: McGraw-Hill.

Wheeler, R.E.M. (1968) *The Indus Civilization*. Cambridge: Cambridge University Press.

Wheeler, R.E.M. (1976) *My Archaeological Mission to India and Pakistan*. London: Thames and Hudson.

Woolley, L. (1993[1939]) 'A Report on the Work of the Archaeological Survey of India', *Harappan Studies* 1: 17–56.

ASHISH CHADHA is a doctoral candidate at the department of Cultural and Social Anthropology and is also affiliated to the Archaeology Center at Stanford University. He has an MA in 'Ancient Indian history, culture and archaeology' from Deccan College, Pune. His dissertation research deals with the history of archaeology in relation to epistomology and the manufacture of scientific knowlege in colonial and post colonial India.

[email: ashishw@stanford.edu]