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### Imposing the habit of science: Sir Mortimer Wheeler and Indian archaeology

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“...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!”

This is how Sir Robert Eric Mortimer Wheeler’s “directive” to “young officers” of the Archaeological Survey of India ended. It was circulated as one of the staff memorandum (no. 5) in April 1945 and is his most didactic official circular. The four years of Wheeler’s Director-Generalship of the Survey (1944 to 1948) are usually regarded as being foundational to the development of archaeological method in the subcontinent. By instilling ‘discipline’ among his crew, showing them how to attain technical precision in recording and exposing the benefits of forward planning, Wheeler (as he himself tells us) could successfully impose the habit of scientific enquiry among his Indian students and staff; a habit he regarded necessary for the progress of archaeology in the Indian subcontinent. This paper explores some of his methods and seeks to open up a discussion regarding why they acquired significance within the post-colonial milieu of Indian archaeology.

#### I

Wheeler was invited to the post of Director-General of the Archaeological Survey by the then Viceroy of India, Lord Wavell, in 1943. The choice for appointing a man from Britain was instigated by Sir Leonard Woolley’s damning report, published on 28 February 1939, after surveying the archaeological work that was being undertaken in the Indian subcontinent for three months. In effect Woolley had questioned the efficiency of the Survey’s existing leadership and noted the need for a “temporary Advisor on Archaeology who could deal with all points at issue” (Woolley 1939: 3).<sup>1</sup> Four years after his one and only brief encounter with Indian archaeology, he continued to express “shock at some of the archaeological work carried out by Indians in India” and suggested that “the British school of archaeology in India working even on a small scale and organizing expeditions run by qualified archaeologists, would do amazingly useful work and would in future time enable Indians to carry on for

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<sup>1</sup> Sir Leonard Woolley, by then an archaeologist of considerable international reputation for his excavation of the ‘Royal’ cemetery at Ur (Mesopotamia), was invited by the Government of India to evaluate the work of the Archaeological Survey of India. His report was unduly critical, offensive in tone and ill-informed in many aspects, and had to be withdrawn very soon after its partial circulation as a ‘confidential’ document. It is significant that a full copy of the report exists at the British Library in London, but not in the archives of the Archaeological Survey of India in New Delhi.

themselves" (Woolley 1943).<sup>2</sup>

The Archaeological Survey of India whose leadership Wheeler assumed in February 1944, was first established in 1861 as a non-permanent institution to expose and document India's historical sites, although during its first fifteen years, its staff, headed by General Alexander Cunningham, mainly explored northern India. Cunningham is representative of the intense antiquarian interest taken by the British before the Survey was established, and of the period when ancient sites and ruins were explored and randomly excavated by civil and military officers of the East India Company. Reminding the Council on Antiquities of Upper India in January 1862 on the nature of exploration and repair work undertaken on ancient sites and monuments in India until then, Lord Canning, the Governor-General of India, remarked that "everything that has hitherto been done in this way has been done by private persons, imperfectly and without system. It is impossible not to feel that there are European governments which if they had held our rule in India, would not have allowed this to be said".

The legislations for the creation of a Survey three years after the Mutiny of 1857, when the British were found to be ignorant of affairs within India, may be related to the immediate need of the new Raj to systematise the collection of information throughout its recently acquired territory. Although there is no direct evidence to substantiate such a relationship, it is not implausible to suggest that the establishment of a national body that could overlook and document features of Indian history, was a political necessity. It is perfectly logical to see the Archaeological Survey, whose Director was made personally responsible to the central government, as one among a series of central and provincial organisations that were being established in India throughout the nineteenth century to develop colonial rule.

The early years of the Survey were beset with financial and organisational problems, and no large-scale excavations were undertaken until 1903. However, through a series of legislative acts, passed between 1878 and 1901, the power of the Survey was allowed to expand remarkably, and by the beginning of the twentieth century it had assumed total control of archaeological activities within the entire subcontinent, even those undertaken by independent princely states.

In 1944, Mortimer Wheeler had inherited a Survey whose staff had worked under Sir John Marshall, its longest-serving Director-General (from 1902 until 1931). Marshall's tenure saw the beginning of systematic excavations in the subcontinent. His team undertook extensive excavations of Buddhist sites and monasteries, and three important examples of the period between 1904 and 1916 are those at Sarnath, Sanchi and Taxila. In 1921 and '22, the two 'prehistoric' cities of Harappa and Mohenjodaro were first excavated, and archaeology pushed back the antiquity of the Indian subcontinent to the third millennium B.C.

Marshall's retirement coincided with a series of government sanctions on the activities of the Survey that necessitated stringent financial measures. They destroyed staff morale and left

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<sup>2</sup> Typically Woolley provided an unsubstantiated case, of bodies unearthed by Indian archaeologists by plough, to situate this statement which he made at a meeting in London (The Statesman 9 August 1943). Both K.N. Dikshit, then the Director-General of Archaeological Survey of India, and B.S. Guha, of the Zoological Survey of India, publicly refuted Woolley's allegations. "Generalisation", according to them (at a press conference in Benaras on 12 August 1943), was "of no use and it would have been much more helpful if Sir Leonard had mentioned where these novel methods of excavation had actually been adopted".

the Survey without an excavation department. The rapid succession of Directors-General after Marshall (four in ten years) further weakened the bureaucracy. The officers had to abide by the colonial politics of India during the 1930s, which were caught up between the struggle for Indian independence and insecurities of impending participation in an international war.

Although there is no evidence to relate Wheeler's appointment to Sir Leonard Woolley's recommendations (but see Winstone 1990:219),<sup>3</sup> it may not be irrational to suggest that the colonial government's decision to bring a Director-General from 'home', and thereby flout rules of internal promotion was instigated by Woolley's report. In effect Woolley had questioned the efficiency of the Survey's existing leadership. Looking back at Wheeler's career in India, it seems to me reasonable to assume that his choice was geared to satisfy the core of Woolley's thesis regarding how the profile of the Survey could be raised, viz., "the staff before it can train others, must train itself" (Woolley 1939: 3). By appointing Wheeler, the Government of India in all probability acted on Woolley's report (but see Possehl 1993), although by withdrawing the report from public circulation it demonstrated political prudence.

## II

By the 1930s, Wheeler had already built up a formidable reputation for himself in the United Kingdom. He was not only well known for his scholarship and meticulous excavations, but also for his sharp political acumen that had sustained his efforts at establishing an institutional base for archaeology in Britain.<sup>4</sup> Through his excavations of Roman sites in Wales (Segontium, Brecon Gaer, Caerleon) and England (Lydney, Verulamium, Maiden Castle), Wheeler had trained a generation of British students,<sup>5</sup> such as Ian Richmond, Christopher Hawkes, Kathleen Kenyon, to qualify as professional archaeologists, and who in the 50s and the 60s established successful careers for themselves in archaeology. The main elements that characterized Wheeler's archaeological practice in India grew roots in the very first excavation that was placed solely under his charge, in Segontium (1921–23). It was here that he first laid the grounds for his archaeological practice, viz., field training for participating students in the principles of archaeology, quick publication of excavation report, and consorting with the media to secure public visibility for his field work.

Wheeler could demonstrate the benefits of undertaking systematic and scientific excavations in Britain by adapting his techniques from General Augustus Henry Lane Fox Pitt Rivers' work at Cranborne Chase (from 1880 to 1895). In his excavations of Roman towns and military forts, he rallied for meticulous recording techniques, showed how the geological principles of stratigraphy held meaning in the production of archaeological knowledge, emphasized the importance of problem-oriented research projects, and implored his students to sharpen their reasoning skills while drawing inferences. He brought all these features to Indian archaeology.

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<sup>3</sup> Wheeler did not come to India as an Advisor as Woolley had suggested, and Possehl has pointed out that "none of the documentation ... regarding" his "appointment makes reference to Woolley or the 1939 report" (1993:13).

<sup>4</sup> The Institute of Archaeology in London was established on 29 April 1937, solely due to Wheeler's efforts and vision. See Wheeler 1955: 91–2 for reasons for its creation.

<sup>5</sup> Wheeler established a routine of training his students on site in the principles of archaeology from his first major excavations (at Segontium in 1921). See Wheeler 1955: 71–2, also Hawkes 1980.

In her biography of Mortimer Wheeler, Jacquetta Hawkes has commented that in relation to his archaeological work in Britain during the 1920s and the 30s, Wheeler's "achievement in India was ... even more important, more extraordinary in its extent, and less open to criticism" (1982, p.145). It is true that the uncritical air with which the Indian academia received him, and in which he revelled, was very different from his experiences in Britain where his definitive statements and quick publications were questioned by some of his British colleagues (e.g. Myers 1938). However, Hawkes statement is not wholly true, as well before the 1980s it had become apparent to many archaeologists working in India that Wheeler's inferences on aspects of the Indus Valley Civilization (particularly those related to its origin and decline) were not valid.<sup>6</sup> Wheeler's archaeology in India may have been less open to criticism during his period of stay not because it was faultless, but because of the remarkable absence of senior officers within the Survey, with experience of archaeological excavations in India. Most had retired or were made to retire by 1943, so Wheeler had the unusual opportunity of introducing to the Survey a large group of young students who were only trained by him.

Unlike the other Directors-General before him, Wheeler set the tone for his own accomplishments in India as soon as he arrived. He generated a massive public visibility for his plans of raising the profile of archaeological work. By using every media opportunity,<sup>7</sup> by systematically articulating his scathing criticism of Marshall's (and his colleagues') methods and leadership in print,<sup>8</sup> by strategically distancing himself from previous excavations of the Survey,<sup>9</sup> and by aiming to establish a group of followers who would owe no obligations to past officers of the Survey,<sup>10</sup> Wheeler successfully created a hiatus between his archaeology and that of his predecessors from the very beginning of his tenure. However, Wheeler was not the only Director-General who was critical of his predecessors' work. Official publications

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<sup>6</sup> In 1964, George Dales had disproved Wheeler's theory of the massacre of the population at Mohenjodaro by the invading Aryans.

<sup>7</sup> For example, Wheeler advertised the opening of his training school at Taxila in the national press in less than two months of his arrival in India. The Statesman carried the news on 25 May 1944.

<sup>8</sup> The technical notes Wheeler wrote for *Ancient India*, a journal he established in 1944, provides a lucid commentary of his views on his predecessors' work that he often found as being a "parody of scientific method" (1947: 144) and was aimed to demonstrate how his excavation methods would ameliorate their faults.

<sup>9</sup> Wheeler did not continue excavations at Ahichchhatra, a historical site that was excavated between 1940 and 1944 by Rao Bahadur K.N. Dikshit. Although Wheeler excavated Harappa for a season and trained his students at Taxila (two sites excavated during Marshall's tenure), his reasons for doing did not involve any continuity with the work already done there.

<sup>10</sup> This was the most significant outcome of the training school at Taxila, held between October 1944 and March 1945. Wheeler actively sought students from different universities to join his school, and although his purpose was to expand the domain of archaeology within Indian universities, he was able to secure offices for many of his Taxila students in the Survey. They subsequently rose to senior ranks in the Archaeological Survey of India and Pakistan, and some examples are B. B. Lal, B. K. Thapar, Farid Khan and A.H. Dani. Although existing staff members of the Archaeological Survey of India (such as Krishna Deva and Amalendu Ghosh) were also trained at Taxila, very few had direct connections with Survey excavations prior to 1940.

and demi-official letters in the archives of the Survey at New Delhi provide many examples of criticism of former Directors-General towards their immediate predecessor.<sup>11</sup>

### III

Wheeler's rhetoric of forging a coherent plan for archaeological work in India and of training staff, may have been a direct response to Woolley's survey of Indian archaeology, although he did not admire the tone of the latter's report. The Survey officers before Wheeler had followed specific plans for excavation, although his didactic tone implied otherwise. Like Wheeler, Marshall also took credit for introducing scientific methods to excavations in India (e.g. Marshall 1916). In fact, Marshall's experience of excavations at Knossos under Sir Arthur Evans was one of the determining factors for the choice of his candidature against Vincent Smith, a colonial administrator and by then a reputed historian of India. Wheeler's criticism of Marshall's excavation techniques was based on his belief that by the 1920s Marshall had fallen back on his knowledge of western archaeological methods (1955: 181). Yet, Wheeler's 'new' digging and recording techniques could "not invalidate the chronological sequences established by Marshall, his staff and Ernest Mackay (who excavated Mohenjodaro between 1927 and 1931, and Chanhudaro in 1935–1936) for the Indus cities of Mohenjodaro and Harappa, and Taxila. These three sites faced both kinds of spadework" (Guha 2003). The irony is that while Marshall's cautious inferences on Indian history still hold, many of Wheeler's theories were declared non-valid within less than two decades after their conception.

In my analysis of Wheeler's excavation work in India I have shown the extent to which Wheeler's choice of sites in India and their interpretation was informed by his own educational background in Classics and experience of excavating Romano-British sites in Wales and England. His grand plan (which he implemented through his excavations at Harappa, Arikamedu, Chandravalli and Brahmagiri) for establishing the chronological framework for the entire country also conformed to the kind of archaeology that was practiced by his generation (Guha 2003). Crucial to this discussion, his plan initiated an interest in the prehistory of the subcontinent. The extensive research on Indian prehistory through which archaeological methodology has been sharpened in post-independent India owes a large debt to Wheeler's emphasis for archaeologically obtaining a master chronology for the country.

Although the school for archaeological training that Wheeler established at Taxila was unique, teaching staff and students in archaeological methods in the field had precedence. In 1903, Marshall had submitted a scheme for the grant of scholarship for the training of natives in archaeological work (Survey Archives, 1/1/1906). There are references to training scholars from Ceylon, Pondicherry and Indian states during excavations, an example being R. Taimuri from Ceylon who learnt conservation work at Taxila in 1935 under J.F. Blakistone, and P.Z. Pattabiramin (subsequently the curator of the archaeological section at the library at Pondicherry) who earned a scholarship from the French government to attend the Ramnagar (Ahichchhatra) excavations of K.N. Dikshit. Therefore, although Wheeler's training at Taxila incorporated novel elements of a school with chosen pupils, concrete syllabi, daily lectures

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<sup>11</sup> On James Burgess directorship, Marshall was of the opinion that "brilliant though it was in scholarship, it was begun without system and continued in a desolatory manner, entirely omitting large and important parts of the country" (Annual Reports of the Archaeological Survey of India 1902-03: 11). Burgess was of the opinion that his predecessor, Alexander Cunningham's excavations methods were "disastrous" (Survey Archives, New Delhi, File 1/D.O. 10/7/1902).

given at times by specialists from England, and a work plan, the idea of imparting knowledge of 'scientific' excavation techniques in *situ* was not his alone.

Where Wheeler differed from his predecessors in the Survey was in his larger vision for the discipline of archaeology. He regarded archaeology as essentially humanistic, but with scientific research methodology. "Archaeology increasingly and very properly adapts and adopts the methods of natural science and unblushingly seeks its aid" was how he phrased his understanding of what the archaeological method involved (Wheeler 1956: 229). Wheeler passionately advocated the integration of natural and social sciences to broaden the base for archaeological enquiry in India (Wheeler 1946). His personal correspondence reveal that as early in his Indian career as December 1944, he had sought help from the Forest Research Institute (at Dehra Dun, India) to prepare a soil-map of India to foster research on the effects of environment upon historical and archaeological distributions (Survey Archives, New Delhi, File 33/40/44, D.O. 1123/c).

To situate Wheeler's work only within the production of colonial knowledge (see Chaddha 2002), does not promote an understanding of his success in securing the fortunes of Indian archaeology at the eve of the subcontinent's independence from British rule. There is no doubt that Wheeler took every advantage of the colonial conditions, and that his personal communications with his staff and students followed the norms of a benevolent dictator, a common practice among British civil servants in India. But it is equally true that his conservative politics and dictatorial behaviour marked his professional relationships with students and colleagues in Britain.

Wheeler tried to instill in his Indian students the habits of scientific and rational enquiry. His didactic practices were aimed at creating an interest for the discipline among them, in engaging them with deductive methods of reasoning, and showing them how, through the use of more precise techniques adopted from the natural sciences, they could extend the scope of archaeological enquiry. His legacy to Indian archaeology lies in establishing the parameters of archaeological work, explaining its methodology, and demonstrating the effectiveness of scientific enquiry.

The archaeological method that Wheeler propagated offered easy assimilation within the newly independent Indian government's agenda for promoting scientific work. In the decades just after independence, science was understood as leading to progress and development, and scientific research was aggressively promoted. Wheeler's methodology provided archaeological enquiry with the respectability of a scientific discipline. Therefore, although many of his students (such as B.B. Lal) became critical of the shortcomings in his research,<sup>12</sup> they did not ignore his methodology. However, Wheeler had himself feared the "prospect of archaeology passing wholly into the hands of the biologist and the technician" (1956: 239). He was averse to the performance of archaeological research by those whose "main education" had been in fields of natural sciences. Phrasing his ambivalence he had remarked philosophically that "Man, we may be forgiven for recalling, is something a good deal more to us than an ingredient in the chemistry of the cosmos; and a course of poetry or philosophy may properly be regarded as no less needful for the young archaeologist ... than

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<sup>12</sup> Particularly of Wheeler's blatant ignorance of Indian languages and his neglect of traditional texts in his analyses of Indian history. Significantly, B.B. Lal chose to excavate the historical site of Hastinapura when he became the Director-General. He is now, unfortunately the most vocal advocate for a Vedic (and by analogy Hindu) identity for prehistoric India.

a course of pottery making or pollen analysis" (1956: 240). With the proliferation in excavations of prehistoric sites in India from the 1950s onwards, the discipline came to rely more on natural sciences for interpreting its unearthed material relics. Professional scientists, mainly zoologists, botanists, geologists and chemists were incorporated into the discipline, and by the 1980s their undue emphasis on science based research, led to clear disciplinary divisions between archaeology and history.<sup>13</sup> It is therefore ironical, that by adapting Wheeler's techniques to situate their discipline as a science, archaeologists in India allowed themselves to become less secure in the craftsmanship of proper historical enquiry.

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<sup>13</sup> In many Indian research institutes, the discipline co-exists with the teaching of ancient Indian History and Culture. However, all historians of ancient India are not considered qualified archaeologists even if they participate in excavations, and in many erstwhile Indian universities ancient India is taught within the Faculty of History.