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Microlith ≠ Mesolithic: A Note Addressing the issue of Assumption Guided Interpretation of
many Archaeological sites in India

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By late 1850's existence of two stone ages, yet to be named Palaeolithic and Neolithic by Sir John Lubbock had become inevitable. However, there believed to be a hiatus between the two during this time. As, until then, no continuous succession from Palaeolithic to Neolithic was found anywhere in the world. In this backdrop, A.C.L Carlleyle found the first microliths in the rockshelters of Kaimur hills in the then United Province of Agra and Oudh, under the British rule (Misra 2002). "Mezolithics", the term coined by Carlleyle himself, according to Binford (1968), was among the first to argue against the hiatus between the two stone ages i.e., Palaeolithic and Neolithic. His argument was based on the excavation of rock shelters at MorhanaPahar, which resulted in the occurrence of microliths with late Palaeoliths as well as pottery (Binford 1968). Carlleyle recognized no hiatus and thus named it "Mezolithic", for the period intervening the Palaeolithic and Neolithic (Misra 2002). This term was apt for the time and information that was available. However, unfortunately, this has made microliths as the only hallmark of Mesolithic culture in India, which no doubt are present during Mesolithic but also during the earlier as well as later phases (Jayaswal 2002).

Conventionally, a microlith is a stone tool that may be made on a blade or a flake and is 5 cm or smaller in size (Misra 2002). There are, so far, no distinguishable characteristics known to differentiate microliths of different time periods or cultures (except the context). A peculiar feature noted with Indian microliths is that majority are made of blades, except a few from sites like Teri which are made on flakes as well as blades (Zeuner and Allchin 1956). Therefore, a

detailed study of lithic composition of different time periods containing microliths is need of the hour.

Before 1960's, a distinct Mesolithic phase in Indian prehistory was not recognised by all the researchers; as a result, they used the term "Microlithic" (Misra 1964). Against this backdrop, Misra (1964) argued, "the term Microlithic is a purely technological one and has no economic and cultural connotations". He suggested that microliths be assigned to a culture, in this case Mesolithic culture. In his paper, Misra (1964) put forward the following points for identifying Mesolithic culture; a) belonging to post-Pleistocene and post-Palaeolithic, b) characterised by hunting and gathering economy, c) technology is distinguished by use of microliths, and d) they are mostly pre-Neolithic but coexisted with the latter in a symbiotic relationship. Please note, in the points discussed above, microliths are the only empirical evidence that can be recovered in the archaeological sites. Hunting and gathering economy is implied by the presence of microliths alone, and in the absence of any other cultural material. Most significantly, during this time, microliths were thought to be a Holocene phenomenon. Thus, fitting into post-Pleistocene and post-Palaeolithic bracket.

Six decades later, the question of assigning a culture to microliths is still a challenge for researchers in India. Today, we know that microliths in India date back to later Pleistocene and therefore assigning them a culture has become very complicated. Furthermore, thanks to the works of Allahabad University, Banaras Hindu University and Deccan College PGRI, we now have a better understanding of what constitutes the Indian Mesolithic culture, than we knew in 1960s (to cite a few examples, Karve-Corvinus and Kennedy 1964; Sankalia 1965; Sharma 1973; Misra 1973, 2002; Sharma *et al.* 1980; Sharma and Clark 1983; Pal 1985; Pandey 1985; Varma *et al.* 1985; Kennedy *et al.* 1986; Misra 1988; 1994; Pant and Jayaswal 1991). There are certain characteristics associated with Mesolithic culture, like dating to Holocene, occurrence of microliths, burying the dead, sedentism, faunal remains, increased subsistence diversity, evidence of grains and occasional pottery (Misra 2002; Lukacs and Pal 2003; Mishra 2016). G.R. Sharma (1973) divided the Indian Mesolithic culture into three phases; 1) Non-geometric pre-pottery microliths, (2) Geometric (triangle only) pre-pottery microliths, (3) Geometric microliths with pottery.

Consequently, we now know that Microliths (including geometric microliths) are only one of the characteristics associated with Mesolithic culture. The occurrence of microliths has a long history, dating from Late Pleistocene to Holocene. During this long time span, according to

Jayaswal (2002) there were at least eight different cultural stages with which microliths are associated. These cultural stages are; (1) Upper Palaeolithic; (2) Epi-palaeolithic; (3) Early Mesolithic; (4) Late Mesolithic; (5) Neolithic; (6) Chalcolithic; (7) Early Iron Age; and (8) the isolated post Mesolithic tradition. The author argues that each of these stages has a chronological position and denotes different cultural milieu, which only together completes the history of microliths in India. Thus, immediately ascertaining any microlithic assemblage as Mesolithic might be misleading. Ahmed (2014) suggests we must wean ourselves from the habit of using the term “microlith” for every stone tool that is ‘small.’

Today, we know with certainty that microliths were continuously present in the Indian subcontinent from ~ 48 ka upto 3 ka, and even beyond (Mishra *et al.* 2013; Clarkson *et al.* 2020). Some authors have even argued for presence of microliths as late as post 17th century A.D. (Malik 1966; Ahmed 2014).

In the last two decades a number of sites dated to Late Pleistocene yielding microliths have been excavated, viz. Jwalapuram (Clarkson *et al.* 2009), Mehtakheri (Mishra *et al.* 2013), Kana and Mahadebbara (Basak and Srivastava 2017), Dhaba (Clarkson *et al.* 2020), and Fa-Hien (Wedage *et al.* 2019). These sites not only pushed back the antiquity of microliths in the Indian sub-continent but helped to put it on the global map of various debates surrounding modern human dispersal. While, the results of detailed lithic analysis from most of these sites still awaits. A common denominator in all these sites is microliths. In the case of Jwalapuram, Mehtakheri, Kana and Mahadebera the lithic assemblage is predominantly microliths made on blades (Clarkson *et. al* 2009; Mishra *et. al* 2013; Basak *et. al* 2014). So far, no human fossil, pottery or signs of sedentary life have been reported from any of the above mentioned sites during the later Pleistocene, which is a common feature of Mesolithic culture, among other cultural materials. Thus, more than ever, there is an immediate need for a clear and distinct classification as more data accumulates.

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