

Archaeology of South Asian hunters and gatherers

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In South Asia, humans and their ancestors have made a living by gathering and hunting for perhaps as long as 2 million and certainly as long as half a million years. This long record incorporates a significant degree of diversity in lifestyles through time and across space. Pleistocene and earlier inhabitants of South Asia (the subcontinent and island that today includes India, Pakistan, Bangladesh, Bhutan, and Sri Lanka) lived in a sparsely populated world of hunter-gatherers. Holocene hunter-gatherers, by contrast, had to co-exist with agriculturalists, and later with pastoralists, states, armies, and traders. Thus, the later archaeological record of South Asia is a record of integration between hunter-gatherers and others, including a certain fluidity in subsistence practices so that the same people may have at different times hunted and gathered for their own subsistence and trade; grown food or commodity crops in their own garden plots; worked for a wage; or paid tribute to distant kings.

The Lower and Middle Palaeolithic

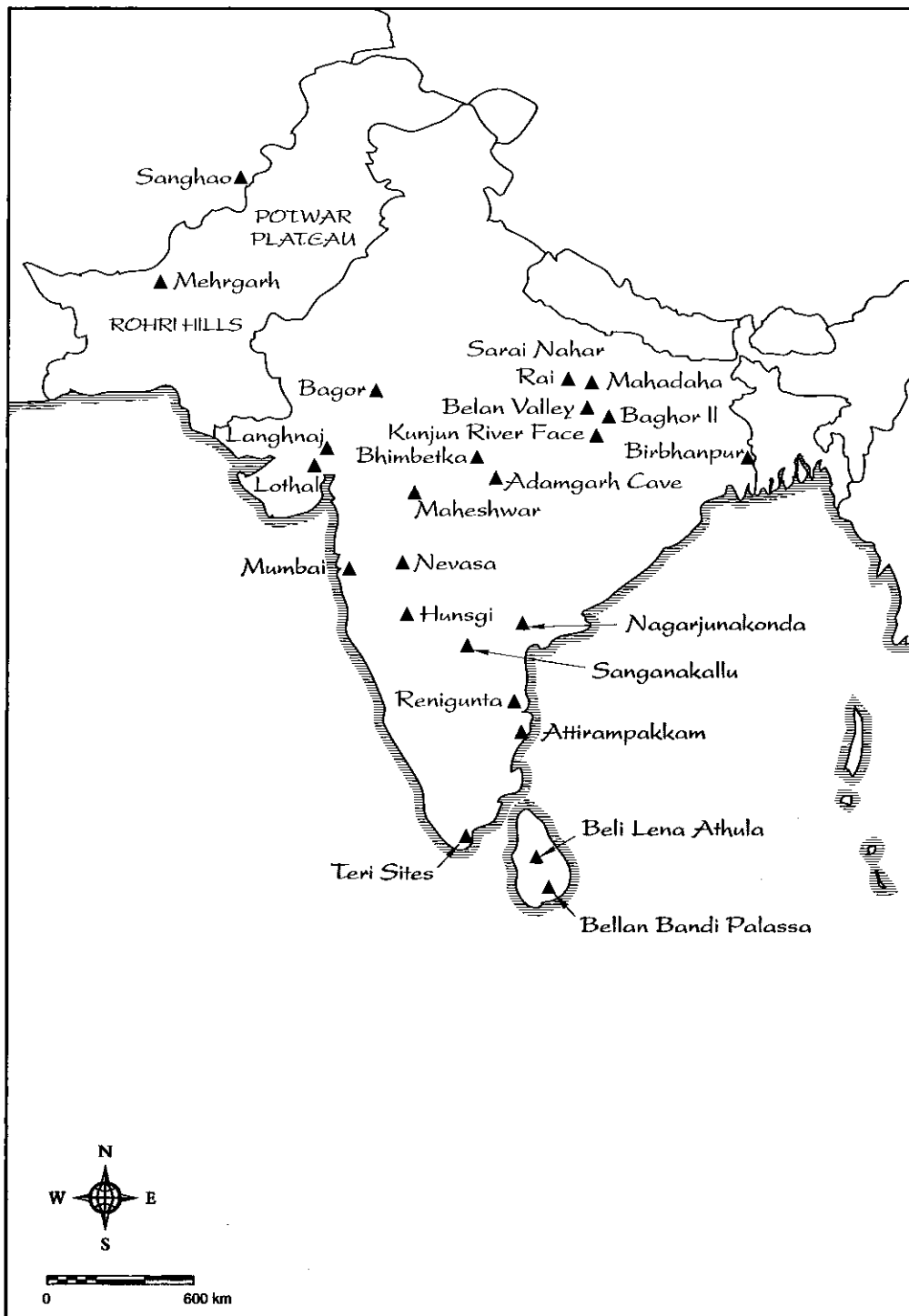
The British Archaeological Mission to Pakistan has presented controversial new evidence for very early hominid occupation of South Asia. This is based on the discovery of flaked stone artifacts from the Potwar Plateau dating back 2 million years. This debate may be resolved by ongoing work on the chronology of *Homo erectus* finds across Asia. However, most of mainland South Asia was certainly occupied during the Lower Palaeolithic, a period falling within the Middle Pleistocene or about 500,000 to 50,000 before the present. Climatic conditions during this period were broadly similar to those of today. Excavated sites include rock shelters such as Adamgarh Hill and Bhimbetka, a series of sites containing artifacts spanning the Lower Palaeolithic to the Mesolithic. Lower Palaeolithic tools at Bhimbetka, as elsewhere, are made of locally available raw materials and consist of Acheulian assemblages dominated by flake tools. Lower Palaeolithic open-air

sites include those in the Hunsgi Valley in southern India and the Madras coastal sites (a continuous spread of artifacts over tens of square kilometers). These coastal assemblages include many finished artifacts and represent continuous reuse of, and movement over, a large region.

The Middle Palaeolithic falls during the Upper Pleistocene, approximately 40,000 to 17,000 years BP, a period of increasing regional diversity in stone tool forms, which was also a more humid climatic phase in parts of the subcontinent; settlement seems to have expanded accordingly. Technologically, Middle Palaeolithic stone tools show more complex reduction techniques and an increasing use of higher-quality lithic raw materials. During the Middle Palaeolithic, sites are again located all across mainland South Asia, but in this period there is also good evidence for occupation of Sri Lanka by fully modern *Homo sapiens* at the sites of Batadombalena and Fa Hien Cave (c. 31,000 BP). Specialized sites such as the factory sites of the Rohri Hills in Sind (used as late as the first millennium BC) are also known, indicating specialized procurement of high-quality flint. Large workshops covering several hectares and containing thousands of finished tools as well as flaking debris are also found near Bhimbetka.

The Upper Palaeolithic and Mesolithic

Although the categories Lower and Middle Palaeolithic fit South Asian data reasonably well, Eurocentric categories have been resisted by many researchers, particularly in light of the difficulty of defining an Upper Palaeolithic period matching that of Europe. In 1961, participants in an international conference agreed to adopt the terms Early, Middle, and Late Stone Ages, corresponding to Lower and Middle Palaeolithic and Mesolithic in the European scheme. Since then, however, Upper Palaeolithic blade and burin assemblages have been identified in India. The presence of this blade-based lithic technology (blades are long, straight-sided flakes), strati-



Map 11

Archaeological

graphically superimposed over flake-based Middle Palaeolithic tools, prompted archaeologists to revert to the older terminology. In any case, the new terms had only been partially adopted, with the term Microlithic often used in place of Late Stone Age. Hence there remains a confusing and inconsistent use of terminology. Coupled with a scarcity of absolute dates, this situation leads one to suggest caution since the same term may be

used to refer, for example, to either a time period, a lithic technology, or both.

The recently defined Upper Palaeolithic begins around the end of the Middle Pleistocene humid phase and extends into a major dry period. Upper Palaeolithic sites include Bhimbetka, where the stone tools include short, thin blades along with “older” tool forms made on flakes. At Renigunta, stone tools are accompanied by some bone tools. Batadombalena, in Sri Lanka, dates to about 28,000 BP. Although this date falls within the period defined as

Upper Palaeolithic, Batadombalena has a microlithic stone tool industry. Microliths are small tools made out of blades, usually blades that have been snapped into several pieces. Clearly, blade tools and microliths are closely related technologically. This distinction is important, however, in understanding the confusion over the Mesolithic period (below), and illustrates why there has been resistance to using European categories that create a sharp break between Palaeolithic and Mesolithic.

The elaborate bone artifacts and other mobiliary and parietal (occurring on natural walls) art of the European Upper Palaeolithic have no parallel in South Asia. This is not to say that decorative artifacts are absent: in stratified gravel deposits of the Belan valley, G. R. Sharma and colleagues have identified an Upper Palaeolithic stratum containing blade tools and what they call a “mother goddess” figurine, although others have described this object as a bone harpoon. There is also good evidence for production and use of non-lithic artifacts, including ornaments. At a site in western India, Sheila Mishra and the Archaeological Survey of India have located an Upper Palaeolithic ostrich eggshell bead manufacturing site containing beads in various stages of the manufacturing process. Drills of chalcedony and carnelian were also found, as were microlithic stone tools. Other specialized sites include Baghor I, where a feature hypothesized to be a shrine has been dated to the late Upper Palaeolithic.

Mesolithic/microlithic: hunter-gatherers in a changing world

The Mesolithic is used here to refer to a time period that begins with the Holocene, about 10,000 years ago. The term *microlithic* is sometimes used as a synonym for Mesolithic, but will here refer only to a form of stone tool technology. This distinction is important because *microlithic* sites evince a very broad range of dates and need not belong to the Mesolithic. In fact, a large number of the sites that have been identified as Mesolithic seem to have been produced by small-scale groups of microlith-using people who gathered and hunted, but who also maintained close relationships with non-hunter-gatherers.

The Early Holocene: diverging ways of making a living

The Early Holocene was marked by world-wide climatic changes. In India, the aridity of the Upper Palaeolithic ended; pollen data from western India show a climate slightly wetter and more favorable than that of today. Lakes in Rajasthan that are now saline were freshwater, but the typical monsoon pattern with seasonal dry

periods continued. In this period, the earliest part of the Mesolithic, there were still no agricultural communities and we see a continuation of (but a greater diversity in) hunting and gathering ways of life. The Mesolithic also saw the expansion of occupation into new areas and a large increase in the number of sites, probably reflecting larger regional populations.

Microliths, many formed into geometric shapes, were made from small blades, mass produced by the pressure flaking technique. These geometric microliths (some of them amazingly small) were probably hafted to form sophisticated composite tools with multiple small blades that could be repaired or replaced as needed. Across South Asia, stone tools show significant regional differences in size, shape, and raw material, pointing to the increasing differentiation of strategies and traditions of those living in this part of the world. Occupied environments range from dry to humid. This range is certainly reflected in material culture. At several sites we see grinding stones for the first time, as well as doughnut-shaped ground stones that may have been used as digging stick weights. Pottery also appears in some Early Holocene contexts, replacing or supplementing less bulky containers such as baskets or woven bags.

Although we know little about how people made a living during the various Palaeolithic periods, it is at least clear that South Asians were mobile gatherers and hunters. In the Holocene, some hunter-gatherers were sedentary, particularly along the southern coasts where they engaged in fishing as well as gathering and hunting terrestrial game. Elsewhere, seasonal mobility continued. The Mesolithic levels at Baghor II, for example, date to between 8600 and 7600 BC and were repeatedly occupied on a semi-permanent basis. Many of the cave and rock shelter sites of central and western India (Bagor, Langhnaj, Adamgarh, Bhimbetka) were occupied seasonally, some filling with blown sand in the dry season. Both Adamgarh and Bhimbetka contain bones of domesticated animals, suggesting that they were occupied by people not totally dependent upon wild taxa (see below). There has been little work devoted to reconstructing patterns of mobility, but it is interesting that some Mesolithic sites contain stone floors, and at Sarai Nahar Rai there was a floor of rammed burnt clay nodules. Some rock shelters contain small walls, and possibly huts, suggesting a more long-term occupation of or investment in these locations.

The Holocene also saw an explosion of rock art in South Asia. The various caves of Bhimbetka contain thousands of paintings. The early paintings are more naturalistic, while later ones are more abstract. Common themes include animals and gathering and hunting scenes. Rock art has only recently become a popular topic of enquiry in South Asia and we can expect much more scholarship on this material in the future.

The Mesolithic continues into the period of initial plant and animal domestication. Agriculture changed the conditions of life quite dramatically for some people, less so for others, but no group remained fully outside the changes brought about by this shift. It is useful to think of the process of domestication as a mosaic; the earliest domesticates are found in the northwest where, at the site of Mehrgarh, agriculture based on wheat and barley was present by the seventh millennium BC. In west/central India, domesticates were well established by the sixth–fifth millennia, in north/central India cultivation of barley (and later rice) by the fifth millennium, and in the south millet-based agriculture by the third millennium BC. Further, the sequence of subsistence change was different in different places. For example, at Bagor, hunting and gathering gave way to a way of life based largely on animal husbandry; this must be seen in the context of a region also inhabited by agriculturalists. In short, the variability of Mesolithic sites shows us that while some people were subsisting entirely by hunting and gathering, others were also keeping domestic animals, planting some crops, and/or trading with village agriculturalists and (by the third millennium BC) urban dwellers.

Hunting and gathering in a larger world

If one considers microlithic sites from all time periods, it is clear that much of this material represents the remains of small-scale communities who were very much a part of the larger economic, ecological, and political contexts of their day. Sites include the rock shelter of Langhnaj, dating to *c.* 2000 BC. In the middle levels of the site, amid microlithic stone tools, excavators found a copper knife, probably obtained in trade from the Harappans of Gujarat. Similarly, Phase II deposits from Bagor contained Harappan-style copper arrowheads as well as handmade pottery and stone beads. There is abundant evidence of trade by such small-scale groups with nearby agricultural communities, including the urban Harappans, a situation which prompted Possehl to suggest that the urban site of Lothal was located to take advantage of the specialized procurement of raw materials by hunter-gatherers for manufacture by urban artisans (Possehl 1976).

In addition to metal and ceramics, hunter-gatherers obtained domestic plants and animals from their agricultural neighbors. Bones of domestic Indian cattle (*Bos indicus*) are found at Adamgarh, Sarai Nahar Rai, Bagor, and other Mesolithic sites from about 5000 BC onward, as are domestic sheep, goats, and pigs. At Tilwara, pig bones came from both domestic pigs and wild boar, suggesting both animal husbandry and hunting. Microlithic Bagor has a faunal assemblage containing

some 65 percent sheep, interpreted as reflecting a pastoral way of life.

Unfortunately, archaeological sites from later periods are less well studied than earlier ones and there are at present no reliable links between contemporary hunting and gathering groups and specific archaeological sites. The identification of specific ethnic groups is simply not possible before the advent of written records and then only with relatively recent ones. Early texts do, however, mention gathering and hunting groups. Among the earliest deciphered written texts in India are inscriptions commissioned by the Mauryan emperor, Ashoka, in the third century BC. These inscriptions note the presence of undefeated forest tribes on the borders of the Mauryan empire in east/central India. Similarly, early historic Sangam poetry of the far south describes different ecological zones and their inhabitants. Mountains are said to be the abode of hunters, and lower elevation forests and brush lands the home of herding peoples and dry farmers. Hunters and herders are said to share religious beliefs but to maintain rather strained relationships.

Later inscriptional records from south India make references to hill peoples and note their role in the specialized procurement of forest products such as honey and medicinal and aromatic plants. Other historical data from southwestern India indicate that some gathering and hunting peoples had regular relationships of obligation to lowland kings, supplying them with tribute in the form of forest products, including elephants. Beginning around the sixteenth century AD, there was an expansion of the international trade in spices, particularly black pepper from southwest India. The demand for both cultivated and wild products of the western forests, combined with expansion of agriculturalists into the foothills of the western mountains, may have increasingly forced gatherers and hunters into marginal economic and social positions in this expanding world economy.

The degree to which ethnographically and historically known hunter-gatherers of the South Asian mainland and Sri Lanka are integrated into the economies, polities, and religious practices of their agricultural neighbors has prompted many anthropologists and historians to view them as economic specialists. Richard Fox, for example, referred to South Asian hunter-gatherers as “professional primitives,” in recognition of their integration into the larger society. This recognition should not, however, be taken to mean that South Asian hunter-gatherers are somehow not “real.” Instead, we might recognize that diversity and flexibility in lifestyle and subsistence have been features of South Asian life for a very long time, and that gathering and hunting have been (and still are) important parts of this broad economic repertoire. Archaeology will probably never provide a direct link between material remains and specific contemporary

peoples who, among other things, hunt and gather, but there is certainly the promise that archaeologists will begin to focus on more recent time periods and thus round out our rather sketchy vision of the long-term histories of South Asian gatherers and hunters.

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