Middle Palaeolithic Culture of India: Nevasian

Introduction:

The Middle Palaeolithic culture is the next Palaeolithic stage after the Lower Palaeolithic. This stage is also known by several names such as Series II, Nevasian and Middle Stone Age in India. H.D. Sankalia in 1955 first discovered and identified Middle Palaeolithic cultural phase at Nevasa on the Pravara river valley. The site revealed a number of artifacts such as scrapers, points and borers made on flakes. The raw materials used for making these artifacts are siliceous materials like chert, chalcedony, agate and jasper. These artifacts were found in the middle or upper gravels (Gravel II), overlying or resting against a coarse gravel (Gravel I) with Acheulian artifacts like cleavers and handaxes on trap or dolerite. Thus, on the basis of the raw material, typology and stratification, a separate cultural status of the flake-tool assemblage was given. H.D. Sankalia provisionally called it Series II industry and the handaxe-cleaver assemblage from the earlier gravel as Series I. Subsequently, similar stone artifacts were discovered in different parts of India and were ascribed various names like the Middle Palaeolithic by V.N. Misra, Middle Stone Age by G.C. Mohapatra, Series II by H.D. Sankalia, Nevasian by K.D. Banerji and Flake Culture by A.K. Ghosh etc. In general, this culture having flake-tool character can be compared broadly with the Levalloisian-Mousterian cultures of West Asia, the Mousterian culture of Western Europe and the Middle Stone Age cultures of Africa.
Plate 1: Life during Middle Palaeolithic Period

Plate 2: Life during Middle Palaeolithic Period

Plate 3: Life during Middle Palaeolithic Period
During the Middle Palaeolithic period, open-air sites along streams, hill slopes, stable dune surfaces and rock shelters continued to be used. Sanghao cave in modern Pakistan, sand dunes of Didwana, river valleys of Chambal, Narmada, Son, Hunsgi, Kortallayar etc., plateaus of Eastern India are some of examples of varied geomorphic features in which Middle Palaeolithic hominids largely occupied. Most of areas inhabited during the Lower Palaeolithic period are continued to occupy by the Middle Palaeolithic men.
Plate 6: Map of Middle Palaeolithic sites in India

Plate 7: Excavation at an Open Air site

Plate 8: A Cave site
Plate 9: Excavations at the site of Jwalapuram

Plate 10: Close-up of Excavations at the site of Jwalapuram
Distribution and Extent of Middle Palaeolithic Culture in India

Continuous explorations have brought to light hundreds of sites in Maharashtra, Karnataka, Andhra Pradesh, Tamil Nadu, Orissa, Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan and Gujarat, and a few in Kerala, Punjab and Kashmir. Similar to the Lower Palaeolithic culture, this culture is also found practically in the whole country, excluding perhaps the southern part of Tamil Nadu and the deltaic regions of the Krishna and Godavari rivers. Several Middle Palaeolithic sites have also been reported from Pakistan such as Sanghao and Parkho-darra caves near Peshawar.

Evidence of this culture is found in deposits sandwiched between those yielding Lower Paleolithic and Upper Palaeolithic/Mesolithic artifacts in several sites of Maharashtra, Andhra Pradesh, Karnataka and Uttar Pradesh. The sites may be classified into various groups, viz. cave and rock-shelter sites (Sanghao and Parkho-darra caves and Bhimbetka rock shelter), open-air workshops or factory sites (Kovalli and Devapur in Karnataka and Choli and Khadi Mata in Madhya Pradesh), river sites (Nevasa on the Pravara and Taminhal on the Krishna river valley), hilltops (Sanganakallu in Bellary) etc.
The existence of the Middle Palaeolithic phase in Northern India is known from a few localities, such as Ror in Kangra district, discovered by M.R. Sahni and G.C. Mohapatra where artifacts such as prepared flakes, asymmetric cores, side scrapers and incipient borers were found. De Terra and T.T. Paterson discovered artifacts in the Potwar area in Pakistan where it is known as Late Sohan.

In the Vindhyan region, Middle Palaeolithic sites are found in parts of Malwa, Bundel-khand and various districts of Madhya Pradesh and southern Uttar Pradesh. The sites of Mandsaur, Khadki and Nalgarh in the Malwa plateau yielded artifacts such as side scrapers, end scrapers and points made of jasper nodules. The Clactonian technique is used for detaching flakes, however; there is complete absence of Levalloisian elements. In the Bundelkhand area, this culture is represented at the sites of Ghatsemtra, Hasrai in the Betwa basin which is characterized by the survival of the earlier tradition in the Middle Paleolithic, as is evident from the implements of scraper-point types along with Acheulian tools. However advanced technological features are also found in the form of faceted core technique and indirect percussion and punch techniques.

The Middle Palaeolithic artifacts of the Narmada valley are made mostly on quartzite, but some are also made on fine-grained siliceous stones. The finished tools made on fine grained stones are more than those made on quartzite. Various types of side scrapers are found at the sites of Mahadeo Piparia by S.G. Supekar and Adamgarh by R.V. Joshi. The Levalloisian character is quite frequent and the blade element is also at times. Survival of handaxes and chopper elements is seen at the site of Adamgarh. The sites of Son basin are marked by the presence of the earlier tradition as well as a Levalloisian element. At several sites of Belan valley, a gradual development from the earlier tradition to the Upper Palaeolithic can be noticed. Various types of side scrapers, end scrapers, Levalloisian flakes, and points, denticulated and notched tools are some of the tool typology in this region.

V.N. Misra records several Middle Palaeolithic sites in western India such as Bhutia, Hajra-Kheri, Beawar, Champakheri in Rajasthan which contains implements on chert, jasper, quartzite and sandstone. The characteristic artifacts are side scrapers on flakes, handaxe, borer and points, Levalloisian flakes and tortoise cores etc. The Middle
Palaeolithic sites of Bihar such as Jamalpur has yielded scrapers, including side and end, denticulated tools and flakes obtained by the Levallois technique, made on quartzite nodules. These have close typo-technological similarities with the Belan group of industries. Again in the Kangsabati and Kumari valley sites of West Bengal, Middle Palaeolithic artifacts are characterized by both scraper-point and Acheulian traditions. In the river valleys of Mula-Mutha, Godavari, Pravara etc. in Maharashtra, Middle Palaeolithic industries are characterized by almost similar typo-technological trends, i.e. scrapers and points and uniformity in the selection of the raw material, invariably siliceous grained stones. The industries found in Kurnool by N. Issac and in Shorapur by K. Paddayya are made on siliceous stones like chert, jasper and chalcedony, etc., and follow the scraper-point tradition. In Andhra Pradesh, the sites have revealed implements made of fine-grained quartzite, the scraper-point tradition is found along with the earlier pebble tool tradition. The flake industry reported from the Kortallayar basin near Chennai seems to contain Mousterian features.

**Tool Typology, Technology and Raw Materials:**

During the Middle Palaeolithic period, a basic change took place in the selection of raw materials such as chert, agate, jasper and chalcedony, as compared to the preceding Lower Palaeolithic period. However, in a few regions like Chittoor and Bellary in southern India, quartzite and dolerite were continued to be used. These raw materials are found extensively in the form of veins or bands in sedimentary formations (limestone) as well as in the form of intertrappean beds. As flakes were mostly used as blanks for manufacturing tools, the Middle Palaeolithic industries are often called flake-tool industries. These blanks were obtained from nodules or pebbles by using several techniques such as stone hammer, soft hammer and prepared core (Levalloisian) techniques etc. The shapes of the blanks include oval, round, square, elongate or irregular. In case of several industries, thick blade-like flakes, known as flake-blades, and even true blades were used for the making of tools.
Plate 13: Mousterian Handaxe from Sahara
Plate 14: Middle Palaeolithic (Mousterian) flake tools from France

Plate 15: Blade Projectile of Mousterian Period

Plate 16: Mousterian Flake Tools
Plate 17: Middle Palaeolithic flake tools

Plate 18: Middle Palaeolithic tools from France

Plate 19: Middle Palaeolithic Levalloisian tools from France

Plate 20: Middle Palaeolithic Points
During this period, decrease in the use of bifaces and heavy-duty chopper-chopping tools can be noticed. The handaxes became smaller as compared to the lower Palaeolithic period. Scrapers of various types, denticulates, borers and points predominates the Middle Palaeolithic industries in India. Different techniques were employed to gain necessary form of the tools such as points by edge-chipping and retouching; the tanged butt by shouldering the margins for a certain length at the distal end; the bifacial points by surface working involving the removal of small and shallow flakes from both the surfaces etc. The edges of the scrapers were either retouched or chipped.

**The finished tool types are comprised of:**

1. Scrapers of various types:
   - (a) Straight edge (single)
   - (b) Straight edge (double)
   - (c) Concave edge
   - (d) Convex edge
   - (e) Concavo-convex edge
   - (f) Transverse edge
   - (g) All-round edge

2. Points of various types:
   - (a) Simple points
   - (b) Tanged or shouldered points
   - (c) Bifacial points

3. Borers

4. Combination tools like scraper-borers and borer-points

5. Knives

6. Denticulate tools

7. Burins (the last three of sporadic occurrence)
(8) Handaxes, cleavers and chopping tools (confined to a few sites only)

Middle Palaeolithic cultures show regional variations in the size of artifacts, determined by the nature of raw material as in the composition of types and their percentages. For example, the Middle Palaeolithic industries of western Rajasthan and Chittoor district still have Lower Palaeolithic types like the handaxe and cleaver, while these types are completely absent in some regions like the Shorapur doab of Karnataka.

Plate 21: Middle Palaeolithic stone tool from Kortallayar Basin

Plate 22: Middle Palaeolithic stone tool from Kortallayar Basin
Geological, Paleontological and Palaeoenvironmental Background:

A consistent geological feature of Middle Palaeolithic sites in South Asia is that they are often found near sources of raw material, such as gravel or conglomerate beds. The cultural horizons are found within sandy-pebbly gravel horizons, generally overlying the basal boulder gravels comprising Lower Palaeolithic artefacts. In general the Middle Palaeolithic sites are rarely buried with Quaternary sequences in the peninsular region; this possible indicates the dominantly erosive mode of the streams in the
Deccan. They are common on the surface with rubble and fan gravels and generally lie away from the streams but close to quarries or sources of raw material. Certain Middle Palaeolithic assemblages have also been recovered from within sandy gravels overlying silts, which often cap cobbly-pebblely horizons, such as at Samnapur in the Narmada Basin.

The sites of Kalegaon and Paithan on the Godavari, Baregaon, Nandur on the Mula, Ambejogai on the Manjra, Devakchar and Burman Ghat on the Narmada, Hagargundgi on the Bhima and a few sites of the Belan have yielded animal fossils in association with artifacts or in gravels morphologically similar to the tool-bearing gravel. The species represented are the *Bos namadicus* Falconer, *Bubalus bubalis* L., *Stegodon insignis*, *Elephas namadicus* and *Equus namadicus*. It is quite likely that some of these animals were hunted by the Middle Palaeolithic man.

Not much is known about the Palaeoenvironmental conditions during this phase. The evidence from Rajasthan points to fluctuating monsoons, with weakening of drainage systems, whereas in Tamil Nadu, the presence of colluvial ferruginous gravel beds also indicates a semi-arid environment. In the Son valley, the deposits of the Patpara Formation marked by clays and fine gravels formed by erosion and fluviatile aggradation which indicate highly effective discharge, at least seasonally suggesting thereby a high flow regime in moist conditions followed by a return to drier conditions.

**Chronology:**

On the basis of radiocarbon dating on shell, wood, etc. from different Middle Palaeolithic sites in Peninsular India, the age of this culture can be considered as younger than 100 kyr. Recent studies at the site of Kalpi in the Ganga Plains which yielded vertebrate fossil remains as well as core-tools such as choppers, gives a date of about 45 kyr by using TL methods. In general, on the basis of paleontology and stratigraphic correlations, Middle Paleolithic culture of India has been placed in the Late Pleistocene period. The absolute dates obtained at several sites such as Mula Dam, Dhom Dam, Paithan, Inamgaon, Badalpur etc. ranges from 17000 to 39000 B.P. which indicate a late Pleistocene time bracket for this culture. Thorium-uranium (Th/U) and thermoluminescence (TL) dates from fossil dune at 16R locality in the Bangur canal near Didwana gives the date for the Middle Paleolithic culture to be around 150,000 BP and the upper limit has been suggested to
belong to the later part of the Upper Pleistocene. The Patpara Formation, contemporary to the Middle Palaeolithic culture in the Son valley has tentatively been dated from < 100,000 to 30,000 years ago (Upper Pleistocene). The important finding of Toba volcanic ash, erupted from Toba volcanic caldera in Sumatra some 75,000 years ago, beneath the Baghor Formation in the middle Son valley is also helpful in understanding the chronology and palaeoenvironment of the Middle Palaeolithic culture. The Middle Palaeolithic culture survived from the late Middle Pleistocene period to the Upper Pleistocene period. It can be dated at least from 125 ka to 40 ka.

Conclusion:

Sheila Mishra believes that in India, separating the Middle Palaeolithic horizons from the Late Acheulian ones has proved to be a major problem. As noted above, the study and identification of the Middle Palaeolithic culture in India started with the discovery of flake tools at Nevasa. Study conducted by Sheila Mishra shows that the levels containing “Nevasian” were the upper levels of the same gravels which also contained Acheulian. According to her, taphonomic factors such as weathering can better explain the contemporaneity of the Acheulian and Nevasian. The Nevasian is just the residual chert component after the basalt component was eliminated by transport and weathering. Although, the chert flake assemblages overlying Acheulian in Nevasa were designated as the “type site” for the Indian Middle Palaeolithic culture, subsequent studies has shown that these artefacts do not actually belong to the Middle Palaeolithic culture and have been put under the light duty component of the Acheulian assemblage.

The emergence of Middle Palaeolithic technology, marked by the prepared-core or Levallois technique, signifies a dramatic change in hominid cognition and subsistence strategies. Most Middle Palaeolithic assemblages, in global context, are produced on smaller nodules of raw material, rather than extracting blanks from large blocks of raw material (as in the Lower Palaeolithic). One main feature is an increase in the intensity of tool-use as well as formal tool-preparation (i.e. retouch, rejuvenation). This transition in raw material exploitation and a corresponding decrease in tool-size are generally regarded as parts of a distinct shift in human behavioral patterns, marked by changes in land-use, technology, demography, and mobility.
Despite detailed inter-regional metrical and typological comparisons, the timing and character of the South Asian Middle Palaeolithic phase remain poorly understood in comparison with similar evidence from Africa, Europe, and West Asia. Although, Middle Palaeolithic artefacts have been recorded from all over South Asia, there are also some regional variations in the techno-typology of artefact assemblages in different regions. According to V.N. Misra, the decline in the density of tools during the post-Acheulian cultures at Bhimbetka may have been due to an increasing use of tools made of organic material. Ethnographic and archaeological studies show that the predominating scrapers were used for wood working and the artifacts were hafted in wooden or bone handles by natural mastics such as resin. As compared to the preceding lower Palaeolithic period, no much work has been done on this period and there is large scope future research.

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