
UNIT 2 MIDDLE PALAEOOLITHIC CULTURES

Contents

- 2.1 Introduction
- 2.2 Mousterian Industry
- 2.3 Neanderthal Fossils
- 2.4 Traditions of Neanderthals
- 2.5 Middle Palaeolithic in India
- 2.6 Summary

Suggested Reading

Sample Questions



Learning Objectives

Once you have studied this unit, you should be able to:

- describe the Mousterian Culture of Europe;
- understand the cultural traditions of Neanderthal man; and
- discuss on the Middle Palaeolithic Cultures in India.

2.1 INTRODUCTION

Middle Palaeolithic Culture succeeds the Lower Palaeolithic culture. We have seen in the previous unit that the Lower Palaeolithic culture is characterised by heavy tools like the handaxes and cleavers. The Middle Palaeolithic culture, on the other hand, consists of a variety of tools made on flakes; and these flakes are produced by specialised techniques. Therefore it is widely referred to as flake-tool industry. The Middle Palaeolithic culture is best documented in the excavations of cave sites and open-air sites in Europe, Southwest Asia (also called the Middle East), and Africa. In these regions, the Middle Palaeolithic culture is referred to as the Mousterian culture, named after the rock shelter of Le Moustier in France. The human species associated with the Mousterian culture is the extinct *Homo neanderthalensis*. The popular name for this hominin is Neanderthal man. The fossil remains, that have been unearthed in the excavations of caves and rock shelters of Europe and Southwest Asia include some complete and several fragmentary skeletons of Neanderthal man; and these consist of a few hundred specimens. Neanderthal man lived during the period of Wurm glaciation (the last Ice Age/ The Great Ice Age, which is the last major glacial epoch of the Pleistocene period, i.e. Upper Pleistocene).

2.2 MOUSTERIAN INDUSTRY

As we have noted above, the culture of Neanderthal man is the Mousterian culture. This is characterised by specific stone tool assemblages which are called as the Mousterian industry. In other words, Mousterian industry is a Middle Palaeolithic tradition of tool making used by Neanderthals of Europe, Southwest Asia and Africa. This characteristic type of tool making is based on specialised techniques of production of flakes, which are made into a large variety of tools.

The widespread occurrence of stone tool industries in which flakes are predominantly used, in contrast to the handaxes and cleavers of the previous

cultural phase, begins at the close of the Middle Pleistocene period. The production of flakes heralds a technical change in the manufacture of advanced hunting tools. In this new technique, the development is the production of complete implement, at a single blow, from a core previously prepared so as to ensure that flakes when detached conformed to specific pattern of tools. Moreover, it was possible to strike off a series of flakes by reworking (or rejuvenating) the same core; therefore the technique was economical both of labour and raw material. Further, the flakes thus detached could easily be shaped by simple retouch into a variety of tools. It was easy to manufacture a whole range of tools to perform various functions. As already mentioned, stone tool industries, based primarily on the production of flake tools struck from carefully prepared cores, first developed in a broad zone covering North Africa and Southwest Asia to Western, Central and Eastern Europe (Figs. 2.1 and 2.2).



Fig. 2.1: Map showing Neanderthal sites in western Europe

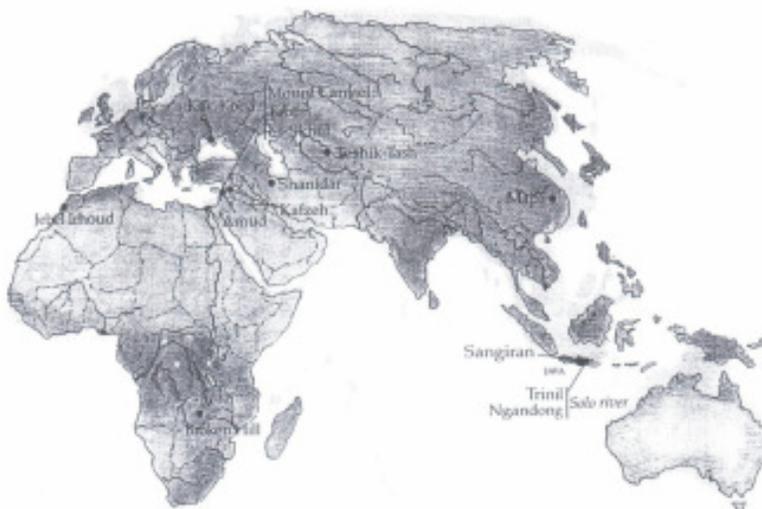


Fig. 2.2: Map showing Neanderthal sites in Southwest Asia and Africa

The easily recognisable product of this new mode of making tools is the “tortoise shaped core”, from the undersurface of which a flake tool could be struck by a single blow. These types of cores were first recognised from sites in the locality of Levallois, a suburb of Paris. Hence the technique was given the name “Levalloisian technique”, and this is also called “Prepared Core Technique”. (Fig. 2.3). What is important, this flake technique makes its appearance in the preceding handaxe-cleaver (Acheulian) cultures but it rose to predominance over the Acheulian core tool traditions in the Middle Palaeolithic cultural phase. One good example to illustrate this is the industry consisting of flake tools alongside with small handaxes and well made cleavers in the culture named from the locality of Fauresmith, in the Orange Free State of Africa (the Fauresmith culture).

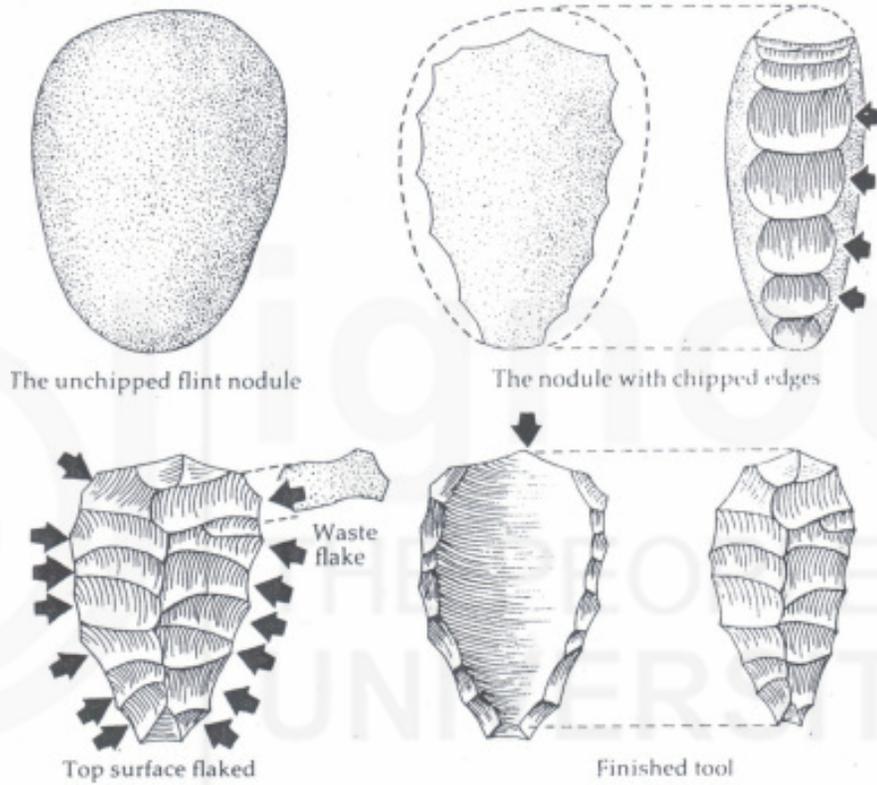


Fig.2.3: Steps in the production of finished flake tool by the Levalloisian technique (after Campbell 1979)

These flake tool industries, and for that matter an assortment of industries characterised by the predominance of flake tools, represent the Middle Palaeolithic cultures in different parts of the Old World. The cultural traditions of the Middle Palaeolithic, as already mentioned, are well documented in the excavations of caves and rock shelters in Europe, Southwest Asia (after referred to as the Middle East), and North Africa. These are called as the Mousterian culture (after the rock shelter Le Moustier in France, is the Mousterian). The deposits excavated at the Le Moustier cave, which have yielded these tools in large numbers, are dated to 55,800 Before Present (BP). The stone tool industries of the Mousterian cultures of Western Europe are closely allied to the Levalloisian but differ in that the cores were small and “disc-like” and shaped in such a way that a series of flakes could be detached without reworking the core. In other words, in this method called the “disc-core technique”, a stone is trimmed to a disc-shape, and numerous flakes are detached until the core is almost used up. And the flakes

thus detached are further retouched (secondary retouch) and shaped into a variety of tools (e.g. scrapers, Mousterian points, denticulate tools etc.). The caves of Southwest Asia, and Libya (in North Africa), on the other hand, yielded Levalloiso-Mousterian industries sharing elements from each. There is a significant degree of variation in the stone tools of the Mousterian industries. For example, Mousterian industries in France were distinguished into four main types. These are: (1) Typical Mousterian (Fig. 2.4); (2) Quina-Ferrassie or Charentian Mousterian (Fig. 2.5); (3) Denticulate Mousterian (Fig. 2.6); and (4) Mousterian of Acheulian tradition (Fig. 2.7 and Fig. 2.8).

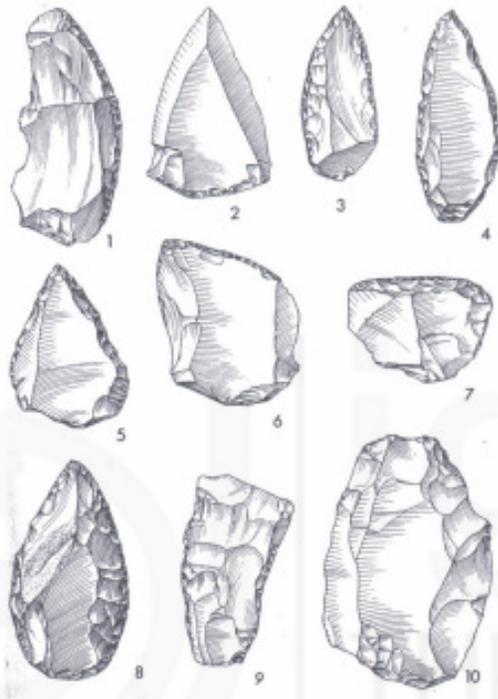


Fig. 2.4: Tools of typical Mousterian from the Dordogne region of southwest France (after Bordes 1978)

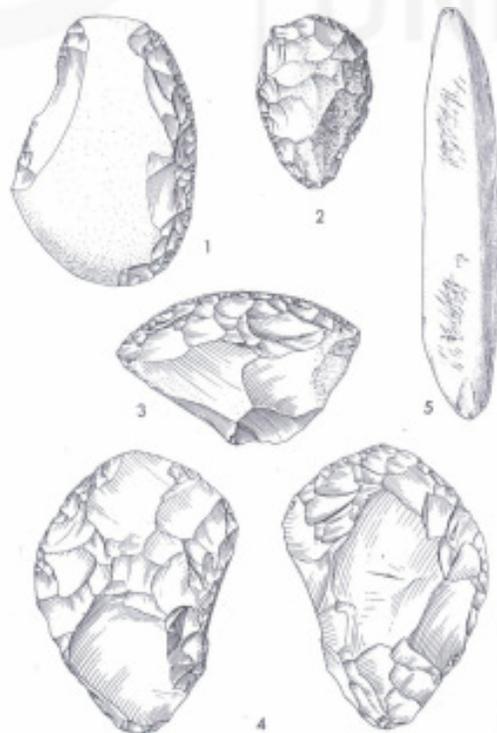


Fig. 2.5: Tools of Quina-Ferrassie Mousterian (after Bordes 1978)

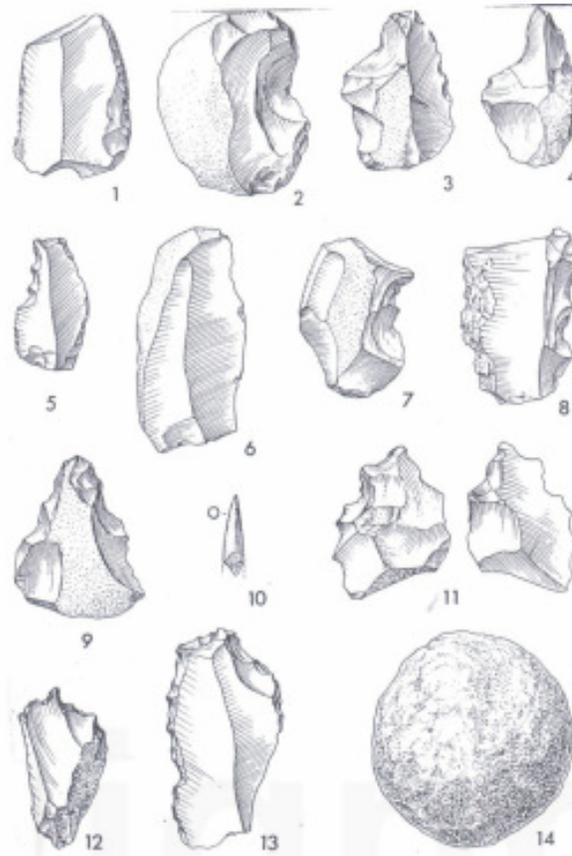


Fig. 2.6: Tools of Denticulate Mousterian (after Bordes 1978)

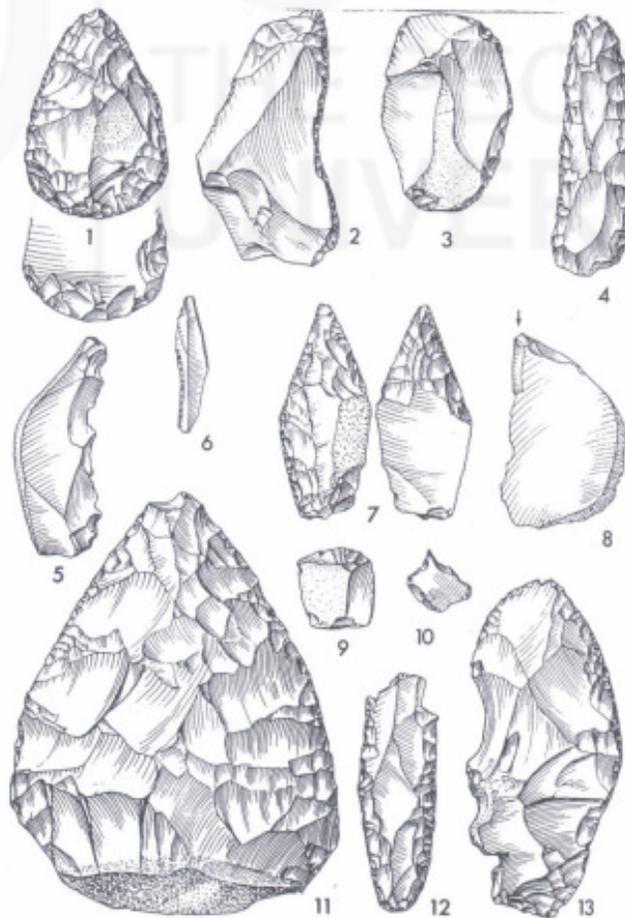


Fig. 2.7: Tools of Mousterian of Acheulian Tradition (after Bordes 1978)

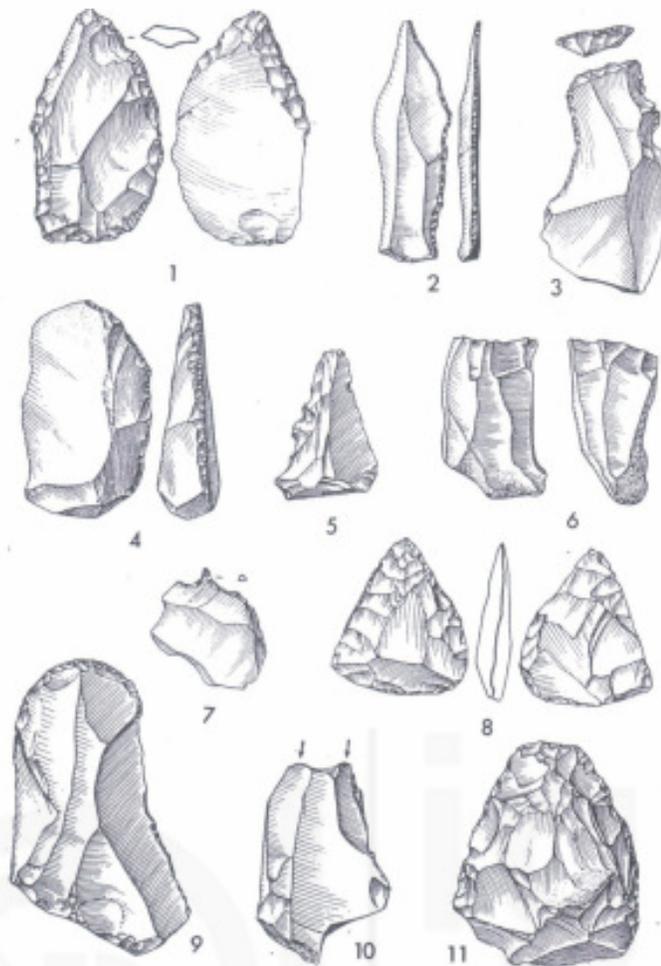


Fig. 2. 8: Tools of Mousterian of Acheulian Tradition (after Bordes 1978)

In Typical Mousterian, the Levalloisian technique was used to varying extents; percentage of scrapers varies from twenty-five to fifty-five; and points are well developed. The Neanderthal man found at Le Moustier was associated with the Typical Mousterian. In the Quina-Ferrassie or Charentian Mousterian (named after its predominance in the Charente region of France), the percentage of scrapers is very high (fifty to eighty percent); there are special type of scrapers like thick convex scrapers with scalariform retouch, transverse scrapers, scrapers with bifacial retouch over the whole surface (*tranchoirs*); a few or no handaxes; and a few denticulates. The Denticulate Mousterian is characterised by a great development of denticulated tools (from thirty-five to fifty-five percent) and notched flakes; no typical handaxes; a few points; and a few backed knives. The Mousterian of Acheulian Tradition is characterised by the occurrence of high proportion of handaxes (eight to fifty percent); flake tools are extremely varied, which include scrapers; points are fairly numerous, some with thinned butts, and some partly bifacial; carefully worked denticulate tools and notched flakes are numerous; and Upper Palaeolithic types (burins, end scrapers, borers, flakes, and truncated blades) occur in appreciable numbers than in the other types of Mousterian.

In Africa, the Middle Palaeolithic is designated the “Middle Stone Age”, and it appears at 280,000 BP. The various flake-tool industries of the Middle Palaeolithic, discussed above are called Mode III industries. The characteristic feature of the Mode III industries is the prepared-core flake tool technique. This technique, in Europe, begins to appear around 300,000 BP – 250,000 BP. The

human species associated with the Middle Stone Age in Africa are also Neanderthals, but termed variously as *Homo helmei*, *Homo rhodesiensis*, *Homo sapiens idaltu*, or *Homo sapiens archaicus*.

2.3 NEANDERTHAL FOSSILS

The first discovery of Neanderthal man (also referred to as Neandertal man) was made in 1856, not far from the city of Dusseldorf, Germany, where a tributary stream of the Rhine flows through a steep sided gorge, known as Neander Valley, “Neanderthal” in old German. The fossil skeletal fragments of this ancient human are given the name Neanderthal man, after this locality. The image of Neanderthal man for many years was that these Stone Age humans were shambling, beetle-browed lout, and grisly folk, who prowled the earth during the time of the glaciers. Subsequent discoveries and research showed that the Neanderthals from 100,000 years ago to 40,000 years expanded into different regions of the Old World, devised ingenious stone tools (which we have discussed above), developed a complicated society and opened the door onto the world of supernatural.

In 1856, a cave near a town called Spy in Belgium yielded two fossil skeletons; and palaeoanthropologists working in the Dordogne region of southwestern France brought to light numerous Neanderthal fossil skeletal remains and large quantities of stone tools. One of the first to turn up was the skeleton of an old man in a cave near the village of La Chapelle-aux Saints (Fig. 2.9). A cave at Le Moustier, nearby to the one from which large quantities of stone tools had been excavated earlier; yielded the skeleton of a Neanderthal youth, dated to 40,300 BP. Excavations at a rock shelter at La Ferrassie (Fig. 2.9) produced adult male and female Neanderthals and later the remains of seven children. Several Neanderthal skeletons have been recovered in the excavations of another rock shelter at La Quina. With the wealth of these skeletal materials from southwestern France, palaeoanthropologists were able to reconstruct what a Neanderthal looked like, and study the physical resemblances—or lack of them—between Neanderthals and modern Humans. As the years passed, Neanderthal fossils were found all over Europe, from Rumania and Crimea in the east to the western lands of Spain and the Channel island of Jersey. In 1921, some labourers mining lead and zinc ore in Zambia (previously Northern Rhodesia), thousands of miles from Europe, unearthed a skull and other human bones that resembled Neanderthals. These fossil fragments came from a cave in a knoll called Broken Hill, north of the Zambesi River.

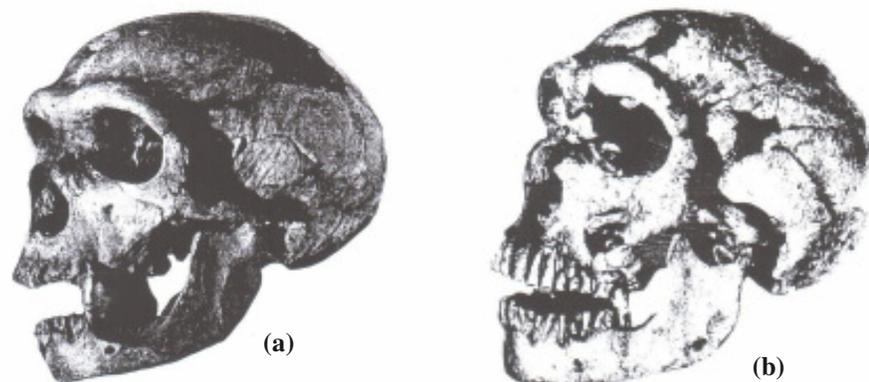


Fig. 2. 9: Skulls of Neanderthal man from (a) La Chapelle aux-Saints and (b) La Ferrassie (after Campbell 1979)

This fossil was given the name “Rhodesian man”. Many scientists now agree that this fossil was the African version of the Neanderthal type. During 1931 and 1932, fragments of eleven individuals were dug from the banks of the Solo River at Ngandong in Java. The fossils, collectively named “Solo man” consisted of several skulls that were almost perfect but lacked their bases and faces, and other bones that were badly shattered. Solo man is the Asian version of the Neanderthals. The gap between Java and Europe was filled in 1938 by a find in the desolate Bajsun-Tau Mountains of south-central Russia, about seventy-eight miles south of Samarkand. A cave in a cliff called Teshik-Tash yielded the fossil remains of a boy who was clearly Neanderthal. Neanderthal discoveries were made during the early 1930s by a joint Anglo-American expedition in what is now Israel, then called Palestine. These came from two of caves excavated by Dorothy Garrod on the slopes of Mount Carmel, overlooking the Mediterranean Sea, near the city of Haifa. These caves are Mugharet et – Tabun (Cave of the Oven) and Mugharet es – Skhul (Cave of the Kids). The first cave yielded a female skeleton, and from the second came the remains of ten individuals.

2.4 TRADITIONS OF NEANDERTHALS

Neanderthals very probably started some of the activities and beliefs that are considered most characteristic of humankind. They conceived life after death. They attempted to control their own destiny through magical rites. And they cared for aged and handicapped individuals. In fact, they were the first humans to display the complete spectrum of behaviour that can be considered to constitute modern human nature.

It seems probable that Neanderthals practiced hunting magic. Apparently, they attempted to manipulate the hidden forces of nature that controlled success and failure in hunt. One clue for this comes from the Grotto della Basura, the “Cave of Witches”, west of Genoa, Italy. In the depths of the cave, almost 1500 feet the entrance, Neanderthal hunters threw pellets of clay at a stalagmite, which to this day has a vaguely animal shape. The inconvenient location of the stalagmite rules out the possibility that this merely a kind of game or target practice. The fact that the Neanderthal hunters went so far back into the further reaches of the cave to throw the pellets suggests that this activity had magical meaning of some kind.

The evidence of a deer ceremony at a cave in Lebanon was brought to light by Ralph Solecki in 1970. Here, about 50,000 years ago, some Neanderthals dismembered a fallow deer, placed the meat on a bed of stones, and sprinkled it with red ochre. The natural pigment was certainly intended as a symbol of blood. This rite seems to represent a ritualistic or magical attempt.

The famous example of Neanderthal hunting magic is the bear cult. It came to light in the excavations conducted at the cave of Drachenloch by the German archaeologist Emil Bachler, between 1917 and 1923. This cave known as the “lair of the dragons” is located 8000 feet up in the Swiss Alps. The front part of the cave served as the occasional dwelling place for the Neanderthals. Deep inside the cave was a cubical chest made of stones and measuring approximately three and a quarter feet on a side. The top of the chest was covered by a single massive slab of stone. Inside were seven bear skulls, all arranged with their muzzles facing the cave entrance. Still deeper in the cave were six bear skulls,

set up in niches along the walls. Another evidence for the bear cult was discovered at Regourdon in southern France. Here was discovered a rectangular pit, covered by a flat stone weighing nearly a ton, which contained the bones of more than twenty bears.

The Neanderthals buried the dead and practiced death rituals. In the cave of La Chapelle-aux Saints, which was excavated in 1908, the excavators found the burial of man. The skeleton was found in a shallow trench, with a bison leg placed on his chest, and the trench was filled with broken animal bones and stone tools. These various articles might have been the provisions for the world beyond the grave, since it was well known that many primitive peoples bury their dead with food, weapons and other goods. The nearby rock shelter at La Ferrassie, appears to have served as a family cemetery. It contained six Neanderthal skeletons: a man, a woman, two children about five years old, and two infants. This Neanderthal cemetery is dated to 60,000 BP. Almost every Neanderthal burial site in Western Europe is associated with the tool making tradition known as the Quina-Ferrassie (discussed above).

The most amazing Neanderthal burial of all was that in the Shanidar cave in Iraq (Iraqi Kurdistan). Excavations conducted here by Ralph Solecki between 1935 and 1960 brought to light the remains of nine Neanderthals (Shanidar 1-9). At the back of the cave, in a layer estimated to be 60,000 years old, was the grave of a man (Shanidar 4) with a badly crushed skull. Analysis of the soil samples on which the skeleton was found indicated that pollen was present in the grave in unprecedented abundance. And pollen was found negligible in the other samples of the cave. Analysis of the pollen from the soil beneath the skeleton indicated that it came from numerous species of bright coloured flowers, related to grape hyacinth, bachelor's button, hollyhock, and groundsel. This has been interpreted as a "flower burial": This man was buried with bunches of these wild flowers on a flower bed. Another skeleton at Shanidar (Shanidar 4) belonged to a forty year old man who probably was killed by a rockfall. He suffered major injuries long before his death: he sustained a massive blow to the right side that badly damaged his right arm, foot and leg and a crushing fracture to the left eye that would rendered his left eye blind, and he could not have been an effective hunter. The fact that he survived up to the age of 40 with these disabilities indicates that he was treated with compassion and cared for by his fellow Neanderthals. The care shown to this cripple, who presumably had to keep close to the cave and can hardly have participated in hunting activities, reflects a degree of humanity not always displayed towards one another by members of civilised society.

At some of the Neanderthal burials, there is plentiful evidence of the darker side of the Neanderthals, such as violence and cannibalism. For example, a fossil of man found at Mugharet es – Skhul bears the traces of a fatal spear wound in his thigh bone and the socket of hip bone. There are enough evidences to indicate that Neanderthals, sometimes, killed their fellow beings. Mutilated remains of about twenty Neanderthals—men, women, and children—were found, in 1899, at the site of Krapina, in Yugoslavia. Skulls had been smashed into fragments; limb bones had been split lengthwise, presumably for their marrow, and there were traces of charring, hinting that the human meat had been cooked. In 1965, another collection of charred and smashed bones, again involving twenty individuals, was found at the cave of Hortus in France. The remains were mixed with animal bones and food refuse, as if the ancient inhabitants of the cave had drawn no distinction between human meat and that of a bison or reindeer.

The group of skulls excavated on the bank of the Solo River in Java suggests ritualistic motives. Though eleven skulls came out in the excavations, no other skeletal parts were found, except for two shin bones. The facial bones had been smashed off every skull, and not a single jaw or tooth was left. In some of the skulls, the opening at the base of the skull (foramen magnum) is widened. A practice of this kind, of widening the base of the skull, to take out the brain, is known in the ritualistic practices of present day cannibals. In a cave at Monte Circeo in Italy, was found a single skull, in a shallow trench that had been scooped out of the ground, encircled by stones in an oval shapes. This skull belonged to a 60,000 year old Neanderthal, who had been killed by a blow in the temple. Once again, the foramen magnum had been enlarged. This mutilation and the presence of ring of stones, indicates that a ceremony had been performed in the cave. These rites of burials and cannibalism of Neanderthals may be only the visible tip of an iceberg of hidden ceremonies. Practically all known primitive peoples have special rites and beliefs and practices pertaining to key steps in human life and it is reasonable to assume that the Neanderthals did too.

2.5 MIDDLE PALAEOLITHIC IN INDIA

The Middle Palaeolithic cultural phase in India is characterised by flake-tool industries. In 1956, Sankalia for the first time recorded and demonstrated these flake tools occurring in association with the second aggradational deposit of the river Pravara at Nevasa (Maharashtra) and then within the same context in the Godavari valley in north Karnataka. He called this industry Nevasian (like Mousterian, Levalloisian etc.). Soon Sankalia organised a large group of river valley surveys along Narmada, Son, Burhabalang, Krishna and its various tributaries. These investigations brought to light flake-tool industries to show that what he had provisionally called Nevasian was not a local phenomenon but a generalised feature of Indian Stone Age cultures. In the beginning the term Middle Stone Age was adopted for this phase in Indian prehistory. Subsequently, the term Middle Palaeolithic has been accepted.

The Middle Palaeolithic tools are made on flakes and flake-blades produced by flake-core, discoid core and the specialised Levallois technique. In some regions, there is a continuity of Late Acheulian lithic tradition with refinement in bifacial flaking, and secondary marginal retouch, and inclusion of small sized handaxes and cleavers, recalling the industries of Mousterian of Acheulian tradition of southwest Asia. In many regions there is switch over in the use of raw material from coarse grained rocks like quartzite of the preceding phase to fine grained rocks like chert, jasper, chalcedony, agate, etc. In some regions of central India and southeast coast, coarse grained and fine grained quartzite has been used.

The tool types of the Indian Middle Palaeolithic are scrapers of various types—single side, double side, side-cum-end, straight, oblique, concave, convex, concavo-convex, notched, and core scrapers; awls; borers; simple unilateral or bilateral points; Levallois points; tanged or shouldered points; miniature handaxes and cleavers; and utilised flakes. Anvils and hammer stones are also found at some of the manufacturing sites (Figs. 2.10 to 2.11).

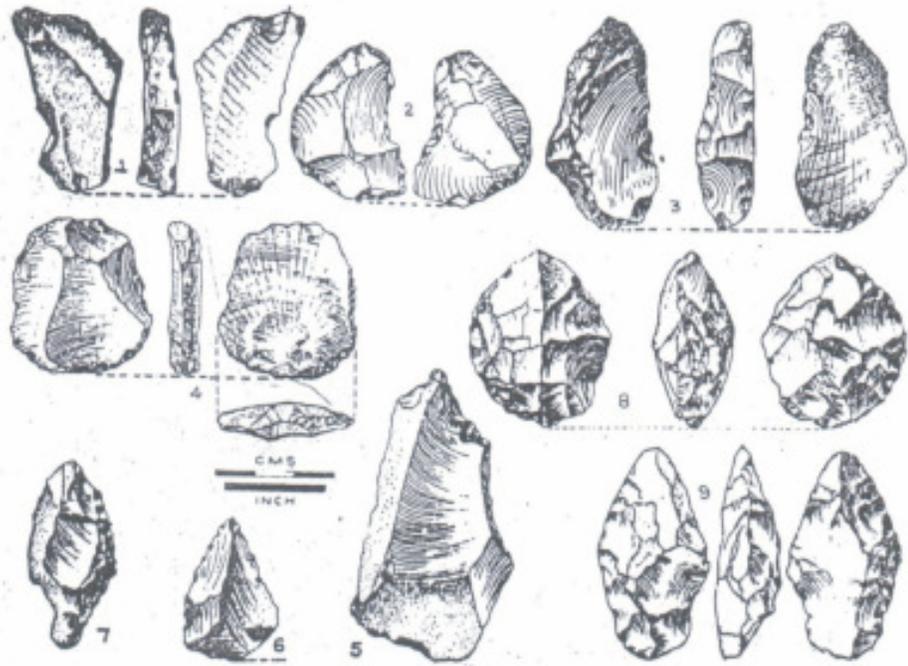


Fig. 2.10: Tools of the Indian Middle Palaeolithic

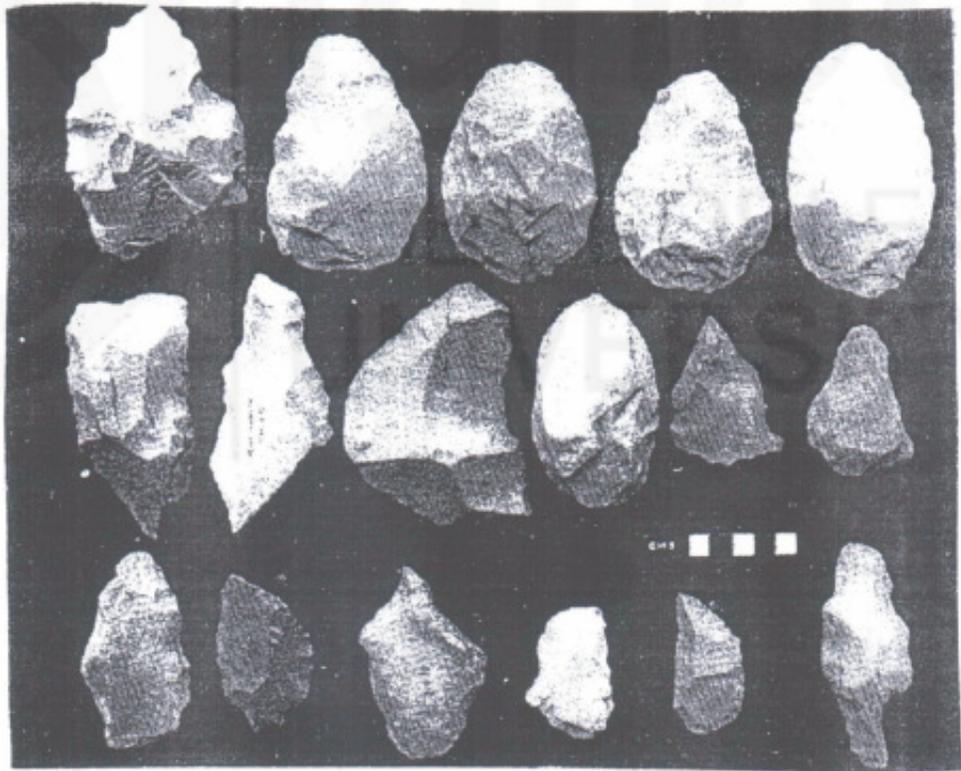


Fig. 2.11: Tools of the Indian Middle Palaeolithic

The debitage (waste products resultant of tool manufacture) comprises various kinds of flakes—simple, end-struck, side-struck and indeterminate; core rejuvenation flakes; chips; and flake cores. The flake cores are discoidal, globular, pyramidal and amorphous. The techniques used for tool manufacture are stone hammer, cylinder hammer, and Levallois. The tools are finished by secondary retouch; and characterised by shallow and small flake scars, step flaking, marginal secondary retouch and sharp edges. The raw materials used for the manufacture

of tools are medium to fine grained quartzite, chert, jasper and chalcedony. Some of the Middle Palaeolithic bifacial flake points, scraper types and retouched flake tools show typo-technological similarities to the Mousterian core and flake tools, recalling the Mousterian of Acheulian Tradition of Southwest Asia where the Mousterian culture is associated with *Homo neanderthalensis*.

If we take into account the distribution of Middle Palaeolithic sites in different parts of India, we find that the western dry zone is rich in occupations as at Budh Pushkar Lake, Didwana, or some parts of the Luni valley. The Luni industry is varied and richer in its typological content: convex and concavo-convex side scrapers, point of various types, burins, side choppers, handaxes, cleavers and edged blades. Upper Palaeolithic types such as retouched blades and blade cores are very infrequent in this zone. Therefore, in all probability, these represent a much younger variety than what has been recorded at Godavari or Narmada. The Nevasa and northern Karnataka sites yield rather large chunky jasper of a number of shades with several typical Levalloisian flakes in them. The point of impact of almost all these flakes maintains pronounced positive bulbs of percussion indicating stone hammer technique as the principal technique of manufacture. The most predominant type among these is the side scraper. Borers form the next frequent type while points occur with a frequency of around 10 to 15 percent. Several of these are thin and leaf shaped and often show a rudimentary shoulder near the butt-end. Abrupt retouching as also alternate retouching is quite common.

In Andhra Pradesh, wherever the Middle Palaeolithic industries are found in a stratified context, they succeed the Lower Palaeolithic (Gravel I) and occur in Gravel II. The Gravel II deposits in the river systems of the Deccan have been ascribed to late Middle Pleistocene to early part of Upper Pleistocene on the basis of geomorphological parameters.

Cammiade was the first to make a large collection of flake tools (which he called series II tools) from the district of Kurnool. Subsequently, Chittoor and Nalgonda districts were also systematically explored. Ramatirthampaye and Raigirvagu on Krishna are two of the richer sites. The tools are prepared on fine grained quartzite and show extensive use of cylindrical hammer technique. Many of these tools maintain pebble cortex and at times some are prepared on cores. There are several discoid tools or round scrapers, and elongated blades with burin edges prepared on them. Likewise, typical end scrapers are also prepared on such thick blades. It is significant that Levalloisian technique in these sites is not as frequent as in Nevasa-Karnataka sites.

In Madhya Pradesh and Bundelkhand region, the Middle Paleolithic is best represented. Besides the main Narmada deposits, the Betwa, Shivna, Chambal and numerous other water courses in the general area have yielded rich evidence of this cultural phase. Gonchi and Sihora on Betwa show patinated chert tools which include side-scrapers of various kinds measuring 13 cm to 7 cm in length. Levalloisian technique is well marked although not as much as in the western region. Bold retouching, often in an abrupt or semi-abrupt manner, is seen in the preparation of these types. Flakes are often flat and retouched bifacially. There are also some burins.

As one moves into the Chhatisgarh region and finally into the Chhotanagpur forest, the Middle Palaeolithic again tends to lose its identity and merge with the

Upper Palaeolithic. Blade cores abound in these assemblages. Mohapatra has recorded Middle Palaeolithic tools from almost all the Orissa rivers and shown that both pebble choppers and blade cores abound in them. Moving northwards across the Narmada into the Gangetic plain, we find that Middle Palaeolithic, like the preceding Lower Palaeolithic has also a wide distribution in the Belan valley in Allahabad district.

At Bhedaghat on Narmada near Jabalpur a section of Narmada has been exposed in recent flood. This has been studied by Sheila Mishra. The section reveals four distinct Quaternary phases; the lowest among these also yielded some Acheulian types. The layers yielding Middle Palaeolithic types had a date of 25,160B.P. The Middle Palaeolithic tools are prepared on chert and include varieties of side scrapers besides medium sized cleaver made on chert. The evidence from Bhimbetka right in the heartland of the Narmada zone, shows a Mousterian industry developing from within an Upper Acheulian base. But a hundred kilometers away, at Shivna in the main Narmada valley, Middle Palaeolithic appears as exotic because of the complete change of raw material heralding this phase.

The Mousterian in Afghanistan and the Zagros mountains farthest west seem to have many similarities with our desert zone Middle Paleolithic. Bridget Allchin suggests a period of 45,000 to 25,000B.P. for them. Maharashtra-Karnataka has a proper Levalloisian based Middle Palaeolithic and hence comes closer to Mousterian character. Even thin leaf-shaped tanged points are also from these sites. The Middle Palaeolithic from Kurnool to Chhatisgarh seems to be a local development.

A Thermoluminescence date from Didwana (Rajasthan) dates the Middle Palaeolithic to around 100,000 B.P. and Clark and Williams suggested that the Middle Palaeolithic in the Son Valley (north Central India) may be 40,000 or 50,000 years B.P. There is a single radio-carbon date on molluscan shells from a post Middle Palaeolithic context from Nandipalli in the Sagileru valley, a tributary of the Penneru, on the southeast coast of India. This date is $23,670 \pm 640$ years B.P. This date suggests that the Middle Palaeolithic in this region is older than ca. 23,000 yrs B.P.

By a review of TL, radiocarbon and Uranium/Thorium dates in a pan-Indian context, a time-bracket of ca. 125,000 years to 40,000 years before present has been suggested for the Indian Middle Palaeolithic by Sheila Mishra.

2.6 SUMMARY

The Middle Palaeolithic culture is widely spread in Europe, Southwest Asia, Africa and India. In Europe and Southwest Asia, it is called as the Mousterian culture, and the stone tool industries are termed as Mousterian industries. These industries are based on specialised techniques of flake production, called Levalloisian. In Europe, the Mousterian industries are divided into four major groups called (1) Typical Mousterian; (2) Quina-Ferrassie or Charentian Mousterian; (3) Denticulate Mousterian; and (4) Mousterian of Acheulian tradition. The Middle Palaeolithic in Africa is called as the "Middle Stone Age". The Middle Palaeolithic industries in India are also based on the predominant use of flakes which include those detached by Levalloisian and disc-core

techniques. It is not possible to distinguish sub-divisions or typological groupings in the Indian Middle Palaeolithic, as in Europe, but stone tools from different parts of the country, nevertheless, variously display affinities to the Mousterian points, Levallois points, scrapers of different types including disc-core scrapers, and miniature handaxes and cleavers of the Mousterian or Acheulian tradition. The Mousterian culture in Europe, Southwest Asia, and Africa is the culture of the Neanderthals, the extinct human species called *Homo neanderthalensis*. The cultural traditions of the Neanderthals include hunting magic, burial customs and death rituals, and caring for the disabled and crippled; and on the darker side, they showed also the traits of violence, and cannibalism.

Fossil remains of human societies associated with the Middle Palaeolithic in India have not come to light so far. On the basis of technological and typological affinities of the Indian Middle Palaeolithic tools to the Mousterian industries, it can only be predicted that the authors of the Indian Middle Palaeolithic might as well represent a South Asian variant of the Neanderthal Man.

Suggested Reading

Allchin Bridget and Raymond Allchin. 1982. *The Rise of Civilisation in India and Pakistan*. Cambridge: Cambridge University Press.

Bhattacharya, D.K. 1977. *Palaeolithic Europe*. Netherlands: Humanities Press.

Bhattacharya, D.K. 2006. *An Outline of Indian Prehistory*. Delhi: Palaka Prakashan.

Bordes, Francois. 1978. *The Old Stone Age (Translated from the French by J.E. Anderson)*. London: Weidenfeld and Nicolson.

Burkitt, M. 1963. *The Old Stone Age: A Study of Palaeolithic Times*. London: Bowes and Bowes.

Campbell, Bernard, G. 1979. *Humankind Emerging (Second Edition)*. Boston: Little Brown and Company.

Clark, Graham and Stuart Piggott. 1976. *Prehistoric Societies*. Harmondsworth, Middlesex (England): Penguin Books Ltd.

Coles, J.M. and E.S. Higgs. 1969. *The Archaeology of Early Man*. London: Faber and Faber.

Fagan, B.M. 2004. *People of the Earth: An Introduction to World Prehistory*. New Jersey: Pearson Education.

Hole, H. and R.F. Heizer. 1969. *An Introduction to Prehistoric Archaeology*. New York: Hold, Rinehart and Winston Inc.

Larsen, C.S. 1998. *Human Origins: The Fossil Record (Paperback)*. Illinois: Waveland Press Inc.

Leakey, R. 1993. *Origins Reconsidered: In Search of What Makes us Human (Paperback)*: New York: Anchor Books.

Lee, R.B and I. Devore (eds.). 1977. *Man the Hunter*. Chicago: Aldine Publishing Company.

Mishra, S. 1995. Chronology of the Indian Stone Age: The Impact of recent Absolute and Relative Dating Attempts. *Man and Environment* 20(2): 11-16.

Misra, V.N. 1989. Stone Age India: An Ecological perspective. *Man and Environment*. 14: 17-64.

Misra, V.N. 2001. Prehistoric Colonisation of India. *Journal of Biosciences*. 26(4): 491-531.

Renefrew, C. 1973. *The Explanation of culture change: Models in prehistory*. London: Duckworth.

Renefrew, C. and P. Bahn. 2001. *Archaeology: Theories methods and Practices*. London: Thames and Hudson.

Sankalia, H.D. 1956. Animal Fossils and Palaeolithic Industries from the Pravara Basin at Nevasa, District Ahmednagar. *Ancient India*. 12: 35-52.

Sankalia, H.D. 1974. *Prehistory and Protohistory of India and Pakistan*. Poona: Deccan College Postgraduate and Research Institute.

Sankalia, H.D. 1977. *Prehistory of India*. Delhi: Munshiram Manoharlal Publishers Pvt. Ltd.

Sample Questions

- 1) Discuss the salient features of the Mousterian industries of Europe and Southwest Asia.
- 2) Give an account of the cultural traditions of the Neanderthals.
- 3) Write short notes on the following:
 - i) Levalloisian technique
 - ii) Neanderthal fossils
 - iii) Middle Stone Age in Africa
 - iv) Mousterian of Acheulian tradition
 - v) Shanidar cave.