

MIDDLE PALEOLITHIC CULTURE

The period of cultural history associated with the Neanderthal is traditionally called the Middle Paleolithic in Europe and Near East and dates from about 300,000 years to about 40,000 years ago. For Africa the term Middle Stone Age is used instead of Middle Paleolithic. The tool assemblages from this period are generally referred to as Mousterian in Europe and the Near East and as **Post-Acheulian** in Africa.

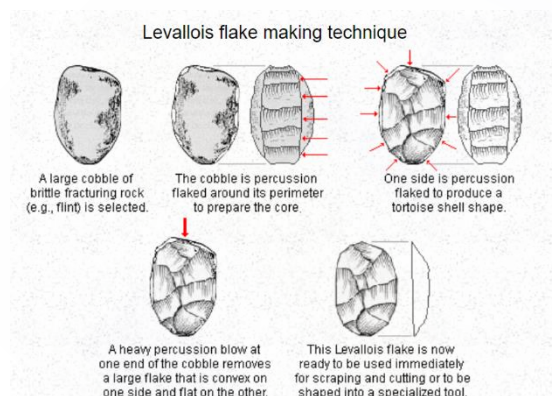
We have seen that the Lower Palaeolithic culture is characterised by heavy tools like the hand-axes and cleavers. The **Middle Palaeolithic culture**, on the other hand, consists of a **variety of tools made on flakes**; and these flakes are produced by specialised techniques. Therefore, it is widely 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).

MOUSTERIAN TOOL CULTURE

Among the well-established accomplishments of the Neanderthals is an elaboration on the **Levalloisian stone toolmaking technique**. Called the **Mousterian technique (or flake tool)**, after the site of Le Moustier in France. This culture's stone tool technology, lasting about **300,000–40,000 yBP**, includes a complex and distinctive type of flaking called the Levalloisian. **This technique involves preparing a stone core and then flaking the raw materials for tools from this core.** These flakes were

sharpened and shaped by precise additional flaking, on one side or both, to make specialized tools.

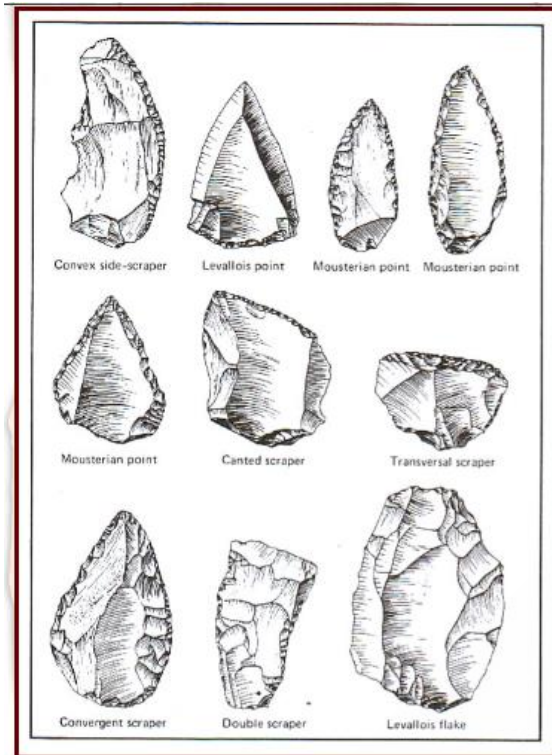


The easily recognisable product of this new mode of making tools is the “tortoise shaped core”, from the under surface of which a flake tool could be struck by a single blow. **These types of cores were first recognised from sites in the locality of Levallois, a suburb of Paris. Hence the technique was given the name “Levalloisian technique”, and this is also called “Prepared Core Technique”.**

Tools included small hand axes made from disk-shaped cores; flake tools, such as well-made sidescrapers and triangular points, probably used as knives; denticulate (toothed) instruments produced by making notches in a flake, perhaps used as saws or shaft straighteners.

This tool assemblage consists of **smaller proportion of large core tools like hand axe and cleavers** and **bigger proportion of flake tools like scrapers**. These scrapers might have been used for scraping hides or for working of wood.

Some of the tools like points might have been hafted or attached to shaft or handle as they were thinned or shaped on one side.



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; (2) Quina-Ferrassie or Charentian Mousterian; (3) Denticulate Mousterian; and (4) Mousterian of Acheulian tradition.**

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 (up 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.

THE POST-ACHEULIAN IN AFRICA

Like Mousterian tools, many of the post- Acheulian tools in Africa using the middle stone age were struck off prepared cores in the Levalloisian way. The assemblages consist mostly of various types of flake tools. A well described sequence of such tools comes from the area around the mouth of **Klasies river on the southern coast of South Africa.**

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.

BURIALS

While we now have earlier evidence of intentional human burials, the first and most famous evidence comes from the Neanderthals. Although many of these “burials” have now been attributed to natural causes, at least thirty-six Neanderthal sites show evidence of intentional interment of the dead, and in some graves there were remains of offerings— stone tools, animal bones, and, possibly, flowers.

The evidences at Le Moustier, France and at Shanidar cave in Iraq indicate the possibility of funeral rituals. A flint tool kit and food offerings are often placed with the dead man. Shanidar cave in Iraq shows the skeletal remains of handicapped man along with the pollen as humans might have put flowers in the grave.

At La Ferrassie, 5 children and 2 adults were apparently buried together in a family plot.

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.

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.

CAVE OR ROCK SHELTER DWELLING

The Neanderthals lived in caves and rock shelter. The caves were made more comfortable for winter dwelling by covering it with animal skins. Though there is evidence of use of fire by Homo erectus, Neanderthals seem to have relied more on fire as there were thick layers of ash in many rock shelters and caves.

Fire was regularly lit both for warming and for cooking. Several caves reveal distinct hearth places with remains of charcoal.

RELIGIOUS BELIEF

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 from 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 was 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.

BEAR-CULT

The existence of an ancient bear cult among Neanderthals in Western Eurasia in the Middle Paleolithic has been a topic of discussion spurred by archaeological findings. The Neanderthals would have worshiped the cave bear and ancient bear bones have been discovered in several different caves and are believed by some archaeologists to be evidence of a bear cult during the Paleolithic. It was not the mere presence of these bones that intrigued archaeologists, but their peculiar arrangement. Upon excavation, archaeologists on site determined that the bones were found arranged in such a way that it was not naturally possible.

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 foot 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.

SUBSISTENCE

We know, from the abundant remains of animal bones at their sites, that Neanderthals were successful hunters. But though it's clear that Neanderthals could hunt large mammals, they may not have been as efficient at this task as Upper Paleolithic modern humans.

Recent archaeological discoveries have shown that Neanderthals also expanded their range of available foods to include marine resources—a subsistence strategy previously thought to have been developed later by modern humans during the Upper Paleolithic. From the island of Gibraltar, new evidence has shown that some Neanderthals gathered shellfish and hunted seals and dolphins, displaying no difference in their hunting behaviour from modern humans of the same region (Stringer et al., 2008).

CANNIBALISM:

A fossil of man found at Mugharettes – 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.

MIDDLE PALEOLITHIC CULTURE 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 aggregational 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, 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.

DISTRIBUTION

The Middle Palaeolithic industries have wide distribution perhaps as wide as the Lower Palaeolithic industries in India.

They occur in **all the Districts of Maharashtra except** the coastal District of **Ratnagiri**. Further, they occur in several places in the **states of Karnataka, Andhra Pradesh, Tamilnadu, Orissa, Madhya Pradesh, Uttar Pradesh, Bihar, Punjab, Rajasthan, Gujarat, West Bengal and Assam.**

The Middle Palaeolithic culture like the Lower Palaeolithic culture existed in **river Valleys, foothills, riverbanks and riverbeds. In several places surface sites yielded Middle Palaeolithic tools. In terms of stratigraphy and typology, the flake industries at a number of sites demonstrate the continuous sequence from the Lower Palaeolithic industries to the Middle Palaeolithic industries.**

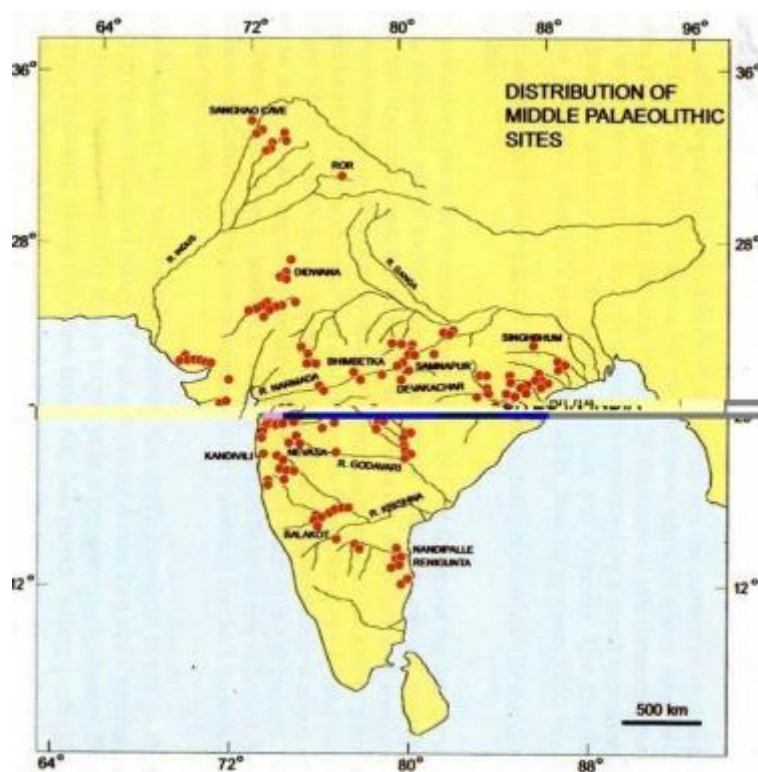
ENVIRONMENT:

The Middle Palaeolithic folk lived in an environment with forests characterized by rich flora and fauna.

People **preferred to occupy banks of rivers and streams** (Nevasa, Renigunta, Giddalur, Mahaboobnagar, Wainganga and Belan Valley) and **foothills** (Sisunia Hills) in basaltic regions.

Some of them lived in caves (Gudiam in Tamilnadu and Bhimbetka in Madhya Pradesh).

Good grazing grounds supporting smaller as well as larger animals were wide spread. Fossil bones of wild ox at Kalegaon and a skull of wild elephant at Chandoli were found in the Godavari Valley of Maharashtra.



CHRONOLOGY:

- Upper Pleistocene: 1,25,000-40,000 years ago

The Middle Palaeolithic culture in India existed during the period from the Middle Pleistocene to Upper Pleistocene.

i) 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

ii) **De Terra and Paterson** (1939) and **Movius** (1967) studies Soan Valley and its adjacent regions existed **50000 years ago**

iii) According to **Sankalia** (1962) Middle Palaeolithic culture in Maharashtra in between **39000 and 17000 years before present**.

iv) **Robert Bruce Foote and Sankalia** analysed the Geological, stratigraphical and typological evidences available in relation to the Middle Palaeolithic in **Andhra Pradesh** existed 40000 years ago.

v) 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**

MATERIALS

The raw materials used for the manufacture of the tools of Middle Palaeolithic culture consist chiefly crypto –crystalline Silica of various kinds such as **agate, jasper and chalcedony**, which have a smoother and more regular fracture than the somewhat granular quartzite of the Lower Palaeolithic tools. These materials were obtained in the form of **river pebbles**.

CULTURAL DIVERSITY

The Middle Palaeolithic culture in India shows uniformities as well as diversities. It may be divided into eight zones or regions or complexes on the basis of variations in environment, typo-technologies and subsistence activities.

Zone	Site	Tools
Soan Culture Complex	Soan Valley	flake tools, hand axes, cleavers, and chopping tools.
Central culture complex	Narmada Valley in M.P and Gujarat hills, forests and several rivers and streams	flake tools, hand axes, points and borers
Luni culture complex	Luni Valley in Rajasthan	flake tools, borers and points
Nevasian culture complex	River Valley in Maharashtra and Karnataka with thick forests	flake tools, blades, points, borers, thin leaf points) which are close to Mousterian traditions
Southern culture complex	Tamilnadu	flake tools points borers, scrapers etc.
South coastal culture complex	Andhra Pradesh and Orissa	flake tools, points, scrapers, an enormous number of borers etc.
Kurnool-Chattisgarh culture complex	Andhra Pradesh and Chattisgarh	flake tools and Mousterian tools in plenty
Eastern culture complex	Uttar Pradesh, Bihar and West Bengal	flake tools, scrapers, borers and others

i. **De Terra and Paterson** in the year 1935 discovered the Soan culture complex. They excavated Soan Valley and identified it in terrace T4 and called it Evolved Soan. It included an abundant number of Mousterian flake tools.

ii. The Middle Palaeolithic culture representing the Central Zones includes Narmada Valley and its adjoining places. **De Terra and Paterson excavated several sites in Narmada Valley in Madhya Pradesh** and they found Middle Palaeolithic tools namely flake tools, scrapers, cleavers, and hand axes in the upper strata 6 and 7 with fine gravel and black soil respectively yielded.

Misra excavated several cave sites in Bhimbetka that yielded Middle Palaeolithic tools. A vast majority of the tools were flake tools and the remaining ones were cleavers and hand axes.

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.

iii. **Misra** discovered the Middle Palaeolithic in the **Luni Valley of Rajasthan**

iv. Sankalia discovered the Nevasian culture of Maharashtra and Karnataka. Nevasa is a tributary of Godavari

v. The **Southern Middle Palaeolithic** is represented by those present at **Vadamadurai and Attirampakkam**

vi. The **South-Coastal culture** was spread over coastal **Andhra and Orissa**. **Timmareddy, Murthy, Issac** and others excavated the sites of **Renigunta** in Chittoor District, **Giddalur** in Prakasham District and **Nagarjunakonda** in Guntur District, and **Nalgonda** in Nalgonda District

vii. The **Kurnool – Chattisgarh culture** was spread across the highlands and thickly wooded contiguous areas in **Andhra and Madhya Pradesh**. It included flake tools and plenty of Mousterian-like tools.

viii. **Eastern zone** spreads across the plains in the eastern part of **Uttar Pradesh, the Southern part of Bihar and the Western part of West Bengal**. The excavation of G.R. Sharma reveals the presence of Middle Palaeolithic with flake tools, scrapers, Burins and borers.

Everywhere flake tools removed from prepared cores are common. The Scrapers of different types were found. These different types of scrapers indicate wooded forests where the scrapers were used to make various tools from hard tropical wood.

The stone points found in association with the scrapers are also flake tools but they are not well-developed types so as to use them as missile points. However, the leaf point characteristic of Nevasian culture is exception.

Other tool types consisted of borers or awls. In Andhra-Orissa culture, the borers occur in great numbers. Apart from borers there were flake knives of square, rectangular or crescent shape; there were chopper and chopping tools, discoids, small Acheulian type hand axes or bifaces and burins.

Everywhere the folk were hunters and gathers, but in some areas like Maharashtra-Karnataka, Andhra-Orissa, Kurnool-Chattisgarh and Narmada-Gujarat, the environment favoured presence of large animals and collective hunting.