Palaeolithic Cultures of Europe

Introduction

The Palaeolithic or the Old Stone Age coincides with the Pleistocene geological period. Largely on the basis of changes in technology and tool type, the Palaeolithic has been subdivided into three phases: the Lower, Middle, and Upper Palaeolithic. Assigning specific dates for each of these stages is difficult.

Earliest Human Occupation in Europe

The chronology of the first human colonization of Europe has generated a long and persistent debate among the Palaeoanthropologists and Prehistoric archaeologists during the last decade. Until very recently, most of the scholars claimed that there were no permanent human settlements before 0.6-0.4 million years ago, i.e. Arago in France, Bilzingsleben, Schoningen and Mauer in Germany, Boxgrove in England and Fontana Ranuccio in Italy etc., with most evidences concentrating on less than 0.3 million years ago i.e. Sima de los Huesos of Atapuerca in Spain, Petralona in Greece, Swanscombe in England, Steinheim in Germany, and Tautavel in France etc. However, new findings as well as the biostatigraphical and geochronological re-evaluation of the evidence already available suggest an early arrival of hominids in Asia, during late Pliocene times; such evidence covers a wide geographical fringe.

One of the major focuses of attention among Palaeoanthropologists and Prehistoric Archaeologists is the establishment of the earliest human occupation in different areas. Moreover, emphasis is given towards understanding the early human dispersal in the Old World from Africa, the cradle of humankind. This issue emerged as ‘out of Africa’ model, implying early Homo species stepping foot outside Africa and dispersing to different parts of the Old World. The formulation of this popularly known model is based on the recent evidence of early human presence in the form of hominin remains.
themselves or traces of their cultural activities from different sites. Recent data with numerical dates authenticates a human presence in the Early Pleistocene time outside Africa at Atapuerca in Spain, Pirro Nord in Italy, Dmanisi in Georgia, Ubeidiya in Israel, Riwat, Pabbi Hills in Pakistan, Isampur and Attirampakkam in India, Java in Indonesia, and Longuppo Cave in China.

The understanding of the timing and pattern of hominid dispersal and initial occupation of Europe has been improved in recent years based on the sites like Ceprano in Italy and Atapuerca, Gran Dolina, Cueva Victoria and Orce in Spain which provide an emerging picture of a continued human settlement in Europe at the end of the lower Pleistocene. The latter findings, particularly the discoveries in Atapuerca, have forced several researchers who defended the ‘short chronology’ for the first human arrival in Europe i.e., that no significant habitation took place before 0.5 million years ago to change their view towards an early occupation of Europe.

**The Lower Palaeolithic**

The European Lower Palaeolithic is traditionally divided into two lithic assemblage types: (i) assemblages with handaxes, generally assigned to the Acheulian techno-complex; and (ii) non-handaxe, core and flake assemblages, variously interpreted as being either flake or core tool based and known by a number of local or regional names. Lower Palaeolithic research in Europe is dominated by the enquiry of the meaning of these variants, examining their relationship and determining the significance of the presence/absence of handaxe.

**Abbevillian Tradition**

Abbevillian is a currently obsolescent name for a tool tradition originally named after the type site of Abbeville located on the Somme river of France. The lithic assemblage including bifaces from high level sediments of lower Somme valley was taken as evidence of the earliest presence of hominids in Europe. A.H. Breuil after an extensive study of the Somme valley deposits gave the name of Abbevillian. The artefacts comprise heavy and crude handaxes with some unretouched flakes.

Abbevillian was considered as the industry of Pre-Chellean and Chellean types of tools identified by Gabriel de Mortillet and V. Commont. G. de Mortillet. Chellean included artifacts discovered at Chelles, a suburb of Paris which are similar to those found at Abbeville. Later anthropologists substituted
Abbevillian for Chellean. The label Abbevillian prevailed until Leakey discovered older artifacts at Olduvai Gorge in Africa. Thereafter, Oldowan replaced Abbevillian in describing African and Asian early Palaeoliths and was restricted to Europe. However, slowly, the term Abbevillian also continued to lose its popularity as a scientific designation.

**Acheulian Tradition**

Acheulian, named after the site of Saint-Acheul in France, is denoted to a series of tool traditions of the Lower Palaeolithic linked by the presence of roughly symmetrical bifacial handaxes and cleavers. Some scholars have suggested that the wide regional spread of the Acheulian traditions may be associated with the appearance and dispersion of *Homo erectus*.

Acheulian assemblages vary considerably in terms of their exact constituents and the sophistication of the lithic technology, and may also include many simple tools based on flakes; in many regions, there are contemporary lithic traditions that lack handaxes and cleavers and are therefore not generally termed as Acheulian.

The distribution of Acheulian industries in Europe appears to be centred in south-western Europe with their maximum northward expansion reaching England and Germany. The Middle Pleistocene sites of the Iberian Peninsula (Spain and Portugal) almost invariably occur in fluvial deposits of middle river terraces. The most notable exceptions are the cave sites of Atapuerca in Burgos and Bolomor of Valencia, along with those appearing in the lacustrine deposits of the Guadix-Baza depressions of Granada in Spain. The sites of Ambrona and Torralba, although in karstic terrain, occur in fluvio-lacustrine deposits. Some of the important region of Iberian Peninsula, especially Spain where Acheulian site occur are Guadalquivir basin, Guadiana basin, middle reaches of the Tagus, Alagon valley, Madrid region and the Duero basin etc.

The sites of Ambrona and Torralba are two important sites of Spain. The lithic industry of both the levels at Ambrona is made on several varieties of flint and silicified limestone, quartzite, quartz and limestone. The artefacts include bifaces and cleavers manufactured on ordinary or cortical flake, sometimes with bifacial invasive retouch. There are also discoid, polyhedral and unipolar cores. Retouching on flake tools is not intensive; some scrapers were made on exhausted cores. Cortical flakes and small flakes and debris are well represented. Torralba has yielded bifaces including cleavers of variable shapes, some with retouch by soft hammer and over half with transverse edges. Torralba has an Acheulian industry similar to that of the central sector of Ambrona and to assemblages from the middle terraces of the Spanish Meseta.

The earliest occurrence of Acheulian handaxes in Italy is in the Middle Pleistocene site of Notarchirico in the Venosa basin of southern Italy which has yielded bifaces made on limestone, flint and more rarely quartzite cobbles. The bifaces are made on limestone and flint pebbles, occasionally on flake.
Assemblages from excavated contexts in various regions in Italy are often characterized by a smaller amount of bifaces and a larger proportion of flake tools and choppers.

The oldest dated occurrence of Acheulian handaxes in France is at Abbeville on the right bank of the Somme River in northern France. The site of Cagny la Garenne have revealed unmodified blocks, blocks with a few removals, discarded biface rough-outs and flakes, finished bifaces, small tools like notches, denticulate, scrapers and choppers etc. Another very important site, Terra Amata has yielded 21 different levels or “living floors,” most of which had the remains of a hunt together with stone and bone artifacts. Artifacts at the site include waste flakes of limestone, silicified limestone, and flint. Among the retouched tools, flaked pebbles and pebble fragments, choppers, and picks predominated, accompanied by a few bifaces and small tools made on retouched flakes. The coarser limestone was used primarily to make the larger pebble tools, while the finer-grained material predominated among the small tools.

A few flake cleavers made on flint have been recorded in England, one in the Lower Thames valley at South Woodford on gravels below silty clay, from a road cutting and found together with three handaxes and some flakes, nine at Whittingham near Norwich in East Anglia in terrace gravels of the Yare River, where at least 200 handaxes were also found, one at Keswick in gravels of the Yare River, which yielded at least 175 handaxes, two at Baker’s Farm and two at Furze Platt in gravels of the middle Thames valley, one in the Middle Gravels at Swanscombe and one at Cuxton in the Medway valley near the Thames estuary, a prolific site that yielded about 200 handaxes in a small area.

**Clactonian Tradition**

The British Lower Palaeolithic is divided into two major cultural/industrial traditions, a simplistic non-biface assemblage type known as the Clactonian, and a technologically more sophisticated biface assemblage type known as the Acheulian. Technological analysis clearly demonstrates similarity between the core reduction strategies present in biface and non-biface assemblages.

This Clactonian industry, termed after the type site of Clacton-on-Sea, was first defined on the basis of the artefacts collected by Hazzledine Warren in 1911. The artifacts include chopping tools and flakes of flint and the tip of a worked wooden shaft along with the remains of a giant elephant and hippopotamus. Later on, similar artifacts have been found at sites like Barnfield Pit near Swanscombe in Kent and Barnham in Suffolk.
The Clactonian tradition involves strikingly thick, irregular flakes from a core of flint, which was then employed as a chopper. The flakes would have been used as crude knives or scrapers. Retouching is uncommon and there is prominent bulb of percussion on the flakes indicating use of a hammer stone. The typical artifacts are flakes, single-edged choppers and chopping tools. The flakes have large, high-angle, plain striking platforms, and prominent bulbs of percussion. These flakes were removed from roughly prepared, discoidal cores by the stone hammer or stone anvil technique.

The Clactonian tradition is dated to the early part of the interglacial period known as the Hoxnian, the Mindel-Riss or the Holstein stages, at around 400,000 years ago. Mark J. White of the University of Durham summarized the classic definition of the Clactonian, however, these interpretations have been questioned and revised on the basis of theoretical paradigms, new discoveries, and new empirical analyses of old collections.

1. The Clactonian is a technologically distinct, primitive core-and-flake assemblage which contains chopper-cores and unstandardized flake tools but definitively lacks handaxes. The use of anvil technique is common.
2. The Clactonian represents the earliest occupation of Britain.
3. The Clactonian represents the products of a habitually non-handaxe making culture/group which has no close affinities with the Acheulian but is related to the chopper/chopping-tool industries of Asia.
4. The Clactonian entered Britain from the east, via central Europe and Asia, and was replaced by different culture-groups from southern Europe who habitually produced handaxes.

According to Hazzledine Warren, the Clactonian artifacts can be classified as pointed nodule tools, choppers, axe-edged tool, discoidal forms and flake disks, side-scrapers, bill-hook forms, end-scrapers, cal-scrapers, bulb scrapers, sub-crescent forms, proto Mousterian flake points, piercers, flakes, cores, anvil stones, notches etc.

Recent work on the British Quaternary sequence and Palaeolithic archaeology defines the Clactonian assemblages as:

1. A generalized Lower Palaeolithic industry in which unprepared core and-flake reduction dominates the assemblage.
2. There are very rare occurrences of bifacially worked tools which are termed non-classic bifaces.
3. The core and flake reduction is inseparable from the assemblages with handaxes. Choppers may be present but are not unique identifiers.
4. The presence/absence and technological or conceptual approach to bifacial tools such as handaxes clearly divide the Clactonian from the Acheulian.
5. The Clactonian does not represent the earliest occupation of the British Isles but has a recurrent occurrence.
6. It first appears at the end of the Anglian, persists through the earlier Hoxnian, and is then replaced by assemblages with handaxes.

7. Handaxe assemblages do not seem to have been contemporaneous with non-handaxe ones.

8. Clactonian and Acheulian belong to the different sub-stages of interglacials.

**Levalloisian Tradition**

Levalloisian technology is a method of making flake tool named after a site of Levallois-Perret in the Paris suburb, where flint artefacts showing its distinctive traits were first recognised by Marcel Reboux in the 1870s in deposits from one of the lower terraces of the Seine river. Subsequently it has been recognised at many European Early Palaeolithic sites. Henry Breuil and Janusz K. Kozlowski were the first to formally name this distinctive lithic technology as Levalloisian. Hitherto it had been labelled Mousterian, due to the work of Commont who had examined Mousterian sites in the Somme valley.

The Levallois technique denotes to a distinctive type of stone knapping. Instead of breaking off a flake and working on it to produce the desired shape, the core was carefully prepared. Its sides were trimmed and flakes were then systematically removed from its surface, from the centre outwards in all directions. Then, a striking platform was created by flattening the top of the prepared core, and perpendicular blows were struck at that point, either directly or through an intermediary tool.

The flake detached in this way was thin, roughly triangular or oval in shape, with a clean undersurface, and shallow, centrally directed flake scars on the upper side. It would need very little further working, because its edges were already sharp. Because the core of a Levallois flake is like the shell of a tortoise, it is also called as tortoise core. This technique can be used to produce only one flake at one time.

The Levallois method provides much greater control over the size and shape of the final flake which would then be employed as a scraper or knife although the technique could also be adapted to produce projectile points known as Levallois points. This technique is first found in the Lower Palaeolithic period but is most commonly associated with the Mousterian industries of the Middle Palaeolithic. The distinctive forms of the flakes were originally thought to indicate a wide ranging Levallois culture but the wide geographical and temporal spread of the technique has rendered this interpretation obsolete. So, at present, Levallois is considered as a technique of tool making rather than a distinct culture by itself.
**Middle Palaeolithic Culture**

In comparison to the Lower Palaeolithic, the Middle Palaeolithic period witnessed an increase in the proportion of prepared cores, especially Levallois cores, an increase in the size and complexity of retouched flake tools, and a decrease in the number of large core-tools, like Acheulian picks and handaxes. This period also witnessed improvement in hunting technology, and hunting abilities reflected both in the tools and in the faunal remains.

Most of the Middle Palaeolithic industries in Europe are grouped in the Mousterian complex, although flake industries with leaf-shaped points found in southern Germany are referred to a separate tradition, known as the Altmuhlian. Assemblages from most areas of western and central Europe, with small sharply pointed handaxes, are known as Micoquian. Middle Palaeolithic industries characterized by blade technologies are particularly concentrated in north-western Europe, including England, Belgium, northern France, and the Rhine Valley of Germany.

This period is marked by the first sustained occupation of high altitudes and boreal forest zones under cold climatic conditions, repeated occupations of caves and rock shelters, emergence of symbolic activities, first use of coloured mineral pigments and burials.

**Mousterian Tradition**

Mousterian culture is the lithic tool tradition which evolved from Acheulian tradition during the middle Palaeolithic. The name Mousterian culture was given after the type site of Le Moustier in Dordogne of France by Gabriel de Mortillet in the nineteenth century. The Middle Palaeolithic in Europe is essentially an industry based on the production, shaping, and use of flakes, although handaxes, generally smaller than those of earlier times, continue to be made. These flakes are manufactured in various ways, two of the most common being the use of disc-shaped cores and use of the Levalloisian technique.

In the former, flakes are struck from a core from its edge, moving radially around the circumference to remove successive flakes. The end result is that cores do resemble semi-flattened oval or round discs with scars of flake removals projecting in from the edge on both faces. This is a relatively simple technique that requires little shaping of the core to allow flake removal and is applicable to both large and small stone nodules. The flakes that are produced in this way can vary considerably in size and shape.

The Levalloisian technique, on the other hand, is more complex.
Essentially, this is a process that allows the flint knapper to predetermine the shape of flakes to a much greater degree than other techniques, but at the expense of additional work to prepare the core. Several steps are necessary to shape the nodule around its edge and to shape the broad surface to guide the force of the blow so that ultimately a flake may be removed that corresponds to the desired shape.

By Levallois technique flakes were produced with a very precise shape. The cores were carefully prepared by trimming their edges, removing small flakes until the core has the correct shape. Thereafter, with the last blow, the desired flake is obtained. The final results of the process, which includes points; scrapers etc. are subsequently modified to sharpen their edges.

Mousterian assemblages from Europe have low-to-moderate percentages of Levallois debitage, and high ratios of denticulates, notches, and side scrapers. Mousterian assemblages from central and Eastern Europe feature large numbers of thin, well made handaxes and are sometimes distinguished as the Eastern Mousterian or the Microlithic.

Most Mousterian lithic assemblages are made on locally available raw materials, with only a small component produced on high-quality exotic flints. Studies by J.M. Geneste of raw-material economy among French Mousterian sites point to a consistent pattern of expedient use of local and low-quality raw materials paired with prolonged curation of symmetrical tools made of exotic materials. Very few recognizably modified bone tools occur in Mousterian contexts, although some pieces of bone and antler preserve wear traces from their use as flint knapping percussors. A few flaked shell tools have been found in the Italian site of Grotta Guattari.

Using graphs of the cumulative percentage of tool types in an assemblage, Francois Bordes distinguished four major variants of the French Mousterian: the Charentian Group, the Typical Group, the Mousterian of Acheulian Tradition (MTA) and the Denticulate Mousterian.

Mousterian sites show evidence for significant developments in economic, social, and cognitive behaviour in comparison to the preceding Early Palaeolithic culture. Neanderthals buried their dead. Voluntary burial is indicative of respect and appreciation, as well as a way to hide the body from scavengers which also imply concern about death. Neanderthal burials have been located in several areas, mainly in southern France, Italy, northern Balkans.

The large mammals whose bones occur regularly on Mousterian sites include cold temperate (Palearctic) species such as bison (*Bison*), wild cattle (*Bos primigenius*), horse (*Equus caballus*), onager (*Equus hemionius*), reindeer (*Rangifer tarandus*), red deer (*Cervus elaphus*), wild boar (*Sus scrofa*), ibex (*Capra sp.*), fallow deer (*Dama sp.*), and gazelle (*Gazella gazella*).

The end of the Middle Palaeolithic in Europe is less abrupt and more reflective of hybridization than the morphological transition from Neanderthals to modern humans. It is nevertheless different enough from the succeeding
cultures of anatomically modern Upper Palaeolithic peoples.

**Upper Palaeolithic Phase**

The upper Palaeolithic is a stage of European and eastern Mediterranean Palaeolithic cultural sequence, characterized by the development of blade and burin technology, skilful hunting of large game, and sophisticated working of organic materials such as bone, antler, horn, ivory, tooth, shell, as well as a proliferation of jewellery and carved, painted and incised images on stone, organic materials, cave and rock shelter walls.

The Upper Palaeolithic in European prehistory is generally characterized by a number of significant changes in stone and bone technology. It also roughly coincides with the appearance of fully modern humans on the continent. However, the precise nature of both the archaeological and biological changes, as well as the relationship between the two, is much debated. It is the final division of the Palaeolithic and preceding the Mesolithic. The border between the Middle and Upper Palaeolithic industries is usually defined by the common use of blade, as opposed to flake technology.

**Stages of Upper Palaeolithic Culture in Europe**

The classic division of the Upper Palaeolithic into Aurignacian, Perigordian (Gravettian), Solutrean, and Magdalenian industries is based on the earliest explorations of sites of this age in south-western France. The first definition of the Upper Palaeolithic, by E. Lartet and Henry Christy in 1875, was on the basis of paleontological material. Subsequent chronologies based on tool typologies rather than stratigraphy was developed by G. de Mortillet from 1867 to 1910. In these schemes, Mortillet initially described the Aurignacian incorporating the Perigordian as an industry with elaborate bone tools, as an early stage of the Magdalenian, but he dropped it as a separate entity by 1881. He placed the Solutrean, with its bifacially worked leaf shaped points on flakes, between the Mousterian and the Aurignacian/Magdalenian.

The importance of stratigraphy in determining the relative chronology of Upper Palaeolithic subdivisions, and the restoration of the Aurignacian to its appropriate place at the beginning of the Upper Palaeolithic, were not established until H. Breuil’s work at the beginning of the twentieth century. Basing his conclusions on the work of D. Peyrony and others, Breuil also defined three stages within each of three Upper Paleolithic industries: Aurignacian, Solutrean, and Magdalenian. His Lower and Upper Aurignacian corresponded to the Chatelperronian and the Upper Perigordian, respectively, while his middle Aurignacian incorporated the type industry from Aurignac.
**Aurignacian Tradition**

Named after the type site of Aurignac in the Haute Garonne of France, the Aurignacian as defined by French Palaeontologist E. Lartet and English Prehistorian H. Christy, as well as by French archaeologist H. Breuil, originally included all early Upper Palaeolithic industries. The Aurignacian can be defined as an early Upper Palaeolithic industry, dated to c. 38000–28000 BC, represented by a full blade technology and a wide range of tools, including carinated scrapers, burins, end scrapers, and blades with a distinctive scalar retouch around their margins. The Aurignacian is characterized by a rich bone industry that includes bone points and awls. Aurignacian assemblages were possibly produced solely by *Homo sapiens sapiens*. In France and Spain, the Aurignacian is strongly associated with the early stages of cave art.

The Aurignacian industry was first recognized in the Perigord region of France, where it succeeds the Mousterian before 35,000 BP. However, the industry seems to appear rather earlier in Central Europe, where it is associated with well crafted mobiliary art. The oldest Aurignacian in Europe dated to c. 40,000 BP has been identified in the Middle Danube and the Balkans. It seems probable that the Aurignacian is intrusive in both Central and Western Europe, and that its appearance is associated with the replacement in Europe of the Neanderthals by anatomically modern humans.

In the early stages of the Aurignacian, blades are often large and irregular and bear heavy invasive marginal retouch on both sides. Lamellar removals are used to create carinate and nose ended scrapers on thick flakes or chunks, as well as thick edged carinate and busked burins or gouges, although the latter are rare in Eastern Europe. Bladelets with semi abrupt inverse-obverse retouch on one or both edges or narrow-pointed blades and bladelets with semi abrupt to abrupt retouch on both edges are associated with certain Aurignacian industries. The tools include end scrapers, made on the end of blades or thick flakes, tools with a chisel like end, called burins, steep, thick, carinate scrapers, nosed scrapers, and beaked burins, heavily retouched blades, often narrower in the middle than at either end etc.

**Solutrean Tradition**

The Solutrean, also known as Solutrian, is an Upper Palaeolithic tool tradition or industry of c. 21,000 16,000 BC, characterized by leaf shaped or foliate points made by using pressure retouch or delicate percussion retouch. Solutrean points are among the finest examples of Upper Palaeolithic stone tool
technology. The tradition is named after the site of Solutre (Saone and Loire), but largely understood from the phases identified at Laugerie-haute rock shelter. The earlier Solutrean is concentrated in southwest France but later Solutrean assemblages appear throughout much of Western Europe.

The Solutrean is characterized by several forms of thin, leaf shaped points, shaped by distinctive flat, highly invasive unifacial and bifacial retouch. Superficial resemblances between these points and leaf shaped Mousterian points, the abundance of flakes, and the relative paucity of Solutrean bone working led to a placement of the Solutrean stage between the Mousterian and the Aurignacian by G. de Mortillet in 1881.

In 1912, H. Breuil made a sequence for the French Upper Palaeolithic, with a three-stage Solutrean phase or Lower, Middle, and Upper or I, II, and III between the Aurignacian and the Magdalenian. A fourth stage, Protosolutrean, was added subsequently to distinguish the basal Solutrean at Laugerie Haute, with its generalized use of flat retouch without specialized point types, from the later stages. Breuil’s three stages were themselves distinguished by different forms of pressure flaked stone points based on the Laugerie Haute sequence.

The Magdalenian Tradition

The archaeological record of Western Europe during much of the late glacial period is dominated by the Upper Palaeolithic culture known as the Magdalenian. The Magdalenian is characterized by abundant blades and bladelets, numerous burins, and particularly large numbers of backed bladelets that probably formed insets in composite tools. Accompanying these stone tools are a series of bone points, initially smooth, but later carved to have one or two rows of barbs. These latter are considered to be harpoons, with points that would detach upon impact and remain in the wound. Further this culture is distinguished by abundant evidence of economic innovation, complex social interaction, and elaborate artistic and ritual activity.

The Magdalenian is named after the type site of La Madeleine, a rock shelter located in the Vezere valley, commune of Tursac, in the Dordogne of France. It was originally termed as the Age of the Reindeer by E. Lartet and H. Christy, the first systematic excavators of the type site, in their publication of 1875. The Magdalenian sites also contain extensive evidence for the hunting of red deer, horse and other large mammals present in Europe towards the end of the last ice age. The culture was geographically widespread, and later Magdalenian sites have been found from Portugal in the west to Poland in the east.
Some important Magdalenian sites are Verberie, Pincevent and Etiolles in the Paris Basin, Guillassou, Le Cerisier, Plateau Parrain, and Le Breuil in the Isle Valley of France, Champreveyres and Monruz on Lake Neuchatel in Switzerland, Schussenquelle, Gonnarsdorf and Andernach in Germany which have yielded structural remains of the Upper Palaeolithic period.

Majority of the known portable art objects from Western Europe has been found in Magdalenian sites. Ornaments were manufactured in profusion, utilitarian tools were decorated with great care, and special art objects were created in abundance. Using bone, animal teeth, imported shells and fossils, and the increasingly scarce mammoth ivory, beads and pendants were made for necklaces and ornaments on clothing. Among the decorated tools are spear throwers intricately carved with three-dimensional figures of animals, bone spatulas with carved designs, and sandstone lamps with engraved geometric decorations on their handles. Other, more enigmatic objects include elaborately carved perforated antler batons, incised antler rods, sculptures and figurines of ivory, clay, bones, and stone, engraved fragments of animal ribs and shoulder blades, intricately decorated and often perforated bone discs, and engraved stone plaquettes.

Although the Upper Palaeolithic was originally defined with reference to its stone tool typology, it became closely associated with a series of changes that are still generally assumed to be interconnected; the appearance of anatomically modern humans; the introduction of all or part of the Aurignacian stone tool typology and a developed bone industry; the development of specialized, co-operative hunting strategies; alterations in settlement patterns, including the construction of relatively permanent houses or huts in some areas; the development of a multiplicity of distinct cultures; a growing population; and, most famously of all, the advent of cave art.

**Conclusion**

Palaeolithic period covers most of our history, starting with the oldest known stone tools at around 2.6 million years ago and lasting until 10,000 years ago. During this period, human were just hunters and gatherers; and they made stone tools as well as artefacts of bone and other perishable material. Palaeolithic period is also known as the Old Stone Age. This module discussed the developmental stages of Palaeolithic cultures in Europe with an emphasis on the earliest human occupation in the continent.