

SECOND SEMESTER (HONS)

PAPER: C3T

Lower Palaeolithic Culture of Europe

The first or the oldest prehistoric culture is known as Palaeolithic or the Old Stone Age. The term comes from the Greek word 'palaios' means old and 'lithos' means stone. Therefore, palaios+lithos=Palaeolithic. Although our knowledge regarding Palaeolithic is very meagre and imperfect, still Palaeolithic or Old Stone Age is very important as it provides a clear cut sequence of cultural development throughout the entire Pleistocene period, all over the world. It is considered as a crucial period for all round human evolution; development of cultures can be traced out distinctively in this period. Palaeolithic can be further sub-divided into three phases—lower Palaeolithic, Middle Palaeolithic and Upper Palaeolithic.

The time span of the Lower Palaeolithic was the maximum covering the whole of Lower Pleistocene and bulk of the Middle Pleistocene epoch. During this span many river valleys and terraces were formed. Early men preferred to live near the water supply, as the stone tools are found mainly in or adjacent to the river valleys. Evidence of the earliest stone tools in Western Europe has appeared from the deposits of first Inter-glacial phase in the Lower Pleistocene. Excellent stratigraphic sequences of entire Pleistocene epoch containing Lower Palaeolithic artifacts have been discovered from the Somme Valley in the north of France and the Thames Valley in the south of England.

On the basis of those valuable evidences, the tool-making traditions of the Lower Palaeolithic in Western Europe can be divided into two groups, such as Hand-axe traditions and Flake traditions basically the Hand-axe traditions contained the core tool cultures while the flake traditions consisted with the flake tool cultures.

Elementary feature of the hand-axe tradition is the bifacial tool that means a more or less pointed tool made on core where both the upper and lower surfaces are worked. Though the core tools are the principal element of this hand-axe tradition, the flake tools are also found to occur in all levels along with hand-axes. These flake tools are relatively simple due to the utilization of waste materials resulting from the manufacture of hand-axes. But, in other cases, much more complicated flake tools have been found in this tradition.

In fact, these two groups of tool traditions {hand-axe tradition and flake tradition) are further subdivided into different cultures. The hand-axe tradition is sub-divided into three

cultures, such as **Pre-Chellean Chellean or Abbevillian and Acheulean** while the flake tradition is sub-divided into two cultures' such as **Clactonian and Levalloisian**.

Hand-axe Traditions:

I. Pre-Chellean Culture:

This early culture was discovered from the Cromer forest bed in Norfolk, England. The Cromer sites were possibly the workshops as because no finished artifact is found there. Most of the tools of Cromerian industry have been derived from a stone bed which was lying just below the Weybourn crag in the cliffs behind, but in present day the stone bed and the crag are completely buried due to natural accumulation of environment. In 1904, V. Commont called it as Pre-Chellean culture.

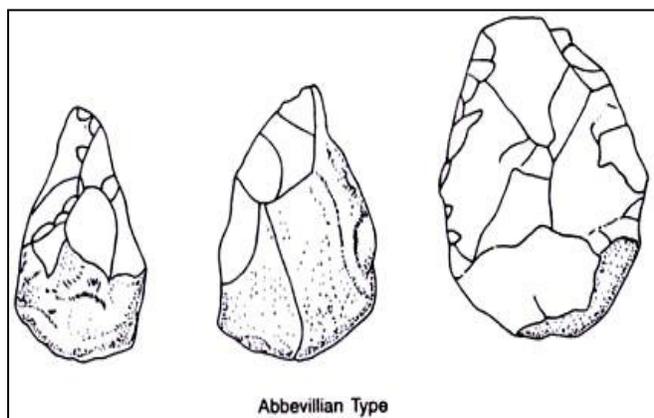
The finished tools are found rarely but the pebbly cortex is significantly present in all Pre-Chellean tools. The primary flakings have been worked out only at the working end. It is definitely an early form of core-tool culture of hand-axe tradition. Occasionally more finished tools are found as rare specimens of core-tool type Primary flakings are evident in these tools but no sign of secondary working has been observed, essentially, the major findings were the flakes.

The geological age of this culture is the early Pleistocene epoch. During the first glacial period (Gunz), the culture flourished in Western Europe and Africa. Though, no definite representative group has yet been found in association with this industry, still some pre-historians feel that a group alike to *Australopithecine* might be responsible for this culture.

II. Chellean or Abbevillian Culture:

It is apparently the oldest tool-making tradition of the core-tool culture in Western Europe. In the gravel terraces of the Somme Valley, a large number of sites have been discovered. Previously this culture was named as the Chellean, after the site Chelles on Somme Valley in northern France.

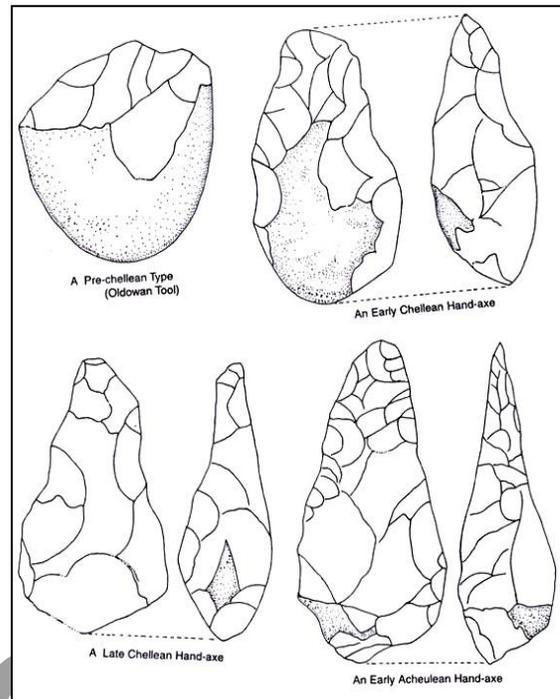
The Pleistocene deposits at Chelles are situated on a lower terrace. But in Abbeville the tools are found in situ at the higher terraces at Abbeville. The name Abbevillian takes its name from the site Abbeville on Somme Valley in northern France. According to Prof. Breuil, Abbevillian is the combination of Pre-Chellean and Chellean cultures. But, Prof. A.L. Kroeber considered both the Chellean and the Abbevillian as the same culture where the Chellean being the older name and the Abbevillian is



Abbevillian Type

more modern nomenclature. It is mainly a bifacial core-tool culture. E. A. Hoebel, 1958, in his book *Man in the Primitive World* defined the bifaces as core tools made from the remaining part or heart of a nodule of flint after surface flakes have been removed. The residue of a nodule is taken into a particular shape.

The biface have greater breadth than thickness and they are tapering to thin edges around the circumference. In this way, two faces i.e. dorsal and ventral sides of the tools are well marked. The characteristic tools are mostly hand-axes; crudest type is found in the Lower



Palaeolithic period. German scholars call them '*Faustkeil*' or 'fist wedge' while the French have coined the term '*Coup-de-poing*', a blow of the fist or a punch. In fact, these hand-axes coarsely flaked with zig-zag margins are probably manufactured either with a stone-hammer or on a stone anvil. So, it is clear that Block- on-Block technique was employed for releasing irregular flakes to manufacture of hand-axes.

Pear-shaped, tongue-shaped, and oval-shaped hand- axes are common types in Abbevillian culture, which is slightly evolved form of the Pre-Chellean culture. The pebbly cortex is slightly present in Abbevillian hand-axes. Besides, discs, scrapers, choppers and also knives on flakes are found in this culture. It can be accepted as the first tradition of the bifacial core-tools culture.

The geological age of this culture is the Lower Pleistocene epoch particularly during the time of Gunz-Mindel Inter-glacial (first Inter-glacial period). The distribution is chiefly observed in Western Europe, Africa and Western Asia. The representative population responsible for this culture was an allied group of *Homo erectus*.

III. Acheulean culture:

This culture covers the longest time-span of tool-making tradition of the Palaeolithic period. A large number of tools have been discovered from both the Somme and the Thames Valley. The principal stratigraphic development of this culture has occurred in 30-meter deep middle terrace of the Somme Valley at St. Acheul, a suburb of Amiens in France.

The tool types are found in the terrace gravel of the Somme. The oldest types relate to the early inter-glacial gravel of the 45-meter high at the terrace of the Valley. Some of the scholars

have tried to include the lithic findings occurred at Suffolk Swanscombe (Kent in England) in the Thames Valley, Torralba-Ambrona sites in Spain under the Acheulean culture.

In general the Acheulean may be divided into *Lower*, *Middle* and *Upper* though the actual sequence is more complex. In fact, the Acheulean culture is continued with bifacial core-tools and primarily focused on the manufacture of hand-axes which means the first tradition (hand-axe tradition) of the bifacial core-tools culture.

a) Lower Acheulean:

This level includes a proportion of roughly made hand-axes, but there is a larger proportion of ovate forms of hand-axes than in other levels. Besides, cleavers, the bifacial core-tool with square, or slightly convex, sharp cutting edge at one extremity is found abundant. This type is comparatively rare but found in all Acheulean levels.

b) Middle Acheulean:

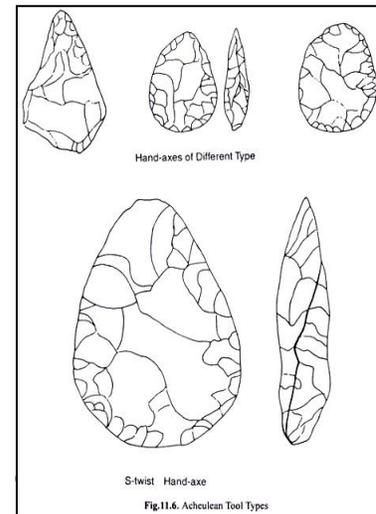
This level is marked with ovate hand-axes where sinuous edge, known as the 'S-twist', stand as characteristic type. The apart from this, fossil human remains have been discovered in direct association with this cultural level.

c) Upper Acheulean:

This is the final level of Acheulean and also known as the Micoquian. This name has been accepted after the type-site. La Micoque in the Dordogne region of south central **France**. The Micoquian type of hand-axes is the developed form of bifacial core-tools and has been characterized by very straight and finely chipped edges. Further, these hand-axes show an overall sub-triangular or elongated form.

The hand-axes of triangular, heart-shaped or cordiform, lanceolate form, pointed forms are found in all levels, but they are rare in earlier levels. Flake tools have occurred in all levels, but the number of tools increases in the Upper Acheulean. Most of the tools are made from the flakes struck off during the process of hand-axe manufacture and the side scrapers are the predominant types. In general, the lanceolate forms of hand-axes (core-tools) are found in association with a large number of flake-tools (including points with a triangular cross-section) in Upper Acheulean level. It represents the most developed form of Acheulean culture, known as Micoquian.

The hand-axes marked with sinuous edge ('S or Z – twist') are typical to the Acheulean culture and suggest controlled or resolved flakings. Besides, some flake tools with faceted



striking platform are found in association with these hand-axes (core-tools). Some flakes with Levalloisian influence have been observed in Upper Acheulean culture level.

Geological age of this culture is middle Pleistocene epoch. It originated particularly in the early part of second inter-glacial period (Mindel-Riss inter-glacial) and continued up to the third inter-glacial period (Riss-Wurm inter-glacial). In fact, Acheulean represents a cultural stage between the two flake traditions — Clactonian and Levalloisian. This bifacial core-tool tradition was though confined to Western Europe but the Acheulean-Levalloisian complexes were found in Africa and Asia. However, this type of bifacial core-tools or core-biface was possibly the contribution of *Neanthropic men* (modern men). The representative group must be an early form of *Homo sapiens*. The fossil human remains have been identified as the Swanscombe, Galley Hill, and other associated types of *Neanthropic man*.

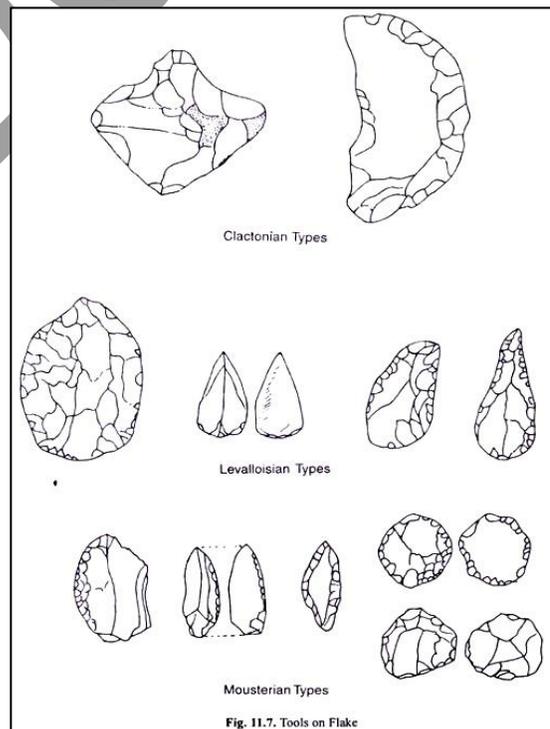
Flake Tradition:

I. Clactonian Culture:

The second tradition is the Flake tool tradition where Clactonian is the first flake-tool culture. The Clactonian is named after the stratigraphic position of the type-site at Clacton-on-Sea, Essex in England, which is most clearly shown at Swanscombe, Kent, in the Thames Valley. The Clactonian culture is mainly a flake-tradition though some core-tools are found in association with them. These core-tools are the nodules of flint, either alternately worked or flaked along the upper surface of one side as choppers. The Clactonian flakes are rough and struck out unsystematically from the prepared cores.

The Clactonian flakes generally exhibited large, massive, un-facetted striking platforms and prominent positive bulbs of percussion. The flake surface formed a wide angle, greater than 90° with the striking platform. These types of flake-tools are mostly crude, but in some cases, actual retouching or secondary working on the edges of the flakes is also found.

Small chopping tools, rough scrapers, discs, knives, blades on flint are the chief findings of this culture. Some flake-tools designed as bill-hook and types of long flake with concave



cutting edge are found here. According to M.C. Burkitt, finely trimmed side scrapers and pointed tools obtained from this stage should be labeled as 'late and highly evolved Clactonian'.

The geological age of these culture points the lower Pleistocene period which originated during the early part of Mindel glacial phase or second glaciation and continued up to the Mindel-Riss inter-glacial or second inter-glacial period. This culture level represents a stage between Abbevillian and Acheulean.

This first flake-tool culture of Flake-tradition is widely distributed in Western Europe, Africa, Western and southeastern Asia including India. No definite human group can be pointed out as the carrier of this culture, but many scholars believed that this industry was a contribution of *Neanderthal*-like Palaenanthropic men, who were probably the members of third stage of hominid evolution.

II. Levalloisian Culture:

The Levalloisian is named after a locality at Levallois-Perret, a suburb of Paris in France. This is a direct and indisputable association of Levalloisian flake tools with Middle Acheulean core-tools. In this way, the tortoise core technique or the technique of prepared striking platform can be pointed out as basic to Levalloisian culture which appeared first in the Middle Acheulean level. The technique was found to evolve during the Upper Acheulean or Micoquian level and its final expression was arrived in Proto-Mousterian and also in Levallois-Mousterian level.

It is predominantly a flake-tool culture of Flake-tradition. The technique of Levalloisian culture is quite different and it requires a careful preparation of the core. At first, the core is prepared to look like the back of tortoise. Thereafter, the flakes are detached from this specially prepared tortoise-core.

In fact, true levalloisian flakes are thin, small and their ventral surfaces show the evidence of a single flat scar. Besides, the faceted striking platform makes an angle of 90° with the flake surface. The striking platforms of most of these flakes exhibit a series of small, roughly parallel, vertical flake scars as the facets. They are the sign of initial preparation on the core before final detachment of the Levalloisian flakes. The positive bulb of percussion is small and flat as because the impact was mild. The development of Levalloisian culture may be shown under four groups on the basis of stratigraphical divisions of the findings along with the technological advancements.

a) Lower Levalloisian:

This phase is characterized by heavy flakes and blades knocked off from tortoise-core or prepared-core. The striking platforms are normally and especially roughly faceted.

b) Middle Levalloisian:

This phase is characterized by smaller, thinner and better retouched flakes than those of the Lower Levalloisian flakes. Numerous blades and rectangular blade-core appeared for the first time in this phase. Another feature is the presence of faceted striking platform. This phase may be labeled as the Proto-Mousterian.

c) *Upper Levalloisian:*

This phase is characterized by the regular occurrence of the hand-axes, triangular in shape. They occur in association with large and oval flakes of similar size as found in Lower Levalloisian phase. But, Upper Levalloisian large and oval flakes are invariably more thinner and show better workmanship on them. This phase may be termed as early Levalloiso-Mousterian.

d) *Final Levalloisian:*

In this phase, the retouched blades and triangles are struck off very carefully from the well-prepared cores. Typologically, the tools do not show much difference from the previous phase, but this phase presents a high esteemed workmanship which denote the Final Levalloisian culture and may also be called as the developed Levalloiso-Mousterian.

The geological age of this culture is the middle Pleistocene period. In terms of glacial age the culture is extended between the third glacial (Riss) and third inter-glacial (Riss-Wurm) periods. In fact, Levalloisian appeared as contemporary to Middle Acheulean and merged into the famous Mousterian culture.

This flake tradition is found well distributed in Western Europe, Africa, and in India, especially in soanian industries. Although no definite group is held as the carrier of this culture, but an early *Neanderthal* group seems to be responsible behind it who belonged to the third stage of hominid evolution.
