UTKAL UNIVERSITY
NAAC ACCREDITED A+

MASTER OF ARTS
HISTORY

SEMESTER-I

HIS-1.1: ANCIENT CIVILISATIONS

CREDIT: 4

BLOCK: 1, 2, 3 & 4

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C.D.O.E

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DIRECTOR

M.A in HISTORY: Ancient Civilizations
Brief Contents

Block No	Block	Unit No.	Unit
1	**Evolution of Human & Pre-historic Culture**	**1**	Stages and Growth of Human Evolution
		2	Characteristic features of Palaeolithic Culture
		3	Characteristic features of Mesolithic & Culture
		4	Characteristic features of Neolithic Culture

Block No	Block	Unit No.	Unit
2	**Major Civilizations of the Ancient World**	**5**	Characteristic features of Chalcolithic Culture
		6	Polity, art & religion of Egyptian Civilization
		7	Society, culture and Economy of Mesopotamian civilization
		8	Sumerian, Babylonian & Assyrian Civilisations

Block No	Block	Unit No.	Unit
3	**Ancient American Civilisation**	**9**	Polity, Society, Science & Technology of Chinese Civilisation
		10	Origin and Decline of Maya Civilisation
		11	Polity, religion, society of the Incas
		12	The Aztec-society, Cosmology, Economy

Block No	Block	Unit No.	Unit
4	**Ancient Greco-Roman & Persian Civilisation**	**13**	Polity, Philosophy & history of Greek civilization
		14	Athenian Democracy, & Sparta
		15	Society, Culture & Republic in Roman
		16	Socio-political and Economic History of Persian Civilisation

Centre for Distance and Online Education, Utkal University, Bhubaneswar.

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MATERIAL PRODUCTION

M.A History-13010309101: ANCIENT CIVILISATIONS

CONTENTS

BLOCK/UNITS

BLOCK 01: EVOLUTION OF HUMAN & PRE-HISTORIC CULTURE

Unit 01: Stages and Growth of Human Evolution
Unit 02: Characteristic features of Palaeolithic Culture
Unis 03: Characteristic features of Mesolithic & Culture
Unit 04: Characteristic features of Neolithic Culture

BLOCK 01: EVOLUTION OF HUMAN & PRE-HISTORIC CULTURE

Units 01: Stages and Growth of Human Evolution

STRUCTURE

1.1 Learning Objectives

After studying this lesson you will be able to:

i. Trace the evolutionary history of Homo sapiens and their ancestors.
ii. To understand the concept and various theories of human evolution on the earth surface
iii. Learn about the genetic relationship between humans and our closest living relatives.
iv. Trace the fossil history of the mankind and to Identify major fossil groups: Australopithecus, Homo Habilis, Homo Erectus, Homo-Neanderthalensis, and Homo sapiens.
v. Discuss that concepts like culture, religion and ethics evolved with humans.
vi. Early humans were primarily nomadic hunter-gatherers, relying on hunting, fishing, and gathering wild plants for sustenance.
vii. Stone tools, such as handaxes and choppers, were the primary implements for various tasks, including butchering animals and processing plants.
viii. The creation of cave paintings and engravings suggests a capacity for symbolic thinking and communication.
ix. Stone tools became more refined, with the development of microliths—small, specialized stone blades.
x. The establishment of permanent villages and towns marked a significant departure from the nomadic lifestyle of earlier periods.

1.2 Introduction

There are questions that have bothered mankind for ages such as from where did wecome from, when did our ancestors appear on earth? And there have been as numerous answers as there are religions in the world. But common to all early ideas was the concept of creation. It was almost universally accepted that the world and all its creations- plants, insects, birds, animals and human beings-were created at the same time by some supernatural being, call it God, or whatever. No wonder, the idea of creation was deep-rooted in almost all religious faiths and humans were considered to be the supreme creation of god. Science, however, looks at things differently. It tries to understand and observed facts on the basis of logical explanations and evidence wherever possible. In this lesson students will subsequently come across various aspects about human evolution such as the concept of evolution, ours primate heritage and phases of human evolution.

1.3 Theory and Fact of Human Evolution

Different theories have been given by different scholars, scientist, Anthropologist, religious teachers regarding the origin and evolution of man. During the 18th century, scholars grew increasingly interested in biological diversity and human origins. The following are some of the theories of human evolutions.

1.3.1 Theory of creationism

Before the scientific discoveries of fossils records, in the theological world the commonly accepted explanation for the origin of species came from **Genesis**, the first book of the Bible, wherein it is stated that God had created all life during six days of creation and this is known as the theory of creationism. According to creationism, biological similarities and differences originated at the Creation. Characteristics of life forms were seen as absolute; they could not change. Through calculations based on genealogies in the Bible, the biblical scholars James Ussher and John Lightfoot even claimed to trace the creation to a very specific time: October 23, 4004 B.C., at 9 A.M.

1.3.2 Theory of Catastrophism

Fossil discoveries during the 18^{th} and 19^{th} centuries raised doubts about creationism. In this circumstance a modified explanation combining creationism with catastrophism arose to replace the original doctrine. In this view, fires, floods and other catastrophes, including the biblical flood involving Noah‘s ark, had destroyed ancient species. After each destructive event, God had created again, leading to contemporary species. On this theory critics questioned that how did the catastrophists explain certain clear similarities between fossils and modern animals? And the proposer of this theory argued that some ancient species had managed to survive in

isolated areas. For example, after the biblical flood, the progeny of the animals saved on Noah‘s ark spread throughout the world.

1.3.3 Theory of Transformism/Evolution

The alternative to creationism and catastrophism was transformism, also called evolution. Evolutionists believe that species arise from others through a long and gradual process of transformation, or descent with modification. Charles Darwin became the best known of the evolutionists. However, he was influenced by earlier scholars, including his own grandfather. In a book called **Zoonomia** published in 1794, Erasmus Darwin had proclaimed the common ancestry of all animal species.

In 19th century, Charles Darwin put forward the idea that humans have evolved from apes, in his book *The Descent of Man*. Darwin based his hypotheses on his wide-ranging studies of plant and animal life, of different continents and island of the world, which he carried out during a five year voyage-from 1831 to 1836 on board the research ship HMS Beagle. On examining the hundreds of species of plants, animals and birds he had seen and collected during

Species close to the last common ancestor of gorillas, chimpanzees and humans may be represented by Nakalipithecus fossils found in Kenya and Ouranopithecus found in Greece. Molecular evidence suggests that between 8 and 4 million years ago, first the gorillas, and then the chimpanzees (genus Pan) split off from the line leading to the humans. Human DNA is approximately 98.4% identical to that of chimpanzees when comparing single nucleotide polymorphisms (see human evolutionary genetics). The fossil record, however, of gorillas and chimpanzees is limited; both poor preservation – rain forest soils tend to be acidic and dissolve bone – and sampling bias probably contribute to this problem.

Other hominins probably adapted to the drier environments outside the equatorial belt; and there they encountered antelope, hyenas, dogs, pigs, elephants, horses, and others. The equatorial belt contracted after about 8 million years ago, and there is very little fossil evidence for the split—thought to have occurred around that time—of the hominin lineage from the lineages of gorillas and chimpanzees. It has been argued in a study of the life history of Ar. ramidus that the species provides evidence for a suite of anatomical and behavioral adaptations in very early hominins unlike any species of extant great ape.[28] This study demonstrated affinities between the skull morphology of Ar. ramidus and that of infant and juvenile chimpanzees, suggesting the species evolved a juvenalised or paedomorphic craniofacial morphology via heterochronic dissociation of growth trajectories. It was also argued that the species provides support for the notion that very early hominins, akin to bonobos (Pan paniscus) the less aggressive species of the genus Pan, may have evolved via the process of self-domestication.

his voyage, Darwin could distinguish small changes in characters between similar species inhabiting different ecological niches. He summarized his findings in the book, *On the Origin of Species by Means of Natural Selection*, published in 1859, in which he described how one species could evolves into another more fit to survive in a changed environment, by a process which he called natural selection. Human beings, Darwin believed, evolved by a similar process. Charles Darwin also was influenced by Sir Charles Lyell, the father of Geology.

During his famous voyage to South America aboard the Beagle, Darwin read Lyell‘s influential book Principles of Geology, which exposed him to Lyell‘s principle of uniformitarianism, which states that the present is the key to the past. Explanations for past events should be sought in the long-term action of ordinary forces that still operate today. Thus, natural forces such as rainfall, soil deposition, earthquakes, and volcanic action gradually have built and modified geological features such as mountain ranges. The earth‘s structure has been transformed gradually through natural forces operating for millions of years.

Uniformitarianism was a necessary building block for evolutionary theory. It cast serious doubt on the belief that the world was only 6,000 years old. It would take much longer for such ordinary forces as rain and wind to produce major geological changes. The longer time span also allowed enough time for the biological changes that fossil discoveries were revealing. Darwin applied the ideas of uniformitarianism and long-term transformation to living things. He argued that all life forms are ultimately related and that the number of species has increased over time.

Charles Darwin provided a theoretical framework for understanding evolution. He offered natural selection as a powerful evolutionary mechanism that could explain the origin of species, biological diversity, and similarities among related life forms. Darwin proposed a theory of evolution. The theory of evolution, through natural selection, was Darwin‘s major contribution. Darwin postulated the theory that apes and human had a common ancestors. In his descent of man he discussed about human ancestry. According to him man descended from minute organisms, the simplest forms of distant past and from simple form evolved the complex form through various stages. The most complex form is represented by man.

1.4 Our place among primates

Our nearest relatives (animals with which we share common ancestry) are other members of the zoological order known as primates, which includes humans, apes, monkeys, and lemurs. Apes are our closest relatives. Similarities between apes and humans are evident in anatomy, brain structure, genetics and biochemistry. Many similarities between organisms reflect their common ancestry. In other words, organism‘s share features they have inherited from the same ancestor. Apes and humans belong to the same taxonomic super family, Hominidea (hominoids) means all two legged man like species extinct or living. Apes and humans are more closely related to each other than either is to monkeys. Most closely related to humans are the Africangreat apes: chimpanzees and gorillas. A more distant relative is Asia‘s great ape, the orangutan, which survives on two Indonesian islands, Gibbons and Siamangs are smaller and more widespread Asian apes. The primates share structural and biochemical homologies that distinguish them from other mammals

Human being belong to the large mammalian order of primates, with in that order, humans being is the members of genus homo means gean of afamily of hominidae, characterized by a relatively large cranial capacity, limbs structure adopted to a habitual erect postures and a bipedal gait, well developed and fully erect posture and a hand capable of power and precision, grips and ability to make, standardized precision tools using one tool to make another. Thus, human although belong the order of primates is the wisest among them owing to his intelligence and others physical features which separated human from rest of the mammals of primates order.

1.5 Primate Heritage

In course of search for missing link between primates and human to trace the evolution of mankind on the earth surface, in the 20^{th} century a numbers of fossils remains were discovered from different parts of globe. All those discoveries gives us a good ideas on the origin of human being. As per the paleontological study the primate fossil history dates back to 60 million years i.e. to Paleocene times, more specifically to the cretaceous age (Cretaceous is a geological age of our earth), the fossils of mammals of this period, their teeth, jaws and skulls bear affinities with Lemuroids. Next primates fossil record found in the Eocene times were comparable to modern lemurs except that their brain was smaller and teeth specializations were not found. There is a poor fossil record of primates in Oligocene times. Some 20 million years ago during Miocene times the fossils of **hominoids** appeared and towards the end of Miocene the old world monkeys appeared.

In the line of hominid evolution the major fossil record was that of ***Dryopithecus.*** This fossil had teeth like those of living apes, and long limb bones. ***Dryopithecus*** belongs to the sub-family Dryopithecinae which included chimpanzees, gorillas and orangutans. The next major fossil finds belong to Pliocene age dating back to 10 million years. Such fossils also belong to the late Miocene age. These rare fossils of subfamily Dryopithecinae belong to the genera ***Sivapithecus*** and ***Ramapithecus*** and were discovered in Siwalik hills of northern India. These fossils were the earliest recognizable hominid fossils along with those discovered in Kenya and Hungary. Subsequently, the genus ***Gigantopithecus*** was found both in Siwalik Hills and Pleistocene deposits of South China. All these fossils show certain hominid characters such as the shortening of the face, thickening of molar enamel and modest development of canines. The hominid nature of such fossils became obvious with the discovery of a beautifully preserved partial skull of a ***Sivapithecus*** discovered in **1982** by Pilbeam. The skull resembled that of orangutan. To sum up, although several late Miocene and Pliocene fossils were found there was

no real consensus that they belonged to hominids. The real hominid fossils did not appear, until Pleistocene times that is until eight million years before the present. In the subsequent discussion we will be discussing the hominid fossils that were ancestral to the genus ***Homo*** and provided evidence for the evolution of modern man.

1.6 Trends in Human Evolution

The world‘s climate began to get cooler in five to ten million years ago, and the rain forests of Africa were replaced with savannas and open woodland. In these climatic changes evolved a new kind of hominoid of bipedal order. These new hominoids are classified as hominids-that is, of the human line. There are two major groups of hominids: few species of the genus *Homo* and some species of the older, smaller-brained genus *Australopithecus*. In the subsequent paragraphs we will discuss *Australopithecus*, and then *Homo* along with their varieties based on the fossil findings.

Before our discussion on the fossil history of the humans we shall briefly look into those facts, which distinguish humans or genus *Homo* from his ancestors namely the apes. These differences are clearly indicative of the trends in human evolution which are to a certain extent supported by the available fossil evidence. Some of the general trends in human evolution which we will examine in the subsequent discussion are: The development of bipedalism so that the forelimbs are set free for performing specific tasks, the development of visual capacity which has been perfected by the evolution of a binocular stereoscopic vision, an increase in cranial capacity in order to accommodate a larger volume of brain, a receding forehead, development of opposable thumb and the development of arched feet, etc.

Besides the above mentioned anatomical changes other important factors that were responsible for delimiting the genus Homo are: Evolution of culture by which it is meant that individuals in a society formulate concepts and communicate them to the other members of the society and by evolution of communication to express their views among each other it is meant that language has to be developed as a fundamental medium of culture. We will also examine here the cultural advances of mankind as per the material evidence they left behind such as lithic tools and traces of art activities.

In subsequent paragraphs our analysis of human evolution would focus the trends we mentioned above in relation to fossil records. Whereas it is possible to obtain the fossil evidence for the anatomical traits we mentioned and to a certain extent to depict cultural evolution such as subsistence pattern and other cultural activities.

1.6.1 Australopithecines: The Earliest Hominins

The oldest known hominidae remains are classified as belonging to the genus Australopithecus and are found only in Africa. The first ever australopithecine fossil was found in 1924 at Taung, South Africa by famous anatomist Raymond Dart. It was the skull of a 5 year

old child still with its milk teeth showing a mixture of human and ape like features. What fascinated Dart‘s attention was that the rock in which the skull was embedded had been collected near other fossils that suggested that the rocks and their fossils were several million years old. Scientists estimate Dart‘s skull to be 5.8 million years old. Professor Raymond Dart coined the term ***Australopithecus*** *Africanus* (from the Latin *australo*, meaning ―southern‖ and the Greek *pithecus*, meaning ―ape‖), the ape from the south of Africa to describe the first fossil representative of this species, the skull of a juvenile that was found accidentally in a quarry at Taung, South Africa.

1.6.2 Other Australopithecus Species

In 1938, a second, stockier kind of *Australopithecus* was unearthed in South Africa. Called *Australopithecus robustus*, it had massive teeth and jaws. In 1959, in East Africa, Mary Leakey discovered a third kind of *Australopithecus* called *Australopithecus boisei* (after Charles Boise, an American-born businessman who contributed to the Leakeys‘ projects)—who was even more stockily built. Like the other australopithecines, *Australopithecus Boisei* was very old-almost 2 million years.

In 1974, anthropologist Don Johanson went to the remote Afar Desert of Ethiopia in search of early human fossils and hit the jackpot. He found the most complete, best preserved australopithecine skeleton known. Nicknamed ―Lucy,‖ the skeleton was 40% complete and over 3 million years old. The skeleton and other similar fossils have been assigned the scientific name *Australopithecus Afarensis* (from the Afar Desert). The shape of the pelvis indicated that Lucy was a female, and her leg bones proved she walked upright. Her teeth were distinctly hominid but her head was shaped like an ape‘s and her brain was about the size of a large orange.

In the subsequent years, three additional kinds of australopithecines have been reported. These seven species provide ample evidence that australopithecines were a diverse group, and additional species will undoubtedly be described by future investigators. The evolution of hominids seems to have begun with an initial radiation of numerous species. Based on stratigraphy of these fossil hominins, found at five main sites in South Africa, the time of these fossils can be placed in between 3 and 2 million year ago. Subsequent to this finding several additional skeletons, most of which were incomplete, were found. All such finds fell into two groups:

i) A lighter more progressive group or the **Gracile** type

ii) A heavier less progressive group or the **Robustus** type.

―Gracile‖ indicates that members of Australopithecus Africanus were smaller and slighter, less robust, than were members of Australopithecus Robustus. The trend toward enlarged back teeth, chewing muscles and facial buttressing continued in the South African australopithecines. However, the canines are reduced and the premolars are fully bicuspid. The

diet of Australopithecine was the vegetation of the Savanna, although these early hominins also might have hunted small and slow-moving game. As well, they may have scavenged, bringing home parts of kills made by large cats and other carnivores. Overall robustness, especially in the chewing apparatus, increased through time among the australopithecines.

In East Africa the site of Laetoli is located 50 kms south of Olduvai Gorge in Tanzania. In this site M. Leaky found in volcanic ash a twenty meter trail of footprints of three hominids of 3.75 million years age. Also fossil fragments of 13 individuals, mostly teeth and jaws with a few post-cranial bones were found. The discovery of fossil footprints of 3.75 million years old essentially suggests that upright walking had already developed to a great degree. This observation has to be viewed in relation to the brain size. Mostly the brain case of australopithecines ranged from 400 to 600 C.C. and was in fact much larger in proportion to that of the body which was about 1.2 meters tall and weighed around 23 kilograms. Most of the fossils were found in cave sites which mean that by 2 million years ago the use of caves as shelter has begun. It is believed that the males while collecting and bringing in the food for the families should have got their forelimbs freed. In other words bipedalism evolved in relation to the concept of provisioning for the family. The forehead was more rounded than chimpanzees and eyebrow ridges were still very prominent but less so than in chimpanzees. The jaws protrude prominently but less than those of modern apes. The dental arcades of australopithecines were intermediate between the apes and other advanced hominids in overall shape, in the size of the canines and in the prominence of cusps of premolars and molars. Thus, the characters of the australopithecines suggest a hominid ancestry in them.

From the available fossil evidence it cannot be precisely said the point of time at which the branching of the genus *Homo* from australopithecines took place. As date, there is reason to believe that A*ustralopithecus Africanus* could be the point from which the genus, *Homo* bifurcated. This hypothesis seems to be reasonable until new fossils suggesting a different line of bifurcation is discovered. Our discussion on the australopithecines, as the immediate ancestors of genus *Homo* ends here.

1.7 Homo Habilis or the Handy man

Oluvai Gorge is a deep gash running between the volcanic highlands and the Serengeti Plains of east Africa. The landscape of Olduvai gorge today is in many way similar to that seen by early man a couple of million years ago. The only differences is that in early times a lake occupied what is now the central part of the Gorge. It is here among exposed layers of clay and volcanic ash that remains of Homo Habilis, the first true member of the human family were discovered.

The first fragments of Homo Habilis fossils earthed by the British paleoanthropologist and son of Louis S.B. Leakey, Richard Leakey and his team around 1960, about the same time

that *Boisei* fossils came up. But at that time they didn‘t really provide any clue to the creature they belonged to. It was only in April 1964 that it was announced that 1.8 million year old fragments belonged to a new genus with features resembling humans more than apes was discovered. At the suggestion of Raymond Dart it was named Homo Habilis, or handy man. The name was quite appropriate as a large collection of primitive stone tools were also recovered at the same site, indicating that Homo Habilis was indeed quite adept at making tools.

Although the original Habilis fossils were discovered at Olduvai Gorge in Tanzania, the best specimens were unearthed later at Koobi Fora on the shores of Lake Turkana in Kenya. There in, 1972, Richard Leakey‘s team recovered the most complete skull of Homo ever found, along with thousands of fossils of other animals, and stone tools.

Even a causal look at the Habilis skull found at Koobi Fora was enough to convince anyone that it was more humanlike than apelike. The face of Homo Habilis was flatter than that of any of the Australopithecus species and its brain size was significantly larger-680 ml-although still only half as large as the average human brain today. So Homo Habilis must have been more intelligent than any of the earlier ape-like ancestors of man. But what is more significant is that the Habilis brain was not only bigger but also more complex than the brain of any of the Australopithecus species.

From the shape of the skull and the marks of its inner surface, brain specialist have identified a specific area in the Habilis brain similar to what is known as Barca‘s area in the human brain, which is essential for speech. This means that, although Homo Habilis had a brain only half as big as the human brain, it probably had the capability of uttering a few simple ‒words‖, but not much.

The appearance of Homo Habilis marked a quantum jump in the human evaluation process. Australopithecus Robustus and Australopithecus boisei which came before it were mare apelike, living an exceedingly primitive life, without articulate speech, with poor tools and weapons and probably surviving on a meatless diet. In which heralded not only the beginning of speech, but also the all important advantage of stone tools.

From the kind of stone tools found at Habilis sites one thing became clear, Homo Habilis was intelligent enough to gather the right kind of stone for making tools from places as far as 10 to 15 Km away and then shape them carefully in to various forms. From the way the tools were shaped by hand by flaking, one can tell that the first human like tool makers were right handed. They were possibly our earliest ancestors known to eat meat. The fossils sites also give an impression of group activity and some sort of social organization. Some scientists even conjecture that Homo Habilis saw the beginning of ritual and folklore typical human endeavors.

From the sampling of stone tools recovered from Habilis sites, it appears that the tools were quite useful. Small sharp –edged flakes chipped off larger stones formed tools for cutting

the meat from bones of dead animals. That such tools were actually been used for cutting meat is evident from the fine cut marks seen on fossil bone fragments unearthed as Habilis sites. The pattern of accumulations of these remains suggests that our early ancestors brought dead animals and tools to a common spot where meat was butchered.

On the basis of the fossils finds at Olduvai Gorge and Koobi Fora, we can build up a possible scenario in which Homo Habilis lived. The daily life at Olduvai represents a crucial juncture in human evolution. These earliest ancestors of ours shared the land with rich faunas-antelopes, pigs, birds, tigers and elephants which flourished in the salubrious climates of 1.85 million years ago, which was far cooler and wetter than today‘s parched plains. Like all primates Homo Habilis subsisted mainly on a diet of plant parts such as fruits and barriers and also roots and tubers which they dug up using pointed bones and also stone tools. In addition, the diet also included raw meat which they probably scavenged from the kills of other carnivores.

Although they were more enterprising than the earlier apes, Homo Habilis in all probability made their homes in the trees to escape from carnivores. We know this from their skeletal remains: they reveal that Homo Habilis had long arms well adapted to tree climbing.

From the study of fossils remains, other interesting facts about Homo Habilis have come to light. Patterns of tooth growth indicate that the family life at Olduvai was more like that of an ape than of humans. They indicate that Habilis children grew up nearly twice as fast as children of modern humans. This would also mean that our early ancestors would have been young adults by age 12, parents in their teens, and become old by the time they turned 30.

An interesting thing about the fossils finds at Olduvai Gorge and Koobi Fora is that all the sites where fossil remains of Homo Habilis have been located are also the sites which have yielded fossil fragments of Australopithecus boisei lived at the same time and possibly in the same terrains as Homo Habilis did. But we have no idea as to how the two coped with each other or whether they competed for food, which seems unlikely. Homo Habilis with much greater brain power and stone tools must have had a wider choice of food than the more primitive Australopithecus Boisei. No wonder, it would be the more advanced Homo Habilis that would now be on the direct road to human hood, leaving the others by the wayside.

It is now an accepted fact that the appearance of Homo Habilis was the turning point in human evolution; it marked a major milestone in the march of the lowly ape towards human hood. Most probably it was brought about by a sharp environmental change of the kind that had earlier provided the stimulus to primitive apes to come out of the forest and adopt to a life on ground. That this may really have been the cause is borne out by climatic data. Records show that after the global freeze about 6 million years ago the climate had warmed up again. But, around 5.5 million years ago temperature dropped again bringing in a little of ice age.

It was during this period, it is now believed, that the early ancestors of man split into two diverging branches. One branch leading to Australopithecus Robustus and the other to Homo Habilis, which subsequently led towards modern humans. By the time Homo Habilis died some 1.5 million years ago, a new, more advanced human ancestor had appeared on the scene. Named Homo erectus or the upright man, this large brained ancestor of ours was a true wanderer. It would become the first early humans to leave the cradle of the African continent and spread around the world.

1.7.1 Early Tools

The oldest obviously manufactured tools were discovered in 1931 by L. S. B. and Mary Leakey at Olduvai Gorge, Tanzania along with the fossils record of the species Homo habilis. This site gave the tools their name-Oldowan pebble tools. The oldest tools from Olduvai are about 1.8 million years old. Still older stone tools have been found in Ethiopia, Congo, and Malawi. Stone tools consist of cores and flakes. The core is the piece of rock from which flakes are removed; the core can be worked to become a tool itself. A chopper is a tool made by flaking the edge of such a core on one side. Oldowan pebble tools represent the world‘s oldest formally recognized stone tools. With the use of cores about the size of a tennis ball, flakes were struck off one or both sides to form a chopping or cutting edge. The flakes also could be fashioned into tools and were the basis of several later stone tool industries.Thus, Homo Habilis being capable of using his hand was the first species in the line of human evolution to manufactured stone tools for his sustenance. This species is popularly known as the handy man.

1.8 Homo Erectus: The Erect Man

In the last decade of the nineteenth century an unusual fossil discovery was made in the island of Java in South-East Asia that would turn out to be a landmark in the search for human origin. The discovery was made by Dutch Anatomist Eugene Dubois, who in the late 1880s developed a passion for finding the true human ancestor, the missing link between apes and modern man. At that time a dozen of discoveries of manlike fossils were known but nothing that could be considered as the missing link. Dubois was inspired by the writings of German Zoologist Ernst Haeckel, who was a strong supporter of Darwin‘s ideas. Haeckel reasoned that since humans and apes are closely related, then, if humans have indeed evolved from apes, there must have been some kind of an intermediate link between them. He had even given a name for that intermediate form. He called it Pithecanthropus, meaning ape like man. He even suggested where remains of such a creature would be found- in the bone caves of the Malay Archipelago. In 1887, Dubois sailed for the Dutch East India with the avowed intention of finding remains of fossil ape -man.

In 1889, two years after arriving in Java, Dubois set out on his search along the Solo River. In 1891, two key fossils turned up near the village Trinil- a tooth and a skull cap. The next

year, a modern looking thigh bone was found which clearly did not belong to an ape. The fossils were dated at about 1 million years. Realizing that the skull cap certainly belonged to a creature with a large brain and convinced that the tooth, skull cap and thigh bone came from the same individual Dubois was sure that he had stumbled upon the fossils remains of Haeckel‘s missing link. He called the creatures Pithecanthropus Erectus., because from the shape of its thigh bone there was no doubt that this ape-like man walked upright. To the public it would be known as Java Man. Dubois claimed that his Java man was the transition from which in accordance with the teachings of evolution, must have existed between man and the apes. Several other specimens of pithecanthropus were discovered later from the nearby sites.

Forty years later, in China, a young paleontologists, named W.C. Pei, found a similar skull cap embedded in deposits in a limestone cave in a large hill near the village of Zhokoudian, near Beijing. Pei‘s find was named *Sinanthropous Pekinensis* or Chinese man of Perking. To the public at large it was just the Peking man. The fossils of Peking man were less than 1 million year old. Today, of course, we know about both Java man and Peking man belonged to the same species Homo Erectus, a species intermediate between the first upright walking human ancestors and modern man.

The oldest and most complete specimens of Homo Erectus came up at a site at Nariokotome on the western shore of Lake Turkana in Kenya in 1984. The discovery of the fossils was made by Richard Leakey‘s team. It was almost an entire skeleton, fragmented, of course, of a boy, who must have been no more than nine year old when he died at the edge of the ancient lake, more than 1.5 million years ago. The specimens soon came to be known as the Turkana boy.

The age at which the Turkana boy died was inferred from his teeth growth pattern. At the time of his death his second molar was beginning to show through, in modern human children this would happen at the age of 11 and in apes at age seven. Since the place of Homo erectus was somewhere midway it was rescannable to assume that the boy had died when he was nine.

The discovery of the almost complete skeleton of the Turkana boy lay to rest the earlier ideas about the physical appearance of Homo Erectus. Ever since Dubois‘ time, it was ‗squat, heavy-boned and powerfully muscled‘ creature. The Turkana boy changed all that. According to Alan Walker- Richard Leakey‘s team mate who led the group that studied the skeleton- the boy would have grown to a tall, slender adult with a height not less than 1.8 m. he was build much like the people who live around Lake Turkana today- people whose long, slender limbs and bodies are good at shedding the heat load mercilessly imposed by the sun. what is more important is that the Turkana boy represented the earliest human ancestor known to science whose general body proportions marked those of living people.

In facial appearance, Homo Erectus was not much different from its predecessor, homo Habilis. The face still had protruding jaws, no chin, thick brow ridges and a long, low skull, although its teeth were somewhat smaller. But what distinguished it from its predecessors was its rather large brain, with a volume close to 1000 cc, compared to 680 cc for Homo Habilis and 1,350 cc for modern humans.

With its larger, more complex brain, Homo Erectus certainly had better intelligence than its predecessor and must have developed intellectual curiosity none of its predecessors was endowed with. it may even have had some capability of speech. We can tell about the higher intelligence of Homo erectus from the variety of advanced stone tools and weapons found at the excavation sites. These included large quantities of double-edges, teardrop-shaped hand axes and other sharp edged cutting tools.

Evidence from china and elsewhere where charcoal has been found at several sites suggests that Homo Erectus also know how to control fire and cook food. This may have been open of the factors that led to a reduction in teeth size in later human ancestors, because chewing cooked food needs less force than chewing n raw meat or uncooked food.

1.8.1 The Great Exodus and Aftermath

The larger brain capacity may also have endowed Homo Erectus with an urge to venture out beyond its immediate neighborhood in search of new pastures. Like humans today, he must have wanted to see what was on the other side of the mountains. Another factor that may have made Homo Erectus move out of Africa could be population pressure due to increasing numbers at the few favorable locations. But, whatever may have been the driving force, with its better hunting and foraging skills and substantially improved capability of exploiting the environment, Homo erectus may not have faced much difficulty in moving into a new unexplored territory. And so, with Homo erectus began the big exodus out of Africa, about 1 million years ago. They spread far and wide as fossil evidences from China, South-East Asia and from the Narmada Valley in India show. Surprisingly, no definitive fossil evidence of the presence of Homo Erectus has been found in Europe. The Ice Age glaciations prevailing in that part of the world at that time may have prevented the early human wanderers from venturing north onto the frigid ice-covered land, at least temporarily.

When populations of Homo Erectus began to move out of Africa about 1 million year ago, they carried their improved knowledge of tool making with them which was crucial for their survival in an unknown, hostile environment. As they spread across Europe and Asia, they improved their tool-making techniques-broad flakes gave way to narrow blades. The blades were further shaped to produce the finest of implements. These mute stones, products of a different kind of mind at work, tell the story of a real change in the path of human history.

Besides improved tool making, Homo Erectus migrant brought in a different kind of change. Faced with unfamiliar environments in their new homes, they rapidly evolved area-specific adaptations which helped them cope more successfully with the new environments. The change in skin colour may have been one of them.

As Homo Erectus moved into cooler lands of Europe, they found that sunlight was not as abundant as in their earlier home i.e. tropical Africa. Their brown skins would have been a problem. Not only was a layer of protective pigment no longer necessary against the mild sun, but the pigment would also have prevented the synthesis of Vitamin D in the skin. So some of the migrants living in cooler climates must have lost, over a few generations, much of the skin pigmentation, and become white skinned. In this way, regional physical distinctions may have become gradually established.

From the size of the skull of the Turkana boy it has been estimated that homo erectus were born with brains one third of the size of the adult brain, as in t modern humans. It is quite possible that the Turkana boy also must have come into this world in a helpless state, like modern human infant do. This could mean that the intense parental care of infants which is part of modern human social milieu had already begun to develop in early Homo Erectus, some 1.7 million years ago.

With its larger brain, and greater intelligence, Homo Erectus represented a pivotal point in human evolution. It can be said that whatever came before it was more apelike and whatever came later was more humanlike.

Over a period of a million years Homo Erectus evolved gradually. The above discussion shows that Homo Erectus pushed the hominin range beyond Africa-to Asia, Europe and Eurasia , as evidenced from the discoveries of fossils record from China and Indonesia in the east besides Africa. Small groups broke off from larger ones and moved a few miles away. They foraged new tracts of vegetation and carved out new hunting territories. Through population growth and dispersal, Homo Erectus gradually spread and changed. By around 500,000 years ago some of our ancestors looked sufficiently like us and sufficiently different from earlier Homo Erectus.

Homo Erectus first arose about 1.6 million years ago and is believed to have lived for at least 600,000 years at a time when the transition to *Homo sapiens* took place. The fossil finds of Homo Erectus indicate several first happenings in the human history.

- For the first time man became from being an opportunistic scavenger to a cooperative and big game hunter.
- For the first time he had come to know the use of fire.
- From being a mere stone scrapper, he became a systematic tool maker.
- There is evidence to indicate that he had home bases of campsites from where he operated.

- And also for the first time we had such fossils from outside Africa, in Eurasia. *Homo erectus* variously named as Pithecanthropus, Sinanthropus and Atlanthropus, first appeared during the Pleistocene interglacial period. Natural selection, it appears acted on specific characters which favoured the accumulated wisdom, such as increased body size, increased longevity, symbolic human-style culture, and loss of body heat.
- The cranial capacity of the pithecanthropine man ranged between 800 C.C. to 1125 C.C. The later populations of Homo Erectus were known as cave man or ape man**.**

The fossil evidence did suggest that Homo Erectus was very clever as compared to the apes but dull as compared to the modern man.

1.8.2 Tool of Homo erectus

Two specific skills of ***Homo Erectus*** make him stand apart from all his predecessors: i) skills as an efficient tool maker ii) skills as a cooperative game hunter. Both the skills could be associated with the larger brains they had. The tools made by ***Homo Sapiens*** were more refined than those of their immediate ancestors. The ***Homo Erectus*** **Species** was the real author of lower Paleolithic age. Stone tool making industry can be said to fall into two categories:

i) Tools of Oldowan industry which were simple, unspecialised and geographically restricted. Subsequently, the Oldowan industry developed more skill and sophistication as is known in South and East Africa.

ii) The Acheulian industry is characterized by large hand axes with fine workmanship. Such tools were abundant in regions from France to India. The Acheulian industry lasted almost a million years and probably ***Homo Sapiens*** also used these tools.

1.8.3 Big Game Hunting

The most important event that led to the evolution of modern man is his transition from being a hunter-gatherer to that of a big game hunter. During the middle Pleistocene times there were huge herds of very large mammals. Bones of such large mammals were found associated with the human fossil finds and the contemporary fossil tools. Initially the big game hunting was probably not carried out on a large scale and might have been cooperative venture. Here, several males surrounded a selected individual and killed it by the handiest method. The important point is that the whole process was a cooperative venture. It could be true that although the hunting was a cooperative venture, Homo Erectus could not have detailed any specific plan in advance because of the lack of communication skills. But the cooperative venture served one big purpose namely it enabled the formation of multi-family groups and socializing tendencies. In other words, big game hunting could have been the reason for the development of different social roles for males and females. This means the division of labour was being established and the role of female was getting confined mostly to child bearing and rearing children along with gathering of vegetal matter and slow game. The big game hunting brought certain changes in the physical

structure of the human beings. Man hunted the animals during the day time. This meant that the hard work of chasing and killing animals had to be done in the hot sun. Selection during these times favoured individuals that lost the metabolic heat faster than their fellow individuals. During these times possibly man had lost the thick hair of body and developed a high density of sweat glands in the skin. Man could effectively evaporate and cool all over the body.

1.8.4 Invention and Use of Fire

Another tool that Homo ***Erectus*** has learnt to use was fire and in fact man had multiple uses for fire. It is not very clearly known how man had learnt to tame the fire but he understood that it was a source of warmth at a time when the thick hair from the body was being eliminated. Man also found use in fire in scaring of large carnivores. With a generalized tooth row that he was now developing, it became important for him to soften the tough meat and vegetables. Fire was also used to harden the pointed wooden stakes so that it is converted into a spear. Finally, fire also contributed to the development of social behaviour.

The era of *Homo erectus* should have probably come to an end some 275 thousand years ago, but by that time all those salient characters that are found in modern man had come to be established in *Homo erectus.* It has not been possible for the paleontologists and anthropologists to determine precisely the time of transition from *Homo erectus* to *Homo sapiens* although the first fossils of *Homo sapiens* were at least 300,000 years old.

1.9 Homo Sapiens: The Wise Man

Africa, which was center stage during the australopithecine period, is joined by Asia and Europe during the Homo Erectus and Homo Sapiens periods of hominind evolution. Recent discoveries, along with reinterpretation of the dating and the anatomical relevance of some earlier finds, are filling in the gap between Homo Erectus and archaic Homo Sapiens. Archaic Homo Sapiens (300,000 to 28,000 B.P.) encompasses the earliest members of our species, along with the Neanderthals (130,000 to 28,000 B.P.) of Europe and the Middle East and their Neanderthal-like contemporaries in Africa and Asia. A rounding out of the brain case was associated with the increased brain size. Homo sapiens first appeared in the fossil record between 200,000 to 300,000 years ago.

There are only slight physical differences between Homo Erectus and Homo Sapiens and the transition between the two species is obvious from the earliest known groups of Homo Sapien, the Neanderthal man. Whereas Homo Sapien is characterized by a large and round brain case, smaller brow ridges and a more pronounced chin as compared to pithecanthropus, Neanderthals were more or less intermediate

1.9.1 The Neanderthals:

The first Neanderthal was found in 1856 in a German valley called Neander Valley-*tal* is the German word for valley. Scientists had trouble interpreting the discovery. It was clearly

human, yet different enough from modern people to be considered strange and abnormal. There have been numerous subsequent discoveries of Neanderthals in Central Europe and the Middle East. For example, Neanderthal fossils found at the Shanidar cave in northern Iraq date to around 60,000 B.P., as does a Neanderthal skeleton found at Israel‘s Kebara cave.

By 75,000 B.P., after an interglacial interlude, Neanderthals man again faced extreme cold as the Wurm glacial began. To deal with that environment, they wore clothes, made elaborate tools, and hunted reindeer, mammoths, and woolly rhinos. The Neanderthals were stocky, with large trunks relative to limb length that minimizes surface area and thus conserves heat. Another adaptation to extreme cold was the Neanderthal face, which has been likened to a Homo erectus face that has been pulled forward by the nose. This extension increased the distance between outside air and the arteries that carry blood to the brain and was adaptive in a cold climate. The brain is sensitive to temperature changes and must be kept warm.

The massive nasal cavities of Neanderthal fossils suggest long, broad noses. This would expand the area for warming and moistening air. Neanderthal characteristics also include huge front teeth, broad faces, and a rugged skeleton and musculature. Neanderthal teeth probably did many jobs later done by tools. The front teeth show heavy wear, suggesting they were used for varied purposes, including chewing animal hides to make soft winter clothing out of them. The massive Neanderthal face showed the stresses of constantly using the front teeth for holding and pulling.

Neanderthal man was distributed all over Europe, Asia and Africa. Their cranial capacity was larger than that of modern man. It is not very clear whether Neanderthals represent a stage in the evolution of modern man or whether they represent another race of modern man. Both modern man and Neanderthals were found together during the later part of Wurm glaciations and since this is so at one point, it indicates that the Neanderthals represent only another modern race. Neanderthals are known for their fine tool industry, the Mousterian industry in which the hand axe was slowly replaced by various tools. With prominent eyebrow ridges, they had a receding forehead and the cranial capacity was greater than that of modern man averaging about 1450 C.C. The teeth and jaws were large and heavy as compared to modern man and he had a receding chin. Indications are that he had a powerful neck musculature, robust limb bones and a skeleton more adapted to higher levels of activity and stress. Anatomy of the hand indicated a powerful grip. The stature was 1.5 meters and he was a cave dweller. Culturally Neanderthals appeared to be more advanced. They had the habit of burying dead ones with reverence as was evidenced by the presence of flowers in the burial centers. This group was biologically very successful and consisted of a homogeneous and widely distributed people.

1.9.2 The Homo Sapien Sapien: Cro-Magnon Man

Modern humans, Homo Sapiens Sapiens appeared in fossils some **33** thousand years ago. The first fossil was discovered from the Cro-Magnon shelter in France and hence the fossil was known as Cro-Magnon man. Subsequently many such fossils were known from France, Italy and Middle East. All such fossils exhibited reduced brow ridges, steep forehead, high rounded cranial vault, short face and pronounced chin. Being bulky, they were not as tall as Neanderthals. Structurally the Cro-Magnon man had a lot of resemblance to modern Europeans.

It appears that the stone implements of Cro-Magnon‘s man had a high technological perfection. Modern human being in Europe made tools in a variety of traditions, collectively known as Upper Paleolithic because of the tools‘ location in the upper, or more recent, layers of sedimentary deposits. Upper Paleolithic traditions emphasized blade tools. Blades were chipped off prepared cores 4 to 6 inches high, by hitting a punch made of bone or antler with a hammer stone. Blades then were modified to produce a variety of special-purpose implements. Some were composite tools that were made by joining reworked blades to other materials. Europe‘s Upper Paleolithic economy depended on cooperative hunting of mammoths, woolly rhinoceroses, bison, wild horses, bears, wild cattle, wild boars, and-principally-reindeer. Increasing sophistication and diversity in tool-making techniques are the varied special-purpose tools made by Upper Paleolithic populations. Scrapers were used to hollow out wood and bone, scrape animal hides, and remove bark from trees. Burins, the first chisels, were used to make slots in bone and wood and to engrave designs on bone. Awls, which were drills with sharp points, were used to make holes in wood, bone, shell, and skin. Upper Paleolithic bone tools have survived: knives, pins, needles with eyes, and fish hooks. The needles suggest that clothes sewn with thread-made from the sinews of animals-were being worn. Fishhooks and harpoons confirm an increased emphasis on fishing.

One could obtain in fossils long thin blades of various types. Further, Cro-Magnons had a taste for art. They made beads, carved statues and even engraved pictures. The cave paintings made by these men are a record of their aesthetic sense. Their burials were ceremonial and gave an indication of their cultured life. It could be said that with the appearance of Cro-Magnon, the modern human, the morphological evolution of humans is more or less complete and any further progress is relate to culture and language.

A significant shift in the pattern of the human activity has occurred beginning about 10,000 years ago. This shift manifested itself in various aspects of his life. For instance, there was a shift from hunting and gathering to agriculture. There was a shift in the tool making process also. From the Paleolithic age which was marked by making stone tools, he began to make his implements first in bronze and then in iron. And beginning 5,000 years ago special occupations developed, the cities began to be formed and the development of various aspects of

culture such as writing, history, wealth, leisure, science and arts took place. This can briefly be the evolution of modern humans.

1.10 An Overview of Hominid Evolution

In the above sections we discussed in detail the fossil record of primates in general and more particularly those of apes and the humans. Despite the fact that in recent years a number of hominid fossils have been discovered, the fossil history of humans is not complete and the evidence is only fragmentary. Therefore, it has become necessary that based on the available evidence we need to synthesize an acceptable path of human ancestry. It is only during the late Pliocene period the first remarkable hominid Australopithecus Afarensis (Lucy) appeared. The Australopithecus Afarensis led to Australopithecus Africanus which divided into two lineages: 1) to Australopithecus Robustus and Australopithecus Boisei which represented the termination of the australopithecine lineage. 2) the more progressive branch gave rise to Homo Habilis to Homo Erectus and finally to Homo Sapiens.

The fossil history of humans makes one thing clear that at any given time not more than one species of *Homo* existed, although many contemporary sub-species could have lived. The fossil evidence suggests that the origin of *Homo Sapiens* from *Homo Erectus* could have occurred during the middle Pleistocene times. While discussing the origin of modern man we mentioned that the Neanderthals were a separate race by themselves. The classical Neanderthal fossils of later date were found from Western Europe although the skeletons of early Neanderthals were found in Eastern Europe and Asia. Obviously the Neanderthal race, a modern but a distinct race from *Homo sapiens* occupied the old world as early the second interglacial period.

By around the fourth glaciations the classical Neanderthal man got separated from the main population. The *Homo Sapiens Sapiens,* it is believed, should have arisen from the main population and developed into a more progressive Cro-Magnon man. From the Eastern Europe the Cro-Magnon man invaded the West and replaced his Neanderthal cousins. Neanderthal fossils are at least 45,000 years old and are associated with Mousterian tools. About 40,000 years before the present skeletons of both Neanderthals and modern man could be found. Considering the fact that these fossils were found in Eastern Europe it is suggested that modern humans made their appearance in the Middle East Europe, moved out from there and replaced the Neanderthals. At such times inter-mating could have occurred between Neanderthals and Cro-Magnon man and the latter inherited the genes of the former.

Evolution is an ever continuing process, what we have discussed here is one aspect of human evolution. Currently man is evolving by adapting biologically to his own cultures. The evolution of cultures and civilization will be the subject matter of our next unit.

1.11 Summary

In this chapter we attempted to reconstruct certain aspects of human evolution based on the scantly fossil evidence that is available. You have studied that:

- The fact of evolution was known before Darwin and Wallace. The theory of evolution, through natural selection (how evolution occurred), was their major contribution. Natural selection requires variety in the population undergoing selection.
- Humans, apes, monkeys, and prosimians are primates. Anthropoids include humans, apes, and monkeys. All share several primate trends, including depth vision and color vision. The great apes are Orang-utans, gorillas, and chimpanzees. The African apes—chimps and gorillas—are our nearest relatives.
- The human evolutionary history can be traced back to 60 million years that is to the cretaceous age of the Palaeocene times. The Palaeocene primates possessed several of anthropoid characters such as the size of the body, the number of teeth, , and the structure of the canines.
- Towards the Miocene times the hominoids started making their appearance and the old world monkeys dominated the late Miocene times. The fossil of the genus proconsul, a pongid dating back to 17 to 21 million years before the present had / several of the hominoid characters and was the direct ancestor of Dryopithecus.
- About 10 million years before the present during the late Miocene stage the fossils of the genera Sivapithecus and Ramapithecus were found from the Siwalik hills of northern India. These were the earliest recognisable hominid fossils with characters which were a mixture of hominids and pongids.
- The human evolutionary history begins with the discovery of the hominid fossils. The trends that were observed in these fossils leading to the evolution of modern man were the development of bipedalism, increased cranial capacity, receding (forehead and brow ridges, development of stereoscopic binocular vision, development of an opposable thumb and the development of an arched feet.
- Based on fossil evidence it is observed that the hominid lineage separated from the australopithecines some 3.5 million years ago. The australopithecines became extinct with Australopithecus Robustus and Australopithecus Boisei. The hominid lineage passed through different stages such as Homo Habilis and Homo erectus before the modern man evolved. A race of modern human species the Neanderthals were possibly the connecting link between Homo Erectus and Homo Sapiens. The first Homo Sapiens Sapiens, the Cro-Magnon man possibly represented the transition between the Neanderthal man and the modern man.

- The process of evolution is still continuing. It may be happening that still human being is under the process of biological evolution but owing to our short life span we are unable to observe. We are only observing the evolution of mankind in the cultural part, where it still evolving and searching for more comfort and leisure by the employing advance technologies, even once used to roam in the forest as a denizen mankind is now searchingfor extraterrestrial land to settle him.

1.12 Key terms

- ***Australopithecus Afarensis:*** Early form of Australopithecus, known from Hadar in Ethiopia (–Lucy‖) and Laetoli in Tanzania; the Hadar remains date to 3.3–3.0 m.y.a.; the Laetoli remains are older, dating to 3.8–3.6 m.y.a.; despite its many apelike features, A. afarensis was an upright biped.
- **Archaic Homo Sapiens:** Early Homo sapiens, consisting of the Neanderthals of Europe and the Middle East, the Neanderthal-like hominins of Africa and Asia, and the immediate ancestors of all these hominins; lived from about 300,000 to 28,000 B.P.
- **Australopithecines:** Varied group of early hominins. The term is derived from their former classification as members of a distinct subfamily, the Australopithecinae; now they are distinguished from Homo only at the genus level, as Australopithecus.
- **Bipedalism:** Upright two-legged locomotion, the key feature differentiating early hominins from the apes. Evolution Belief that species arose from others through a long and gradual process of transformation, or descent with modification.
- **Gracile:** Opposite of ‒robust;‖ indicates that members of A. africanus were a bit smaller and slighter, less robust, than were members of A. robustus.
- **Hominid:** A member of the taxonomic family that includes humans and the African apes and their immediate ancestors.
- **Hominin:** A member of the human lineage after its split from ancestral chimps; the term hominin is used to describe all the human species that ever have existed, including the extinct ones, and excluding chimps and gorillas.
- **Homo habilis:** Term coined by L. S. B. and Mary Leakey; immediate ancestor of H. erectus; lived from about 5.0 to 1.7 m.y.a. mutation Change in the DNA molecules of which genes and chromosomes are built. m.y.a. Million years ago.
- **Natural selection:** The process by which the forms most fit to survive and reproduce in a given environment do so in greater numbers than others in the same population; morethan survival of the fittest, natural selection is differential reproductive success.
- **Neanderthals:** Members of an archaic H. Sapiens group that lived in Europe and the Middle East between 130,000 and 28,000 B.P.

1.13 Self Assessment Questions

1) Write briefly on the primate lineage of hominid ancestry.
2) How would you justify that australopithecines were human ancestors?
3) Make a comparison of the characters of *Homo Erectus* and *Homo Sapiens* based on fossil evidence.
4) What were the main differences between *Homo Habilis* and *Homo Erectus*? Was

   Homo habilis more like Homo *Erectus*, or more like the *Australopithecines*?
5) How does the geographic distribution of *Homo erectus* differ from that of the

   australopithecines? What did culture have to do with this difference?

1.14 Suggested Readings

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UNIT-II CHARACTERISTIC FEATURES OF PALAEOLITHIC CULTURE

STRUCTURE

Learning Objective

- **i.** Early humans were primarily nomadic hunter-gatherers, relying on hunting, fishing, and gathering wild plants for sustenance.
- **ii.** Stone tools, such as handaxes and choppers, were the primary implements for various tasks, including butchering animals and processing plants.
- **iii.** The creation of cave paintings and engravings suggests a capacity for symbolic thinking and communication.
- **iv.** To know about the major cultural phases of the primitive men.
- **v.** To understand the importance of stone tool for the development of human societies in primitive time.
- **vi.** To understand the appearance of metals in the life of primitive men and its impact on the subsequent period of human civilisation.
- **vii.** To learn the various concept of history such as culture and civilisations etc

Introduction

In the previous chapter of this unit we have discuss the story of human evolution. From there we come to know that life on earth was started from a simple cell and subsequently form developed into complex living beings in thousands of species. All these living beings have been changing and developing over time which is otherwise called as process of evolution. Humans, unlike other animals, are cultural beings. Culture is the sum total of the ways of living built up bya group and passed on from one generation to another. Culture includes all the daily activitiesand behaviour of mankind. The flexible hands helped the primitive man to

hold and make tools and so to create the material artefacts of culture. Culture is learned and not inherited; it permits rapid adaptation to changing conditions, making possible the spread of humanity to almost all the lands of the globe. With the appearance of Homo Erectus species cultures spread across the globe. The earliest humans lived by hunting, fishing, and collecting wild plants. Only some 10,000 years ago did they learn to cultivate plants, herd animals, and make airtight pottery for storage. These discoveries transformed them from gatherers to producers and allowed them to grow in number and to lead a settled life.

Beginning about 5,000 years ago a far more complex way of life began to appear in some parts of the world. In these places humans learned how to increase harvests through irrigation and other methods, making possible much larger populations. They came together in towns, cities, and other centres, where they erected impressive structures and where industry and commerce flourished. They developed writing, enabling them to keep inventories of food and other resources. Specialized occupations emerged, complex religions took form, and social divisions increased. These changes marked the birth of civilization. This chapters will reveals the material cultures of human being flourished in the prehistoric stone age thrived during the Pleistocene and subsequent Holocene epoch of the earth. The lesson will discuss the entire

human cultures from Palaeolithic or Old Stone Age to arrival of metal and appearance of civilisation in different parts of the world in various sections.

5.3 The Stone Age cultures.

The Stone Age is a broad prehistoric period during which stone was widely employed by man for manufacturing of implements or tools. The stone tools used by our primitive ancestors are the sources of study for the prehistoric society. The period lasted roughly 3.4 million years, and ended between 4500 BC and 2000 BC with the advent of metal working. Stone Age artifacts include tools used by mankind in the different stage of its evolution. Bone tools were used during this period as well, but are more rarely preserved in the archaeological record.

The Stone Age is further subdivided by the types of stone tools in use. The Stone Age is nearly contemporaneous with the evolution of the genus *Homo* from the stage of Homo Habilis to Homo Sapiens Sapiens. The period called Stone Age covers more than 98% of the total period of human history and is considered as pre-history as there are no written sources available for it. It is, divided into two broad periods the Palaeolithic or Old Stone Age, identified with the period when food gathering became the dominant form of living and the Neolithic or new Stone Age is identified with domestication of plant and animal by mankind there by human become a producer. In between Old Stone Age and the new Stone Age culture there is a transitional phase occur that is known as Mesolithic culture characterized by small stone tools or the so called microliths. During the entire Stone Age stage of mankind, the

prehistoric man manufactured so much of stone tools that, tools have been found in all parts of the globe, generally spread in and around the settlements inhabited by their users. In the subsequent paragraphs we will discuss the growth of tools and their technology for the whole of Stone Age cultures identifying clear stage of development in the tools, raw materials used and their technology.

5.4 The Paleolithic Culture

The early phase of Stone Age cultures is known in prehistory as Paleolithic age or the Old Stone Age culture. The word is derived from two Latin word *Paleo- Old* and *Lithic-Stone.* In literal *term* this is the Old Stone Age culture. During the whole of this period humans predominantly used stone tools. These tools underwent a lot of change like the types of stone used, the shape of tools, the way and purposes for which tools were used as also other materials used side by side with stone i.e. wood, bones and others. It was not only the tools which underwent change, even the physical features and anatomy of humans changed during this phase off human culture. One may mention Homo Habilis, Homo Erectus, Homo Sapiens, Neanderthals and Homo Sapiens Sapiens as the major human species using stone tools. Depending on the tool types, the human species and other cultural traits the Paleolithic period has been subdivided into lower Paleolithic, middle Paleolithic and upper Paleolithic.

In the archaeological context the objects excavated at the lowest stratum are the earliest and on the upper levels the latest. Therefore, the lower is the earliest while the upper the later Palaeolithic. Many scholars even further divide them into sub-sub divisions. In this context it is essential to keep in mind that in chronological terms these periods did not start or end around the same time in all regions inhabited by hunting gathering people. In certain regions use of tools, human types and cultural traits which identified middle Paleolithic or upper Paleolithic may be quite different from the others. Another point to be kept in view is that in no region or place one type of tools or human species or cultural traits were completely replaced by the other. There are at times some amount of overlap is clearly noticed in continuance of the types of tools and characteristics of users belonging to different periods.

5.4.1 Lower Paleolithic

In the last chapter we learn that the earliest hominids date back to around more than 2-6 million years. Their spread is mainly confined to Africa. Closely following them we have more developed hominid species known as Homo Erectus dating back to around 1.5 million years. They have been noticed till around 2, 50,000 years. Their presence has been recorded in fairly wide spread regions. Evidence for their presence is available in Europe, Africa and Asia. The presence of both these hominids has been confirmed by the presence of fossilized bone of skull fragments, tools and other artifacts. The period is referred as lower or earlier Paleolithic.

It is believed that regular tool making started with the emergence of Homo Habilis. The earliest stone tools dates back to 1.8 to 1.6 million years have been found in Olduvai Gorge

(North Tanzania) and Melka Kunture (Ethiopia). These tools are referred as Oldovian tools after their first finding in the Olduvai Gorge. They were put to use to cut plant foods, digging roots and to skin meat of small animals. It is believed that meat constituted a small proportion of food during this period. Procurement of meat at best was through scavenging of dead animals. The tools found at these sites are known as choppers and were made by removing flakes from one side of stone providing it with a cutting edge. The tools were mostly made from the stones available in locality with minimum changes in their natural form. It is suggested that probably flakes were also used for scrapping. Homo Habilis were the users of these tools.

Further changes in tools are noticed in Acheulian tools. These are available for a very long period of time, from around 1.4 million years to 2, 00,000 years in Africa and 1, 00,000 years in Europe. They draw their name from St. Acheul a site in North France. Homo erectus was the main users of these tools. Acheulian tools had a simple range which was used for chopping, cutting, piercing and pounding. These were effective for both butchering meat and preparing plant food. The hand axe and cleavers were the main tool types. The hand axes were pear shaped or tear drop shaped with a pointed end and a broad end. These hand axes had sharp cutting edge on both sides which was obtained by removing flakes from both sides towards the pointed end. The tools made by removing flakes from one side are termed unifacial and when removed from both sides are termed bifacial. Now for the first time a distinction between core tools and flake tools is made. Flakes were those pieces which were detached from a large block while core tools were those from which flakes were removed. Flakes could be used for tasks which required sharp edges. In many cases edges were retouched to obtain a desired edge or to facilitate holding in hand. Flaking was done with a hammer stone. It is noticed that certain materials were favoured for making tools in specific regions even if it meant procurement from some distance. Generally siliceous rocks, chert and quartz were used for small tools which required sharp and tough edges. Lime stones were used for heavier tools. Quartzite, sand stones and basalt were other materials in use. During this period existence of a few bone or ivory tools has also been confirmed. The Acheulian tools have been found in all sites of lower Palaeolithic cultures.

5.4.2 Middle Palaeolithic

During the long periods when Homo Erectus inhabited various pockets, some sub species began to develop in different parts. These were various species of Homo sapiens. Of these most robust and wider spread were Homo Sapiens Neanderthalensis. They were discovered in all parts of Europe. There were a number of variants of these which are traceable from around 400000 years. However, Neanderthal proper are more clearly to be found from around 230000 years and their stable lineage from around 100000 years to 40000 years. These

Neanderthals had a short and stout body, absent chin, protruding brow-ridges, a narrow forehead and an average cranial capacity of 1450 c.c. The period of flourishing of their culture is referred as Middle Paleolithic and their technology as Mousterian. The name is drawn from the site of Le Moustier in Southern France where their tools were found. The spread of Neanderthals is reported from Northern Africa; Southern Africa; East Africa; Europe and Asia.

The tools which are classified as Mousterian have been found in Middle Paleolithic sites. The main finds are from Europe and Asia and their users have been identified as various species of Homo sapiens and predominantly Neanderthals. A large number of different types of varying tools have been ascribed to this culture. Among the stone tool types found are scrapers, borers, knives, blades, burins etc. during this period five main type of tools are used such as;

1) Tool types predominated by borers, end scrapers, and knives. These may have been used to work bone and wood into shafts or hafts and to work skins for cordage. These tools are associated with tool making and maintenance activities.
2) Tool types, including three kinds of points, scrapers and burins. The inferred function is hunting and butchering.
3) Tool types mostly flakes and knives for butchering.
4) Tool types, including used flakes and scrapers. The suggested function is preparing wood and plant foods and possibly the scraping of bones.
5) Tool types, including a projectile-point type, discs, scrapers and blades. This kit appears to be a blend of hunting and butchering and perhaps other kinds of tools.

One significant aspect of the middle Paleolithic tools is the use of bones, horns and wood. Sharpened wooden sticks with points hardened with fire to be used and spears are indicative of the hunting of large animals.

5.4.3 Upper Palaeolithic

Homo sapiens Neanderthalensis gave way to Homo Sapiens Sapiens around 40000-35000 years back. These were like modern humans in physique, brain capacity, structure and facial features. The first fossils of this modern man were discovered in France and given the name Cro-Magnon after the rock shelter where it was found. There have been considerable debates among scholars as to whether this modern man first appeared in Africa, Asia or Europe. The latest researches are more inclined to indicate that it first appeared in Africa. The sudden disappearance of Neanderthals was also one of the complex questions. Most probable large scale migration and interbreeding with the new species led to the extinction of Neanderthal genes. This was the last phase of Paleolithic which lasted till around 12000 years back after which the Mesolithic culture appears. This phase as a whole is called upper Paleolithic. However, within this phase a number of cultures flourished with distinct characteristics, tool types and regional and geographic variations. The important phases of

upper Paleolithic are:

i) Aurignacian (34000 to 30000 years ago)

ii) Solutrean (22000 to 18000 years ago)

iii) Magdalenian (18000 to 11000 years ago)

Other small cultural groups identified are Perigordian, Gravettian, Szeletian etc. Upper Paleolithic culture has been recorded with a large number of evidences from all parts of the world including Australia, and North and South America. Their penetration into every continent, in different regions especially to Americas might have been deadly through frozen Tundra's and grassy plains and Australia moving through islands. It was probably made possible by their ability to adapt quickly and perfectly to changing conditions due to the growth of mental faculty. After the upper Paleolithic cultures and before the Neolithic cultures another phase of hunting and gathering cultures an intermediate stage called Mesolithic culture is also identified.

During the upper Paleolithic phase the art of tool making reached new heights with HomoSapiens Sapiens. Large variety of tools, regular use of materials other than stones, tools which could be used from a distance, composite tools through hafting, use of specials intermediary tools for making tools, manufacture of microlithic tools, and certain artistic and aesthetic sense intool making are some of the major achievements in tool making during this phase.

During this period technology of blade production was perfected. The shape of blade was regular with parallel edges to serve as knife. The tools were now processed by pressure flaking with stone, bone or wood. It was perfected by retouching the edge and point. Burin was perfectly made and was an important tool for engraving or drilling. New weapons for killing a prey at a distance were light spear, spear thrower and bow and arrows. It was probably around the later period of upper Paleolithic that bows and arrows made their first appearance. For making stone tools diverse materials like flint, horn stones, quartzite, quartz, clay stones and crystalline schist were used. Use of precious stones like rock crystal, chalcedony, obsidian, opal, agate and jasper etc. has been indicated. Many of these were acquired from distant places. The presence of non-local stone tools in a region indicates some sort of barters or exchange of materials.

The use of material other than stones is on a much larger scale in an organized manner. These were bones, horns, antlers, teeth, tusks and wood. These tools comprised standardized forms such as spear points, daggers various points, picks, polished tools, pins, needles, awls, hammers, cylindrical grinding implements, shovel-like and spoon like implements, clubs, perforated antlers and others which were designed for various important tasks. Some of them were composite tools or were lengthened by a handle. Many of these tools made of organic materials have not survived due to natural decay. Their remarkable feature is those have not

been found only in their natural form but have been worked upon through shaping and creating edges, points etc. Many available materials were put to other uses too such as hollowed logs as boats, concave stones as vessels or dishes.

Another important feature was introduction of very small tools called microliths. These were used as independent tools or were joined with some handle, or a sharp edge or harpoon or heads of projectiles for specialized tasks for hunting small animals, fishing, processing the hunted animal or giving shape to tools or engraving some aesthetic and art work. However, the full potential of microliths was exploited during the Mesolithic period only. Finally, now we notice use of tools for making tools. Patterns of flaking or tool working shows that several tools were made from the same stone indicating that the methods of tool making also advanced.

5.4.4 Habitation and way of life of Paleolithic man

The sources for reconstruction of mode of living, habitation, means of subsistence, disposal of dead and rituals and belief systems of hunting gathering people is fragmentary. Mostly the inorganic substances have survived while the degradable organic material have not. However, the small fragments, tools, artifacts, locations of finds and circumstances of their preservation throw some light about their habitation, means of subsistence and their social organisation. During lower Palaeolithic period very little is known about the dwellings of the

Homo Habilis. Their main food came from plants and a small proportion from scavenging dead animals or very small animal hunt which was probably consumed in raw form.

From the period of Homo Erectus we notice certain significant features like the use of fire, building dwellings, living in bands of 25-30 people, social relations and planned hunting. All these gave them a certain life style. Their shelters are in the form of natural caves as well as built dwellings which were oval or circular in shape. Tree branches and covering of skins were used to erect these. Presence of hearth in dwellings indicates regular use of fire. Now the meat was consumed grilled on fire or cooked in pits. The hearths are open. Hunting was a regular practice which was mainly the work of men while women were involved in gathering of plant food and foraging. Human groups lived separately but did come together on seasonal or cyclic manner. The movements of groups were within a limited territory.

During the period of Neanderthalensis and early Homo Sapiens Sapiens Cro-Magnon the methods of hunting, types of hunt, consumption of food, types of tool and the bones available at habitation sites suggest that large animals especially herbivores were also hunted along with smaller animals. We have evidence of hunt of large animals like bison, mammoths, horses, wild boar, reindeer, various species of deer and other cattle. In Europe Reindeer was the main animal hunted and around 90% of the bones available pertain to them only. The use of spears must have facilitated big game hunt. The hunt of large animals was a group activity

and confined to men folk. The hunted animals were to be shared by the whole group. Meat was consumed cooked, grilled or baked on fire. All parts of animals were consumed even the bone marrow was extracted with specific tools or by smashing the bones. The new item in animal food now added was fish and other water animals. Huge quantity of bones found in Kudaro caves in great Caucasus belongs to Salmon fish. In upper Palaeolithic availability of suitable tools for hunting and catching increased the proportion of fish.

In plant food also the variety seems to have increased. Tools for extracting roots were varied and the storage of plant food is also evident. Generally the consumption of plant food was dictated by the immediate environment and available flora. However, the subsistence needs were fulfilled through collection of food and exploiting the resources available in natural form without altering the nature. The available evidence also suggests the domestication of dog which was probably an asset in hunting operations.

Habitation sites of Neanderthals indicate that caves and sites were occupied repeatedly by different groups inhabiting these regions. The important cave sites are caves of Kilna (Moravia), Bockstein caves (Germany), Hortus Caves (Southern France), Shanidar Caves (Iraq) and Teshik-Tash Cave (Uzbekistan). Caves are more important for the finds of artifacts, bones etc. During upper Paleolithic period human made habitations and settlements are numerous as compared to earlier period. Caves and rock shelters available in habitation zones were continued to be occupied. Habitation sites seem to have been chosen near water bodies, rivers and fords as also near places where prey animals were available. The construction of huts is refined with clear demarcations. Wooden frames with covering made of skins were the main material used. Bones, stones and mud also appear to have been used. The shapes of huts are varied, irregular, oval, round and even kidney shaped. Some of these were temporary tent like while others of some permanent nature especially during the late Paleolithic. Apart from securing the dwellings the people protected their bodies with the use of animal hide.

Presence of hearths inside or outside is strongly indicated. These are open as well as covered and a tendency to preserve fire is suggested. Wood and even bones were used as fuel. The large deposits of ash and bones near the habitation sites indicate the size and frequency of using a site for long periods. As a way of life they seem highly mobile though the area of movement was limited. It is believed that this movement was within a small region. According to Leaky their movements were mainly restricted to specific territories usually 25-30 kilometers in all directions from a central water source or home base. It is also indicated that smaller groups came together for short periods where exchange of materials or mates might have taken place. Social relationships were strong. Some evidence suggests that wounded persons were looked after and the healing process is also evident which indicates social bonding and taking care of the sick persons in the group. During the middle Palaeolithic strong evidence is available to suggest that the dead were disposed off or buried by the surviving members of

groups. In Shanidar Cave in the Zagros Mountains of Iraq a burial, which is around 60,000 years old, probably of some leader or important person has been laid on bed of branches and even flowers are placed.

Around 50 burials were studied belonging to around 20 sites in Europe, Africa and Asia. Here around one third is children and a few women which indicate love and care for children as a few of them are new born. The burials are mostly in shallow trenches. The cemetery of La Ferrassie (France) contains the burial of a man, a woman and children. They probably belong to the same family. In many cases some tools, horn, animal bones and even flowers have been placed on the bodies and buried. In some cases red powder is sprinkled. These sorts of burials indicate some ritual practices associated with it.

2.4.2 Arts and communication

Various forms of arts have come down to us from Paleolithic societies. These are in the form of engravings, markings, colouring of bones, some polishing, or holes in bones etc. It is only with upper Palaeolithic period that we get a lot of evidence in the form of objects, artifacts, statues and cave or rock paintings and engravings. The most elaborate surviving art is in the formof rock or cave art. This is available in the form of drawings made on walls, ceiling or floor of caves. The engravings and colours have been used to draw them. The drawings mainly pertain to animal figures representing mammoths, deer, fishes, birds etc. Human figures are less frequently

drawn. Hunting scenes with weapons in the hands of hunters are also drawn. The most remarkable find of cave paintings is in Spain in the Altamira caves. The paintings done on the ceiling had bison, horses, deer, wolves and boars. These are life size and brown, yellow, red and black colours were used. These have been dated between 34000 and 12000 years. In Las Caux cave in France similar paintings were found, estimated to be around 15-14000 years old. The figures here are not merely portraits of animals but appear full of action, movement and life. Bulls, horses, stags, wild goats, bison, cows even lion are represented. Arrows or spears stuck in animals, even a dead man and a few geometrical designs are shown. In Africa and Asia a numberof such caves have been found. In India most important caves with prehistoric rock art is those ofBhimbetaka in Madhya Pradesh, which is a world heritage site. In Odisha, there more than 100 rock shelters and caves where rock paintings and engraving are discover.

A lot of similarities in subjects and style can be noticed. In most of the cases figures arejumbled up one on the other. Human figures wherever drawn are sketchy, stick like and onlylines have been drawn to represent them. The colours seem to have been obtained by natural mineral pigments of manganese oxide, ochre, even charcoal and applied through some sticks, brush like objects, or fingers. There is a lot of debate among scholars to ascertain the meaningand purpose of this cave art. Some see it as representing some sort of magic or ritual for hunting.

Other art forms are decorated tools of bones, horns or stones. A few decorated objects have been found which seem like ornaments. These were used to adorn arms, wrists, neck or feet. The decoration is done by colouring, drawing lines, engraving, polishing, drilling holes and giving specific shapes to art objects. Another example of art is in the form of statues or figurines. Famous Venus figurines such as the one found at Willendorf in Austria showing faceless female figure with bulging belly, heavy breasts and prominent genital organ smeared in red colour are also found in many places across the globe. Besides, animal figurines are also come from numbers caves in Europe and other part of world.

SUMMARY

- In this Unit we have tried to present an account of the evolution of hominids as a biological specie and hunting gathering cultures.
- Hunting gathering as a way of life spans almost 98 per cent of the period of existence of humans on earth. Hominids have lived on earth for more than 5.5 million years.
- In their hunting gathering mode of life humans underwent through a process of change and development. This period has been divided into three phases. Lower Palaeolithic, middle Palaeolithic and upper Palaeolithic with distinctive features.
- During the whole Palaeolithic period the tools used by humans passed through various stages of development. Oldovian, Acheulian Mousterian and upper Palaeolithic are main tool types. Stone tools represented the dominant tool type throughout the period. However, bones, ivory, horns and wood also came to be used in later phases.
- The pattern of habitation and settlement of hunting gathering cultures also changed during this period. Apart from caves and rock shelters they made dwellings of various types in almost all parts inhabited by them. Discovery and use of fire had a lot of impact on food consumption and way of life during the Palaeolithic period.
- In the Palaeolithic cultures we come across arts in various forms. Some important ones were cave paintings, decorative arts and statues which have come down to us from various Palaeolithic settlements.
- The Palaeolithic culture was succeeded by Mesolithic cultures characterised with use of pigmy tools or small stone tools.

KEY TERMS

1. **Oldowan:** Earliest (5.5 to 5.0 m.y.a.) stone tools; first discovered in 1931 by L. S. B. and Mary Leakey at Olduvai Gorge.
2. **Palaeolithic:** Old Stone Age (from Greek roots meaning ‑old‖ and ‑stone‖); divided

into Lower (early), Middle, and Upper (late). robust Large, strong, sturdy; said of skull, skeleton, muscle, and teeth; opposite of gracile.

3. **Theory:** A set of ideas formulated (by reasoning from known facts) to explain something. The main value of a theory is to promote new understanding. A theory suggests patterns, connections, and relationships that may be confirmed by new research.
4. **Uniformitarianism:** Belief that explanations for past events should be sought in ordinaryforces that continue to work today.
5. **Upper Palaeolithic:** Blade-tool-making traditions associated with early H. sapiens sapiens; named from their location in upper, or more recent, layers of sedimentary deposits.

SELF ASSESMENT QUESTIONS

1. How archaeology does help us in knowing about early cultures?
2. Give a brief account of the periodisation of Palaeolithic cultures.
3. Discuss in brief the evolution of hominids to Homo sapiens sapiens stage.
4. How upper Palaeolithic are tools an improvement over earlier tools?
5. What were the means of subsistence of Palaeolithic people?
6. Write a short note on the habitats of upper Palaeolithic people.
7. What sort of art forms is found in the Palaeolithic culture?

Further Reading

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UNIT 03 CHARACTERISTIC FEATURES OF MESOLITHIC CULTURE

STRUCTURE

Learning Objectives

i. Some communities began to experiment with early forms of plant cultivation and animal domestication, marking a shift towards a more settled lifestyle.

ii. Stone tools became more refined, with the development of microliths small, specialized stoneblades.

iii. Regional variations in tools and cultural practices began to emerge as populations adapted to their specific environments.

Introduction

In European landmass Mesolithic began with the Holocene warm period around 11,660 BP and ended with the introduction of farming, the date of which varied in each geographical region. Regions that experienced greater environmental effects as the last glacial period ended have a much more apparent Mesolithic era, lasting millennia. In northern Europe, for example, societies were able to live well on rich food supplies from the marshlands created by the warmer climate. Such conditions also delayed the coming of the Neolithic until as late as 5000-4000 BC in northern Europe. Spread of Neolithic cultural trait including farming, herding, polished stone axes, timber longhouses and pottery into Europe, resulting the marginalized Mesolithic way of life and its eventually disappearance. Mesolithic adaptations such as sedentism, population size and use of plant foods are cited as evidence of the transition to agriculture. However in north-Eastern Europe, the hunting and fishing lifestyle continued into the medieval period in regions less suitedto agriculture.

The small or pigmy type of tool remains the diagnostic factor of Mesolithic culture.

Microliths or small size (1 to 5 inches long) were used in the manufacture of more efficient composite tools, resulting in an intensification of hunting and fishing and with increasing social activity the development of more complex settlements. Domestication of the dog as a hunting companion probably dates to this period.

Mesolithic culture followed the Aurignacian . By the end of the Aurignacian, gradual changes took place in stone industries. Small stone tools called microliths and retouched bladelets can be found for the first time, this period is more properly called Epipaleolithic. By 20,000 to 18,000 BCE the climate and environment had changed, the cool and dry period ended starting a period of transition. The arid climate resulted depletion of forest and replaced by steppe. The hunter-gatherers of the last part of upper Palaeolithic cultures would have had to modify their way of living and their pattern of settlement to adapt to the changing conditions. The crystallization of these new patterns resulted in early phase of Mesolithic. New types of settlements and new stone industries developed. The inhabitants of this phase left little more thantheir chipped stone tools behind. The industry was of small tools made of bladelets struck off single-platform cores. Besides blade lets, burins and end- scrapper were found. A few bone toolsand some ground stone have also been found.

3.3 Mesolithic Culture

The period starting from the end of the last ice age, 10,000 years ago, to around 6,000 years ago was characterized by rising sea levels and a need to adapt to a changing environment and find new food sources. The development of microlith tools began in response to these changes. They were derived from the previous Palaeolithic tools, hence the term Epipalaeolithic, or were intermediate between the Paleolithic and the Neolithic, hence the term Mesolithic or Middle Stone Age has been employed. The Mesolithic (Greek: mesos "middle", lithos "stone") is an archaeological concept used to refer to specific groups of archaeological cultures defined as falling between the Paleolithic and the Neolithic. The term refers to material that did not fit into the other categories of prehistory. The term "Epipaleolithic" is often used for areas outside northern Europe but was also the preferred synonym used by French archaeologists until the 1960s.

The term is used to refer to different time spans in different parts of Eurasia. It was first used to refer to post-Pleistocene but pre-agricultural material in northwest Europe about 10,000 to 5000 BCE but is also applied to material from the Levant (about 20,000 to 9500 BCE); in Japan the Jomon period (about 14,000 to 400 BCE) is sometimes called Mesolithic.

In the archaeology of northern Europe, for example for archaeological sites in Great Britain, Germany, Scandinavia, Ukraine, and Russia, the term "Mesolithic" is almost always used. In the archaeology of sub-Saharan Africa, Lower Palaeolithic is replaced by "Early Stone

Age," Middle Palaeolithic is replaced by "Middle Stone Age" and Upper Palaeolithic by

"Later Stone Age" according to the to the terminology introduced by John Hilary Goodman and Clarence van Riet Lowe of South Africa in the early 20th century.

3.4History of the Concept

The three lithics age are subdivisions of the Stone Age in the three-age system developed since classical times and given a modern archaeological meaning by Christian Jurgensen Thomsen, a Danish archaeologist, in the early 19th Century. Subdivisions of "earlier" and "later" were added to the Stone Age by Thomsen and especially his junior colleague and employee Jens Jacob Asmussen Worsaae. John Lubbock kept these divisions in his work *Pre-historic Times* in 1865 and introduced the terms Paleolithic ("Old Stone Age") and Neolithic ("New Stone Age"). He saw no need for an intermediate category. It was Hodder Westropp, who in 1866 introduced the term Mesolithic as a technology intermediate between Palaeolithic and Neolithic. By the time of Gordon Childe's work, *The Dawn of Europe* (1947), which affirms the Mesolithic, sufficient data had been collected to determine that the Mesolithic was in fact necessary and was indeed a transition and intermediary between the Palaeolithic and the Neolithic.

3.5 Salient Features of Mesolithic Culture

The time frame of Mesolithic varies by geographical region. Childe's view prevails that the term generally covers the period between the end of the Pleistocene and the start of the

3.5.1 Characteristics

The Mesolithic era, also known as the Middle Stone Age, falls between the Paleolithic (Old Stone Age) and the Neolithic (New Stone Age). This period is characterized by several distinctive features that reflect changes in human adaptation, technology, and social organization. Keep in mind that Mesolithic cultures varied across different regions, and not all features were universally present. Here are some characteristic features of Mesolithic culture:

- **Microliths**:

Mesolithic tool technology is marked by the use of microliths, small and finely crafted stone blades or points. These were often mounted onto shafts to create composite tools.

- Hunter-Gatherer Lifestyle:

Mesolithic communities were predominantly hunter-gatherers, relying on a mix of hunting, fishing, and gathering for sustenance.

- Seasonal Mobility:

While more settled than their Paleolithic counterparts, Mesolithic groups were still often mobile, moving seasonally to exploit different resources.

- Adaptation to Local Environments:

Mesolithic cultures exhibited a greater ability to adapt to local environmental conditions, resulting in diverse subsistence strategies and toolkits..

- Use of Watercraft:

In some regions, Mesolithic communities developed watercraft, allowing them to exploit resources along coastlines and rivers more efficiently.

- Increased Social Complexity:

Mesolithic societies began to show signs of increased social complexity, with evidence of more elaborate burial practices and social differentiation.

- Domestication Experiments:

Some experimentation with early forms of plant cultivation and animal domestication occurred during the Mesolithic, although full-scale agriculture would emerge later in the Neolithic.

- Cultural Diversity:

Regional variations in Mesolithic cultures are observed, reflecting adaptations to specific ecological niches and local resources.

- Tool Specialization:

Tools became more specialized for different tasks, reflecting a more sophisticated understanding of the environment and the development of specific hunting and gathering techniques.

- Clothing and Textiles:

The development of tailored clothing and textiles from plant fibers or animal hides marked a step towards a more sophisticated lifestyle.

- Burial Practices:

Mesolithic burial practices varied, with some groups engaging in complex burial rituals and the inclusion of grave goods.

3.5.2 Transition to Agriculture

Some communities began to experiment with early forms of plant cultivation and animal domestication, marking a shift towards a more settled lifestyle.

3.5.3 Improved Tool Technology

Stone tools became more refined, with the development of microliths—small, specialized stone blades.

3.5.4 Cultural Diversity

Regional variations in tools and cultural practices began to emerge as populations adapted to their specific environments.

3.6 The Stone Age Culture

The Stone Age is a broad prehistoric period during which stone was widely employed by man for manufacturing of implements or tools. The stone tools used by our primitive ancestors are the sources of study for the prehistoric society. The period lasted roughly 3.4 million years, and ended between 4500 BC and 2000 BC with the advent of metal working. Stone Age artifacts include tools used by mankind in the different stage of its evolution. Bone tools were used during this period as well, but are more rarely preserved in the archaeological record.

SUMMARY

- It's important to note that the Mesolithic period is transitional, bridging the gap between the nomadic, hunter-gatherer lifestyle of the Paleolithic and the more settled, agricultural communities of the Neolithic. The characteristics of Mesolithic cultures laid the groundwork for the subsequent develop ents in technology, social organization, and subsistence strategies during the Neolithic era

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- The lavish life of mesolithic required such luxury products such as incense, oil, silver,

timber for building and other things which had to be brought from foreign countries. Internal and foreign trade was controlled by the king. Transport of goods overland was done on pack asses. The Nile was uses as a waterway. The Egyptians had also sea-going ships which were used both in war and for peaceful purposes.

- The culture believed that there was a power behind every phenomenon of nature, but the sun was their most important god, worshipped under different names s the creator of univers.

Key Terms

Mesolithic: The Middle Stone Age'. Represents a period of transition from the Paleolithic hunter-gathers of the last glaciation, to the Neolithic farmers of the post-glaciationperiod.

Microlith: Small size stone tools used by prehistoric man during Mesolithic Age.

Olduvai GorgA George in Tanzania, Africa famous for discovery of fossils remains of earlyhuman species.

Unifacial: Paleolithic stone tools with flaking in one side.

SELF ASSESMENT QUESTIONS

1. How did the technological innovations of the Mesolithic era, particularly the development of microliths, contribute to changes in hunting and gathering strategies, and what implications did these changes have for the social organization and mobility of Mesolithic communities?
2. Discuss the artistic expressions of Mesolithic cultures, including cave paintings, engravings, and carvings. How do these artistic representations provide insights into the cognitive and symbolic capabilities of Mesolithic communities, and what themes or patterns can be identified across different regions?
3. Examine the role of environmental adaptation in shaping the diversity of Mesolithic cultures.
4. Evaluate the evidence for the emergence of social complexity in Mesolithic societies, considering aspects such as burial practices, social differentiation, and the presence of symbolic artifacts. To what extent did these indicators reflect the development of more organized and stratified social structures during the Mesolithic era?

FurtherReading

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UNIT IV CHARACTERISTIC FEATURES OF NEOLITHIC CULTURE

STRUCTURE

Learning Objectives

i. Agriculture became the dominant mode of subsistence, leading to the domestication of plants and animals. This shift allowed for settled communities and surplus food production.

ii. The establishment of permanent villages and towns marked a significant departure from the nomadic lifestyle of earlier periods.

iii. The Neolithic saw the development of pottery and more advanced stone tools, such as polished axes and blades.

iv. With surplus food, social hierarchies emerged, and communities became more organized, possibly with leaders or chiefs.

v. Evidence of ritualistic practices and religious beliefs, often tied to agricultural cycles and fertility, is found in artifacts and structures.

Animals, including cattle, sheep, and goats, were domesticated for various purposes, such as food, labor, and textiles

INTRODUCTION

Neolithic. The times of these events vary greatly; moreover, the various Mesolithics within the span might be as short as roughly a thousand years or as long as roughly 15,000 years depending on the circumstances.

The Paleolithic was an age of purely hunting and gathering while in the Neolithic

domestication of plants and animals had occurred. Some Mesolithic peoples continued with intensive hunting. Others were practising the initial stages of domestication. Some Mesolithic settlements were villages of huts. Others were walled cities.

4.2 The Neolithic Culture

In archaeological terms the Neolithic period followed the Palaeolithic and Mesolithic periods. The concept of Neolithic was introduced by the archaeologist John Lubbock in 1865 to differentiate it from the Old Stone Age or the Palaeolithic. Etymologically the term "Neolithic" is derived from two Greek words – "neo"meaning new and "lithos"meaning stone. Till the mid twentieth century the term Neolithic was associated with the period represented by new ground and polished tools. That the term implies much more than the use of new tools and encompassesa change in the life of hunter-gatherers has been sufficiently established now. The domestication of plants and animals and near total dependence on farming, increase in population and in thesize of settlements, use of pottery and weaving, greater social and cultural interaction among people are some of the features associated with Neolithic. In most societies of the world the Neolithic period preceded the emergence of a complex society and a civilization.

The term Neolithic Revolution was used by V. Gordon Childe in his book *Man Makes Himself* (1936) to highlight the revolutionary significance of the beginning of agriculture in the world. According to him, the period followed the acute climatic crisis of the early Holocene and made humans active partners with nature instead of parasites on nature. Fresh research has however proved that climatic change was neither sudden nor drastic. Following the last period ofglaciations, temperatures rose gradually. It was finally around 10,000 years ago that the climate grew progressively warmer. Climatic change, which fell short of a crisis, nevertheless had a far- reaching impact on the patterns of existence. Some scholars have raised objections to the word revolution' to characterize the change. However, the transition to agriculture and stock-raising were so crucial for the social and economic organisation of human communities that he term revolution has been used to highlight the consequences of beginning of agriculture. For Childe, therefore, food production was the greatest economic revolution in human history after the mastery of fire. Now there was a possibility of a storable surplus for communities to use variously. It could be used during time of crisis, could support a larger population and could be exchanged. It should be remembered that not all early agricultural societies had a food surplus to depend on. Besides, the Neolithic way of life has now come to be associated with a long period of evolution rather than representing rapidity of change. Several parts of the world are now associated with the beginning of agriculture, in the subsequent paragraphs our focus would be onsome of the other aspects of this stage of cultural transition.

4.5.1 Changes in dietary pattern

One of the first consequences of the Neolithic way of life was a radical change in human diet. Whereas the Paleolithic diet was mainly meat-based, it became more and more diversifiedin the Mesolithic. Now, in the Neolithic, it was based primarily on cereals – wheat and corn in western Asia and Europe, rice in southern and eastern Asia, sorghum and millet in Africa, maize in America. The development of the food producing economies took place in two stages. Thefirst saw some farming and herding of animals and bulk of the diet came from game and wild vegetable foods. The next stage came about 8000 years ago when more productive cereal grains and cattle, sheep, goats and pigs were completely domesticated. This created the fully agricultural and stock-raising economy that persisted into historic times, of course in more elaborate forms. The domestication of animals added an entirely new element in the diet: milk and its derivatives. The replacement of a meat diet with a largely vegetable one necessitated the use of salt which became an item of trade.

4.5.2 Settlement pattern

The domestication of plants and animals seemed to have brought about significant changes in the way people lived. A sedentary way of life was one of the main consequences of food production. Earlier it was felt that a site was permanently settled if it contained artifacts like flint sickles, blades, querns (milling stones) and facilities like storage pits. Research has shown that there have been villages without such tools and without farmers. For instance, during the Upper Paleolithic and the Mesolithic advanced hunter-gatherers who adopted an annual migratory cycle and practiced seasonal nomadism, lived in camp like dwellings. Early Neolithic villages in Mallaha (northern Israel, inhabited around 11,000 BP.), Tell Mureybit (Syria) and Suberde (Turkey) were more dependent on intensive collection of wild food. The pattern of settlement changed over a period of time. The Neolithic way of life had considerable demographic consequences. Even in the absence of reliable figures or statistics it can be said thatpopulations were increasing. In almost all the Neolithic cultures, the number and size of settlements and the number of cemeteries considerably increased in the Neolithic compared with earlier periods.

Excavations in Cayonu, Jericho and Jarmo and in the Mediterranean islands of Crete and Cyprus have revealed successive levels of occupation at the same sites. This had resulted in mounds and an increase in the circumference of the site. The Neolithic village of Jarmo was occupied more than 7000 years ago and measured approximately three to four acres. It was a cluster of about 24 houses built of baked mud. These were repaired and rebuilt on the same spot, perhaps to economies on land and to guard against floods. As a result of the very frequentreoccupation of the area, the elevated areas created about 12 distinct levels of occupancy. Villages of mud-plastered walls, as in Jarmo and pavements of limestone cobbles and stone wallsin Cayonu, hint at a somewhat elaborate village network of about 150 people.

Beidha (Jordan) reveals two types of settlement. It is easy to distinguish between the layers of Natufian open-air settlements which had living floors with post- holes and sunken hearths which suggest a temporary settlement and the substantial semi-subterranean round house up to four meters in diameters and built with stone walls of the subsequent Neolithic period. A terrace wall to retain the sand dunes on which it was built surrounded the village, entered by a few stone steps. When the village was rebuilt, after the fire of 8,650 BP., the houses were freestanding and rounded. They finally became rectangular in shape. As compared to these, a rectangular plan of houses existed in Jericho from the very beginning of the PPNB phase. A rock-cut ditch more than 9 feet deep and 10 feet wide was bordered by a finely built stone wall with towers. The bee- hive shaped huts of Jericho were within these defenses. While the Neolithic sites here date from 10,500 years ago, the defense wall was constructed about nine thousand years ago. While the exact reasons for the wall are not clear, the competition for scarce resources and the need for defense was perhaps one of the reasons for it.

About 8000 to 7000 years ago, the Neolithic settlement of Catal Huyuk covered about 32 acres. Numerous houses of sun-dried bricks of standard sizes were built. The foundation of houses also consisted of mud bricks. The houses were rectangular with a small storeroom attached to them. They were designed to back onto one another, occasionally separated by small courtyards. The insides of the houses show a remarkable consistency of plan with specific areas for resting, cooking and for worship. The entrance to the houses was through the roof, access to which could have been with the help of a moveable ladder. This could have provided protection against outsiders and floods. This system of defense must have been quite successful because theonly form of destruction suffered by Catal Huyuk was fire. In Europe, initially Greece or rather the Aegean world, where Neolithic began nine thousand years ago, i.e., about two thousand yearslater compared with Anatolia, the buildings were mainly made of sun-dried bricks, wood and wattle and daub. The settlements of the Yangshao culture in the Henan province in China go back to c.7100 to 4900 years ago. Life had become sedentary and settlements measured from tens of thousands to a hundred thousand or more square metres. Some of the villages had defensive moats. The houses were either semi-subterranean or surface buildings of wooden constructions. The remains of the houses show that the Yangshao culture had reached a high level of competence in house building. SO far as Indian subcontinent is concerned the Neolithic settlement of Mehergarh in Baluchistan is noteworthy.

4.5.3 Tools Technologyy

Cultivation and all the processes associated with it like clearing of forestland, turning over of the soil, sowing of seeds, harvesting, thrashing and grinding of cereals, required special tools. There had been some attempts in this direction during the Mesolithic.

A digging stick and a hoe were some of the early tools used to prepare the ground for cultivation. While a hoe helped in turning over the soil, a digging stick was used to dig furrows in soil for planting seeds. Reaping knife and sickle helped in harvesting ripened plants. Cereals like wheat and barley had to be separated from the husk by threshing and winnowing, and then ground into flour. The grinding and pounding tools like mortars, querns and pestles had to be of tough stone.

However, only certain artifacts used for cutting like axes or adzes were polished. Moreover the technique of polishing was only a minor innovation for it involved application to stone of an earlier technique for working bone that had been in use since the Upper Palaeolithic or perhaps even earlier. New technology was being devised for the manipulation and exploitation of plants and other sources of food. A specialised tool like a sickle was made by attaching short blades of flint on to a wooden handle. The sickle blades of Jarmo (Zagros Mountains) were made of chipped flint. When used for harvesting grain they could be mounted on a piece of wood or bone. For the first time the farmers of this region began using tools of obsidian – a volcanic glass which provided a cutting edge sharper and harder than stone. Tools like axes were polished by rubbing the edges on stones because people must have realised that they could fell trees more effectively with a polished axe than with an axe-head made simply by flaking the material roughly into shape. This was achieved by removing very small flakes from the surface by pressure-flaking, i.e., by pressing against the edge of a flint or obsidian with a pointed bone or hardened wood, rather than by striking flakes with the stone. It had been known earlier, but it came to be widely used now.

4.5.4 Pottery making and weaving

People had now begun using the material naturally available quite ingeniously. Clay was one such material. It was used for laying down floors and for making toys and other artifacts. It has been suggested that small geometric objects such as spheres, cones and disks made from claywere used in recording information pertaining to the changing seasons, harvests etc. In the absence of writing, stray methods as these could have served the purpose of storing basic information. Clay was hardened by firing and shaped into bowls and other pots.

The hunters and foragers had used organic material as hide and wood and vegetables like gourds and pumpkin to make containers. But these had a limited utility. They could not be used for cooking purposes. Pots are particularly useful for groups who collect or cultivate durable foods such as nuts, grass-seeds and grain. Gradually Neolithic pottery became more sophisticatedthan the plain earthenware of the Mesolithic.

4.5.5 Trade and Exchange

The advances made in creative abilities did not take place in isolation. The advanced hunter-gatherers and early farmers depended on each other for the exchange of products and

the movement of flocks between seasonal pastures. Some of the stone tools could not have been used without some kind of an exchange mechanism. Rare stones were exchanged for surplus seeds or other non-perishable items. To cite an example, tools made from obsidian have been found all over southwest Asia. It is a hard volcanic glass which produces an extremely sharp cutting edge. It was used for making scrapers and knives as early as 30,000 years ago. Tools made from obsidian have been found in Shanidar (Iran) around 10,000BC. And in other Natufian sites like Jarmo in the Levant.

In the Neolithic settlement of Catal Huyuk both obsidian and flint were used for making daggers, scrapers, firestones and knives. The major source of obsidian were regions of recent volcanic activity, for instance, places around Italy, some islands in the Aegean Sea, Taurus (the mountain region around modern Turkey) and Armenia. The presence of the material thousands of miles away from its source indicates an active exchange in it. Around 10,000 years ago obsidian was traded in the form of glass lumps or cores. The extent of use of this material depended largely on the distance from the sources of supply. While Jericho, which was about

500 miles away from Anatolia (an important supplier of obsidian), used more flint than obsidian,farmers of Jarmo were almost completely dependent on it.

4.5.6 Social structure

It should be evident from the discussion so far that the shift from hunting gathering to more scheduled food collecting techniques was backed by subtle changes in the social structure. A family as a unit of residence or working groups of men and women could have occupied the villages that emerged with early farming practices. As compared with hunter-gatherers, early agriculturists needed a more corporate social structure. There had been an increase in economic activities pursued in the Neolithic villages. In the Upper Palaeolithic there was but one specialist,the sorcerer-shaman, while all other members of the community shared the same activities: the making of tools and other artifacts, hunting, fishing and so on. In the Neolithic villages, on the other hand, a variety of activities like farming, stock-breeding, pottery-making, weaving, stone and metal work, carpentry etc. demanded a more rigorous division of labour among sexes and among different sections of people.

In Gordon Child‘s estimate, discovery of suitable plants and appropriate methods for their cultivation were tasks accomplished by women. In fact according to him, pottery-making and spinning and weaving and almost all the major inventions and discoveries were works of women. Recent studies show that question of whether men or women should get _credit‘ for the innovation of agriculture in any particular region is rather irrelevant. First, it ignores the fact that plant and animal reproductive biology was well known to people even in the Pleistocene. Second, the successful commitment to agriculture is something that the entire society has to accept.

4.5.7 Belief system

In a Neolithic set-up, agriculture and the social network that supported it had to have commonly accepted customs to ensure smooth relations among the inhabitants. A common religion and a common language perhaps bound the Neolithic villagers together. The physical environment they lived in found a reflection in the world-view or the belief system of the early farmers. Similar to the inter-relationship between the hunting-gathering economy of the Paleolithic and the symbolic representation of animals in the cave art of the Upper Paleolithic period, there was now during the transition to agriculture a renewed interest in the reproductive/procreative abilities of plants, animals and human beings.

A persisting concern with fertility and procreation is natural to agricultural societies. The religions of the Neolithic were clearly fertility cults with dual male and female principles. Female figurines, moulded in clay or carved in stone or bone, have been found in almost all the Neolithic societies. These are ancestors of the Mother Goddess‘ cults of the subsequent period. It is inferred in these practices that the earth from whose bosom the grain sprouts is a woman who would be influenced by prayers, sacrifices and rites and incantations. The male partner in fertilization is depicted through phallic representations as phalli of clay and the like.

4.3 End of the Stone Age

Innovation of the technique of smelting ore ended the Stone Age and began the Bronze Age. The first most significant metal manufactured was bronze, an alloy of copper and tin, each of which was smelted separately. The transition from the Stone Age to the Bronze Age was a period during which modern people could smelt copper, but did not yet manufacture bronze, a time known as the Copper Age, or more technically the Chalcolithic, "copper-stone" age. The transition out of the Stone Age occurred between 6000 BCE and 2500 BCE for muchof humanity living in North Africa and Eurasia. The first evidence of human metallurgy dates to between the 5^{th} and 6^{th} millennium BCE in the archaeological sites of Majdanpek, Yarmovac and Plocnik, though not conventionally considered part of the Chalcolithic or "Copper Age", this provides the earliest known example of copper metallurgy and the Rudna Glava mine in Serbia. Otzi the Iceman, a mummy from about 3300 BCE carried with him a copper axe and a flint knife.

In regions such as Sub Saharan Africa, the Stone Age was followed directly by the Iron Age. The Middle East and South-eastern Asia regions progressed past Stone Age technology around 6000 BCE. Europe, and the rest of Asia became post–Stone Age societies by about 4000 BCE. The proto-Inca cultures of South America continued at a Stone Age level until around 2000 BCE, when gold, copper and silver made their entrance, the rest following later. Australia remained in the Stone Age until the 17th century. Stone tool manufacture continued. In Europe and North America, millstones were in use until well into the 20th century, and still are in many parts of the world.

4.4 The Bronze Age and the Birth of Civilization

Neolithic agricultural villages and herding cultures gradually replaced Paleolithic culture in much of the world. Then another major shift occurred, first in the plains along the Tigris and Euphrates rivers in the region the Greeks and Romans called Mesopotamia (modern Iraq), later in the valley of the Nile River in Egypt, and somewhat later in India and the Yellow River basin in China. This shift was initially associated with the growth of towns alongside villages, creating a hierarchy of larger and smaller settlements in the same region.

Summary

- The Mesolithic culture was followed by Neolithic culture, which is marked by the domestication of plant and animal and settled life of mankind.
- The term Neolithic Revolution was employed to describe the incidents took placeduring this phase of Stone Age.
- Neolithic has come to represent a period of profound social change when human communities developed new mechanisms of control over land, labour and capital which resulted in social differentiation. Further social, economic and political complexities for instance in the form of civilizations would not have emerged without the existence of agriculture and animal husbandry.
- The Neolithic culture was superseded with the mankind knowledge of metal smelting, which gave birth to the Chalcolithic culture or the Bronze Age Culture across the globe in the history of mankind.
- Gradually the use of metal intensify human agricultural activities, surplus production leads to exchange and further necessitated the process of urbanisation in the river valleys of Africa, Asia and Meso-America.

Key Term

Culture: Culture is the sum total of the ways of living built up by a group and passed on from one generation to another. Culture includes all the daily activities and behaviour of mankind.

Prehistory: A large section of human history, lasting over a millennia, during which there are no written records. The only information we have about the prehistoric period is attend through archaeology.

Palaeolithic: The Old Stone Age‘ The period before the end of the last Ice Age when people lived as hunter-gathers, using stone tools, without agriculture or pottery.

Neolithic: The New Stone Age‘. A period in history begging at the end of the last Ice Age, when people cultivated plants and kept animals but still used stone rather than metal tools. In northern Europe this period also sees the first pottery production.

(c.4000-2000BC)

Mesolithic: The Middle Stone Age'. Represents a period of transition from the Paleolithic hunter-gathers of the last glaciation, to the Neolithic farmers of the post-glaciation period.

Microlith: Small size stone tools used by prehistoric man during Mesolithic Age.

Olduvai Gorge: A George in Tanzania, Africa famous for discovery of fossils remains of early human species.

Unifacial: Paleolithic stone tools with flaking in one side.

Quartzites: A kind of hard rock.

Chalcolithic: The period of human history when mankind used both stone and Metals(Copper/Bronze) for manufacturing of tools.

Bronze Age: The first period in which metal implements and ornaments were made. (C.2000.700BC)

SELF ASSESMENT QUESTIONS

1. Discuss how human-environment interactions during this period influenced long-term ecological patterns.
2. Investigate the economic systems that emerged during the Neolithic period, considering factors such as trade, surplus production, and the development of specialized labor.
3. Examine the technological advancements in toolmaking and architecture during the Neolithic period, with a focus on polished stone tools and the construction of megalithic structures.
4. Analyze the social organization within Neolithic communities, considering factors such as hierarchy, gender roles, and community structures.
5. What were the key factors that led to the transition from a hunter-gatherer lifestyle to agriculture during the Neolithic period

Further Reading

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BLOCK 02: MAJOR CIVILIZATIONS OF THE ANCIENT WORLD

Unit 05: Characteristic features of Chalcolithic Culture

Unit 06: Polity, art & religion of Egyptian Civilization

Unit 07: Society, culture and Economy of Mesopotamian Civilization

Unit 08: Sumerian, Babylonian & Assyrian Civilisations

BLOCK 02: MAJOR CIVILIZATIONS OF THE ANCIENT WORLD

Unit 5: Characteristic features of Chalcolithic Culture

STRUCTURE

Learning Objectives

i. Students should be able to create a chronological timeline of key periods in ancient Egyptian history, such as the Predynastic, Old Kingdom, Middle Kingdom, New Kingdom, and Late Period.
ii. Develop an understanding of the geography of ancient Egypt, including the Nile River, its delta, and the natural features that influenced settlement patterns.
iii. Explore the religious beliefs of ancient Egyptians, including the worship of deities, the importance of rituals, and the concept of an afterlife.
iv. Understand the role of temples and the religious significance of monumental structures. Examine the significance of the Nile River in shaping the development of ancient Egyptian civilization, considering its role in agriculture, transportation, and cultural symbolism.

Introduction

The Chalcolithic Age, also known as the Copper Age or Eneolithic period, represents a transitional phase between the Neolithic (New Stone Age) and the Bronze Age. It is characterized by the increased use of metal tools and the gradual shift from a reliance on stone tools to the introduction of metalworking. Here are key aspects and features of the Chalcolithic

Age. Chalcolithic cultures exhibited a variety of artistic expressions, including pottery with intricate designs and decorations. Some regions saw the construction of megalithic structures, such as stone circles and burial mounds. Burial practices during the Chalcolithic period varied widely. Some communities continued using communal burial sites, while others developed more elaborate burial rituals and constructed megalithic tombs. The Chalcolithic Age set the stage for the subsequent Bronze Age, as societies continued experimenting with metallurgy and eventually discovered the alloy bronze, leading to further technological advancements. Aftermath they started to settle in various palces.

A civilization is generally defined as an advanced state of human society containing highly developed forms of government, culture, industry, and common social norms. Of course, not all scholars agree with this definition. In fact, there is much debate over what constitutes a civilization and what does not. Ancient Egyptian civilization followed prehistoric Egypt and coalesced around 3100 BC (according to conventional Egyptian chronology) with the political unification of Upper and Lower Egypt under Menes (often identified with Narmer).

5.3 Egypt- The Gift of Nile

The great civilization of Egypt, flourished on the flood plain of mighty Nile River, the longest river in the world. As a thin ribbon of water in a dry desert land, the great river brings its water to Egypt from distant mountains, plateaus and lakes in present-day Burundi, Tanzania, Uganda, and Ethiopia. Egypt‘s settlements arose along the Nile on a narrow strip of land made fertile by the river. As in the valley of Euphrates and Tigris in Mesopotamia, yearly flooding brought the water and enriches soil that allowed settlements to grow. Every year in July, rains and melting snow from the mountains of east-central Africa caused the Nile River to rise and spill over its banks. When the river receded in October, it left behind a rich deposit of fertile black mud. Before the scorching sun could dry out the soil, the peasants would hitch their cattle to plows and prepare their fields for planting. All fall and winter, they tended the wheat and barley plants. They watered their crops from an intricate network of irrigation ditches. At last came the welcome harvest. This cycle of flood, plant, harvest repeated itself year after year. In an otherwise parched land, the abundance brought by the Nile was so great that the Egyptians worshiped it as a god who gave life and seldom turned against them. Hence. the ancient Greek historian Herodotus remarked in the fifth century B.C., Egypt was the ***–gift of the Nile***.‖

- **Geographical Expansion**

Ancient Egyptians knew only the lower part of the Nile-the last 750 miles before the river meet the Mediterranean Sea. Their domain ended at a point where jagged granite cliffs and boulders turn the river into churning rapids called a cataract. Riverboats could not pass this spot, known as the First Cataract, to continue upstream to the south. Between the First Cataract and the Mediterranean lay two very different regions. Upper Egypt (to the south) was a skinny strip of land from the First Cataract to the point where the river starts to fan out into many branches. Lower Egypt (to the north, near the sea) consisted of the Nile delta region, which begins about 100 miles before the river enters the Mediterranean. The delta is a broad, marshy, triangular area of land formed by deposits of silt at the mouth of the river. This rich land provided a home for many birds and wild animals. The Nile provided a reliable system of transportation between Upper and Lower Egypt. The Nile flows north, so northbound boats simply drifted with the current. Southbound boats hoisted a wide sail. The prevailing winds of Egypt blow from north to south, carrying sailboats against the river current. The ease of contact made possible by this watery highway helped unify Egypt‘s villages and promote trade. However, there is no simple co-relation between the beginning of agriculture and pottery- making. This and other kinds of craft production are dependent on factors like environment and social and economic needs and pressures. There are hunter-gatherers who make pottery and who grind and polish stone tools. There are farmers who do neither. Certain tools like flint sickles and adzes and axes were used around 11,000 BP. in Southwest Asia by groups who were selectively hunting and herding and harvesting wild wheat and barley. In the Tehuacan Valley of Meso- America, the earliest cultigens are found around 7,000 BP. pottery 4,300 BP. and polished stone axes much later around 3,200 BP. Granaries were dug to store the crop.

5,4 Political History

In Fayum (Egypt), dating back to about 6300 BP, straw-lined pits were found filled with grains of domesticated wheat and barley. Weaving is also more likely to develop under more sedentary conditions. It requires a steady supply of fibers, wool, flax or cotton. The domestication of goat and sheep in West Asia and of the llama and other animals like guanaco and vicuna in the Andes (South America) led to the beginning of weaving only when the fleece of these animals grew suitable for spinning and weaving. This happened when certain mutations had occurred due to domestication. Thus, since the earliest domesticated sheep had hairy coats, woolen textiles developed long after the beginning of sheep herding. This further establishes the point raised earlier in the context of domestication of animals that the herders could not have knowingly selected sheep for _woolliness‘. As far as the tools are concerned, the early settlers made bone needles, including net making needles, awls and fishhooks. changes in the economic and social roles of men and women. Working on the fields with a hoe (before the introduction of

the plough), pottery-making, weaving, tending to the animals, collecting ripened seeds, grinding flour and cooking, besides other kinds of household activities, came to be performed by women. In farming societies, the desire for more children to fuel the agricultural workforce, further added to the responsibilities shared by women. Clark Larsen‘s study has shown that men carried on hunting and fishing after the adoption of agriculture, perhaps at a more leisurely rate, whereas women took on the taxing field and household chores.

5.5 Economic Condition

- **Agriculture**

The fertile bank of Nile deposited in its inundation and irrigated during farming seasons was the real cause behind the prosperity of this grate civilization. Every acre of the soil in ancient Egypt belonged to the Pharaoh and other men could use it only by his kind indulgence. Every tiller of the earth had to pay him an annual tax of ten or twenty per cent in kind. Large tracts were owned by the feudal barons or other wealthy men. Cereals, fish and meat were the chief items of diet.

In spite of large tract of fertile land the lot of the peasant was hard. The free farmer was subject only to the middleman and the tax-collector who dealt with him on the most time-honored of economic principles, taking all that the traffic would bear out of the produce of the land. The peasant was subject at any time to the exploitation, doing forced labor for the King, dredging the canals, building roads, tilling the royal lands or dragging great stones and obelisks for pyramids, temples and palaces. Probably a majority of the laborers in the field were moderately at ease, accepting their poverty patiently. Many of them were slaves, captured in the wars or bonded for debt. Sometimes slave-raids were organized and women and children from abroad were sold to the highest bidder at home. Thus, in ancient Egypt condition of farmer was in utter despair but owing to availability of fertile land agriculture was highly productive. The ruling class by exploiting the tiller of land led their life in luxury and built huge structure which still shows the glorious civilization which was once flourished on the bank of river Nile.

- **Industry**

The fertile land and hard work of the peasantry resulted in surplus production. The surplus food was laid aside for workers in industry and trade. Unavailability of minerals forced ancient Egyptian to import those from Arabia and Nubia. The great distances offered no temptation to private initiative and for many centuries mining was a government monopoly. Copper was mined in small quantities, iron was imported from the Hittites, gold mines were found along the eastern coast, in Nubia and in every vassal treasury.

In its early dynasties period Egypt learned the art of making Bronze by mingling copper with tin. They utilized bronze to manufactured different equipments. Egyptian workers made brick, cement and plaster of paris; they glazed pottery, blew glass and glorified both with colour.

They were masters in the carving of wood; they made everything from boats and carriages, chairs and beds to beautiful coffins that almost invited men to die. Out of animal skins they made clothing, quivers, shields and seats. All the arts of the tanner are pictured on the walls of the tombs; and the curved knives represented there in the tanner's hand are used by cobblers to this day. From the papyrus plant Egyptian artisans made ropes, mats, sandals and paper. Other workmen developed the arts of enameling and varnishing and applied chemistry to industry. Still others wove tissues of the subtlest weave in the history of the textile art. Specimens of linen woven four thousand years ago show today, despite time's corrosion, a weave so fine that it requires a magnifying glass to distinguish it from silk. The best work of the modern machine-loom is coarse in comparison with this fabric of the ancient Egyptian hand-loom.

- **Others**

The workers were mostly freemen, partly slaves. In general every trade was hereditary in nature, as in India and sons were expected to follow and take over the occupations of their fathers. The great wars brought in thousands of captives, making possible the large estates and the triumphs of engineering. Rameses III presented 1,13,000 slaves to the temples during the course of his reign.Egyptian engineering was superior to all the civilization and cultures before the Industrial Revolution. Senusret III, for example, built a wall twenty-seven miles long to gather into Lake Moeris the waters of the Fayum basin, thereby reclaiming 25,000 acres of marsh land for cultivation, and providing a vast reservoir for irrigation. Great canals were constructed some from the Nile to the Red Sea; the caisson was used for digging and stones weighing a thousand tons were transported over great distances. Ships a hundred feet long by half a hundred feet wide plied the Nile and the Red Sea and finally sailed the Mediterranean.

- **Trade**

Trade was comparatively primitive; most of it was by barter in village marketplace. Foreign commerce grew slowly, restricted severely by the most up-to-date tariff walls. The various kingdoms of the Near East believed strongly in the "protective principle," for customs dues were a mainstay of their royal treasuries.

5.6 Social Condition

- **The Marriage System.**

The government of the Pharaohs resembled that of a dictator like Napoleon, even to the incest. Very often the king married his own sister occasionally his own daughter to preserve the purity of the royal blood. It is difficult to say whether this weakened the stock. The words brother and sister in Egyptian poetry, have the same significance as lover and beloved in the modern days. In addition to his sisters the Pharaoh had an abundant harem, recruited not only from captive women but from the daughters of the nobles and the gifts of foreign potentates. Some of the nobility imitated this tedious extravagance on a small scale, adjusting their morals to their resources.

- **The Position of Women.**

The common people satisfied themselves with monogamy. Family life was apparently as well ordered as wholesome in moral tone and influence as in the highest civilizations of our time. Divorce was rare until the decadent dynasties. The husband could dismiss his wife without compensation if he detected her in adultery; if he divorced her for other reasons he was required to turn over to her a substantial share of the family property. The position of woman was more advanced than in most countries today. The monuments picture them eating and drinking in public, going about their affairs in the streets unattended and unharmed and freely engaging in industry and trade. Greek travelers were amazed at this liberty. Women held and bequeathed property in their own names. Hatshepsut and Cleopatra rose to be queens, and ruled and ruined like kings.

It is likely that this high status of woman arose from the mildly matriarchal character of Egyptian society. Not only was woman full mistress in the house but all estates descended in the female line. Men married their sisters not because familiarity had bred romance but because they wished to enjoy the family inheritance, which passed down from mother to daughter and they did not care to see this wealth give aid and comfort to strangers. The powers of the wife underwent a slow diminution in the course of time, perhaps through contact with the patriarchal customs of the Hyksos and through the transit of Egypt from agricultural isolation and peace to imperialism and war. Even then, however, the change was accepted only by the upper classes. The Egyptian commoner adhered to matriarchal ways. Possibly because of the mastery of woman over her own affairs, infanticide was rare. Families were large, and children swarmed in both hovels and palaces. The well-to-do were hard put to it to keep count of their offspring.

Even in courtship the woman usually took the initiative. Hence modesty as distinct from fidelity was not prominent among the Egyptians. They spoke of sexual affairs with a directness alien to our late morality, adorned their very temples with pictures and bas-reliefs of startling anatomical candor and supplied their dead with obscene literature to amuse them in the grave. Dancing-girls, were accepted into the best male society as providers of entertainment and physical edification. They dressed in diaphanous robes or contented themselves with anklets, bracelets and rings. Evidences occur of religious prostitution on a small scale as late as the Roman occupation. The most beautiful girl among the noble families of Thebes was chosen to be consecrated to Amon. When she was too old to satisfy the god she received an honorable discharge, married, and moved in the highest circles.

- **Character, Games, Appearance and Costumes etc.**

If we try to visualize the Egyptian character we find it difficult to distinguish between the ethics of the literature and the actual practices of life. Very frequently noble sentiments occur and some of the elders give very laudable advice to their children. In general the Egyptians were enamored of size given to gigantic engineering and majestic building, industrious and accumulative practical even in the midst of many ultra mundane superstitions. They were the arch-conservatives of history. The more they changed, the more they remained the same. Through forty centuries their artists copied the old conventions religiously. They had no sentimental regard for human life and killed with the clear conscience of nature. Egyptian soldiers cut off the right hand or the phallus of a slain enemy and brought it to the proper scribe that it might be put into the record to their credit. In the later dynasties the people long accustomed to internal peace and to none but distant wars lost all military habits and qualities until at last a few Roman soldiers sufficed to master all Egypt.

They played many public and private games, such as checkers and dice.They gave many modern toys to their children, like marbles, bouncing balls, tenpins and tops. They enjoyed wrestling contests, boxing matches and bullfights. At feasts and recreations they were anointed by attendants, were wreathed with flowers, feted with wines, and presented with gifts.

From the painting and the statuary we picture them as a physically vigorous people, muscular, broad-shouldered, thin-waisted, full-lipped and flat-footed from going unshod.

5.7 Art of Writing and Literature

The priests imparted rudimentary instruction to the children of the well-to-do in schools attached to the temples. In the ruins of a school which was apparently part of the Ramesseum a large number of shells has been found, still bearing the lessons of the ancient pedagogue. The teacher's function was to produce scribes for the clerical work of the state. The chief method of instruction was the dictation or copying of texts, which were written upon potsherds or limestone flakes. The subjects were largely commercial because the Egyptians were the first and greatest utilitarian; but the chief topic of pedagogic discourse was virtue and the chief problem, as ever, was discipline. Discipline was vigorous.

5.8 Science and Technology

The scholars of Egypt were mostly priests, who, despite all their superstitions, laid the foundations of Egyptian science. According to their own legends the sciences had been invented some 18,000 B.C. by Thoth, the Egyptian god of wisdom, during his three thousand year-long reign on earth and the most ancient books on science were composed by this learned deity.

- **Origins of Egyptian Science**

At the very outset of recorded Egyptian history we find mathematics highly developed. The design and construction of the Pyramids involved a precision of measurement impossible without considerable mathematical lore. The dependence of Egyptian life upon the fluctuations

of the Nile led to careful records and calculations of the rise and recession of the river; surveyors and scribes were continually re-measuring the land whose boundaries had been obliterated by the inundation, and this measuring of the land was evidently the origin of geometry. Nearly all the ancients agreed in ascribing the invention of this science to the Egyptians.

- **Mathematics, Astronomy and the calendar**

The ancient Egyptian used established numerals only fell just short of the decimal system. They had no zero and never reached the idea of expressing all numbers with ten digits. They idea of multiplication and division tables are as old as the Pyramids. The oldest mathematical treatise known is the Ahmes Papyrus, dating back to 2000-1700 B.C. This refers to mathematical writings five hundred years more ancient than itself. Egyptian geometry measured by.

- **Medical Science.**

The glory of Egyptian science was medicine. Like almost everything else in the cultural life of Egypt, it began with the priests, and dripped with evidences of its magical origins. Among the people amulets were more popular than pills as preventive or curative of disease. Disease was to them a possession by devils and was to be treated with incantations. Several papyri devoted to medicine have come down to us. The most valuable of them, named from the Edwin Smith who discovered it, is a roll fifteen feet long dating about 1600 B.C., and going back for its sources to much earlier works; even in its extant form it is the oldest scientific document known to history. It describes forty-eight cases in clinical surgery, from cranial fractures to injuries of the spine. Each case is treated in logical order, under the heads of provisional diagnosis, examination, diagnosis, prognosis, treatment, and glosses on the terms used.

The Egyptians tried to promote health by public sanitation, by circumcision of males and by teaching the people the frequent use of the enema. In order to prevent sicknesses they look after the health of their body by means of drenches, fasting and emetics, sometimes every day and sometimes at intervals of three or four days. For they say that the larger part of the food taken into the body is superfluous and that it is from this superfluous part that diseases are engendered. Herodotus mentions that the Egyptians purge themselves every month, three days.

5.9 Decline of Egyptian Civilization

After the death of Tutankhamun, the romantic Rameses II, last of the great Pharaohs, mounted the throne. This handsome and brave monarch, added to his charms by his boyish consciousness of them and his exploits in war, which he never tired of recording, were equaled only by his achievements in love. After brushing aside a brother who had inopportune rights to the throne, he resumed many expeditions to different region such as Nubia and into many Asiatic

provinces and extended the Egyptian boundary and replenishes the treasury of Egypt. He had his victories commemorated without undue impartiality on half a hundred walls commissioned a poet to celebrate him in epic verse and rewarded himself with several hundred wives. When he died he left one hundred sons and fifty daughters to testify to his quality by their number and their proportion. He married several of his daughters, so that they too might have splendid children. His offspring were so numerous that they constituted for four hundred years a special class in Egypt, from which, for over a century, her rulers were chosen. He seems to have ruled Egypt well. He built so lavishly that half of the surviving edifices of Egypt are ascribed to his reign. He completed the main hall at Karnak, added to the temple of Luxor, raised his own vast shrine, the Ramesseum, west of the river, finished the great mountain-sanctuary at Abu Simbel, and scattered colossi of himself throughout the land. Commerce flourished under him, both across the Isthmus of Suez and on the Mediterranean. He built another canal from the Nile to the Red Sea, but the shifting sands filled it up soon after his death. He yielded up his life in 1225 B.C., aged ninety, after one of the most remarkable reigns of history. After his death the decline of Egypt began. The following factors are responsible for the collapse of this mighty civilization of Nile.

- **The conquest of Egypt**

The nations along the northern shores of the Mediterranean ripened and blossomed, the nations on the southern shores faded and rotted away. Egypt lost her trade, her gold, her power, her art, at last even her pride. One by one her rivals crept down upon her soil, harassed and conquered her and laid her waste. In 954 B.C. the Libyans came in from the western hills and laid about them with fury; in 722 the Ethiopians entered from the south, and avenged their ancient slavery; in 674 the Assyrians swept down from the north and subjected priest-ridden Egypt to tribute. For a time Psamtik, Prince of Sai's, repelled the invaders, and brought Egypt together again under his leadership. During his long reign, and those of his successors, came the "Sai'te Revival" of Egyptian art: the architects and sculptors, poets and scientists of Egypt gathered up the technical and esthetic traditions of their schools, and prepared to lay them at the feet of the Greeks. But in 525 B.C. the Persians under Cambyses crossed Suez, and again put an end to Egyptian independence. In 332 B.C. Alexander sallied out of Asia, and made Egypt a province of Macedon. In 48 B.C. Caesar arrived to capture Egypt's new capital, Alexandria, and to give to Cleopatra the son and heir whom they vainly hoped to crown as the unifying monarch of the greatest empires of antiquity.

5.10 Contributions Egyptian civilization

In 30 B.C. Egypt became a province of Rome, and disappeared from history. For a time it flourished again when saints peopled the desert, and Cyril dragged Hypatia to her death in the streets (415 A.D.). Again when the Moslems conquered it (ca. A.D. 650), built Cairo with the

ruins of Memphis and filled it with bright-domed mosques and citadels it revived in a different manner. But these were alien cultures not really Egypt's own, and they too passed away. Today there is a place called Egypt, but the Egyptian people are not masters there. Long since they have been broken by conquest and merged in language and marriage with their Arab conquerors; and the feet of weary pilgrims who travel thousands of miles to find that the Pyramids are merely heaps of stones. Perhaps greatness could grow there again if Asia should once more become rich,and make Egypt the half-way house of the planet's trade.

On all sides gigantic ruins, monuments and tombs, memorials of a savage and titanic energy scattered. And on all sides the hostile, engulfing sands, blown about forever by hot winds and grimly resolved to cover everything in the end. Nevertheless the sands have destroyed only the body of ancient Egypt. Its spirit survives in the lore and memory of our race. The improvement of agriculture, metallurgy, industry and engineering. The apparent invention of glass and linen, of paper and ink, of the calendar and the clock, of geometry and the alphabet. The refinement of dress and ornament, of furniture and dwellings, of society and life. The remarkable development of orderly and peaceful government, of census and post, of primary and secondary education, even of technical training for office and administration. The advancement of writing and literature, of science and medicine. The first clear formulation known to us of individual and public conscience, the first cry for social justice, the first widespread monogamy, the first monotheism, the first essays in moral philosophy; the elevation of architecture, sculpture and the minor arts to a degree of excellence and power never reached before and seldom equaled since. These contributions were not lost, even when their finest exemplars were buried under the desert or overthrown by some convulsion of the globe.

Through the Phoenicians, the Syrians and the Jews, through the Cretans, the Greeks and the Romans, the civilization of Egypt passed down to become part of the cultural heritage of mankind. The effect or remembrance of what Egypt accomplished at the very dawn of history has influence in every nation and every age. "It is even possible," as Faure has said, "that Egypt, through the solidarity, the unity, and the disciplined variety of its artistic products, through the enormous duration and the sustained power of its effort, offers the spectacle of the greatest civilization that has yet appeared on the earth.

Summary

- The narrow strip of land on either side of the river Nile is green and fertile while the western part of North Africa is a desert. The area has hardly any rainfall and except along the Nile, cultivation is difficult in Egypt. It would be entirely a desert but for the Nile it is no wonder that Egypt is called the ‒Gift of the Nile‖.
- Regular flood of Nile was an important feature of Egypt. The flood comes when the grounds are parched and when it subsides it leaves a new layer of enriching mud.

From ancient this annual deposit of silt has served as an excellent fertilizer. These natural advantages made Egypt one of the great centres of civilization.

- Historians divide the history of Egypt into three periods: The Old Kingdom, The Middle Kingdom and the New Kingdom. The Old Kingdom is also called the Age of the pyramids. During this period, Memphis, situated near modern Cairo was the capital. The civilization of Egypt with its advances in art, religion and sciences was developed during the period 3000-2000 B.C and during The Middle Kingdom (2000-1750 B.C).
- In the 18^{th} century B.C, Egypt was overrun by invaders called the Hyksos, which came from the east. Their rule was short; soon the Egyptian kings regained their land, and The New Kingdom was founded. Under the New ruling dynasty Egyptian army was reorganized and new tactics of warfare and the horse-drawn chariot were adopted. This enabled the Egyptian kings to conquer many lands.
- The Egyptian king was called the Pharaoh. He had absolute powers. He was also looked upon as God and his statues were put in temples. His deeds and victories were inscribed on temple walls. Next to the Pharaoh came priests, officials, artists and craftsmen. Below these people were the farmers who lived beyond the cities and then came the slaves who were generally the prisoners of war and owned by the king.
- Agriculture was the most important occupation of the people. The rivers fertilized the land every year and the people worked together to build canals to make it possible to grow crops all the round year. Thus they could cultivate a wide area. The chief crops grown were wheat, barley and millet. They also grew dates, figs, apples, peaches and mulberries.
- Like the people of other civilizations, Egyptians also domesticated animals. Goats, dogs, asses, pigs and geese were common. The horse was brought to Egypt by the Hyksos and was used to draw war chariots. Flax was grown in plenty of Egypt. The Egyptian people wore linen garments. During the period of middle kingdom, potter‘s wheel came into use. They started using metal on a large scale gradually. They made beautiful stone vases and the carpenters of Egypt made beautiful furniture inlaid with ivory and precious stones, which was well preserved in the royal tombs.

By about 1000 B.C, the great days of Egypt were over. The Pharaoh had to fight for their very existence against the invaders from the areas to the south of Egypt in Africa or the new powers across the Mediterranean Sea, from Crete and Cyprus. In quick succession Egypt was conquered and became part of the empires of Assyrians, Iranians and Romans.

- Finally with the invasion of Alexander the last ruling dynasty of Ancient Egypt was overthrown.

Key Terms

Artefacts: An object made by workmanship of man Booty: spoil taken in war Chronology: science for computing or arranging units of time

Citadel: Fortress on commanding height

Corvee: Doing forced labor for the King

Cosmopolitan: One free from local or regional prejudices

Decipherment: to finding out meaning of an old died script.

Dolichocephalic : A condition where the head is longer than would be expected, relative to the width of the head.

Embalm: To treat a corpse with preservatives in order to slow decay

Estate: Landed property

Evisceration: Process by which a body is emptied of its internal organs

Frankincense: Sweet-smelling gum resin, from a tree, burned as incense

Hieroglyph: Pictorial representation of writing, sacred character

Inscription: Writing embossed on walls or pillars

Legitimise: To hold justifiable

Mastabas: Simple rectangular structures with a single burial chamber used as tombs for ancient Egyptians

Mausoleum: Magnificent tomb

Millennium: One thousand years

Mummification: Ancient Egyptian process of corpse preservation achieved through embalming.

Papyrus: Tall water plant found in northern Africa; kind of paper made from the stem of this plant

Potsherd: Srchaeological term used to describe a fragment of pottery

Scribe: Individual who copies manuscripts and documents

Shaduf: Device used to irrigate fields surrounding the Nile

Sheet-flood: Flood that spreads out on earth surface

Stylus: A kind of writing pen.

Totemism: A system of belief in which each human is thought to have a spiritual connection or a kinship with another physical being, such as an animal or plant.

Self Asesement Questions

1. What insights do we gain from the 'pyramids on the culture and belief of ancient Egyptians? Write a short note.
2. Describe the writing system of the Egyptians. Explain how the writing system evolved

and classify the uses of their writing.

3. Describe the various art forms of Egyptian culture. Tell what purposes their art served.
4. Describe the types, purposes, and styles of Egyptian buildings and monuments. Summarize the building techniques used in construction of the buildings and monuments.
5. How are the remains of ancient Egyptian temples different from what the temples looked like in the past? What are some of the threats endangering the survival of these ancient structures?
6. What is the ancient Egyptians‘ view of death? What is their interpretation of the afterlife?
7. How do you explain the decline of Egyptian civilisations.
8. Discuss the conditions of women in Ancient Egypt.

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UNIT 06 POLITY, ART & RELIGION OF EGYPTIAN CIVILIZATION

STRUCTURE

Learning Objectives

i. Understand the role of temples and the religious significance of monumental structures. Examine the significance of the Nile River in shaping the development of ancient Egyptian civilization, considering its role in agriculture, transportation, and cultural symbolism.

ii. Students should be able to create a chronological timeline of key periods in ancient Egyptian history, such as the Predynastic, Old Kingdom, Middle Kingdom, New Kingdom, and Late Period.

iii. Develop an understanding of the geography of ancient Egypt, including the Nile River, its delta, and the natural features that influenced settlement patterns.

iv. Explore the religious beliefs of ancient Egyptians, including the worship of deities, the importance of rituals, and the concept of an afterlife.

Egypt- The Gift of Nile

The great civilization of Egypt, flourished on the flood plain of mighty Nile River, the longest river in the world. As a thin ribbon of water in a dry desert land, the great river brings its water to Egypt from distant mountains, plateaus and lakes in present-day Burundi, Tanzania, Uganda, and Ethiopia. Egypt‘s settlements arose along the Nile on a narrow strip of land made fertile by the river. As in the valley of Euphrates and Tigris in Mesopotamia, yearly flooding brought the water and enriches soil that allowed settlements to grow. Every year in July, rains and melting snow from the mountains of east-central Africa caused the Nile River to rise and spill over its banks. When the river receded in October, it left behind a rich deposit of fertile

black mud. Before the scorching sun could dry out the soil, the peasants would hitch their cattle to plows and prepare their fields for planting. All fall and winter, they tended the wheat and barley plants. They watered their crops from an intricate network of irrigation ditches. At last came the welcome harvest. This cycle of flood, plant, harvest repeated itself year after year. In an otherwise parched land, the abundance brought by the Nile was so great that the Egyptians worshiped it as a god who gave life and seldom turned against them. Hence. the ancient Greek historian Herodotus remarked in the fifth century B.C., Egypt was the ***–gift of the Nile***.‖

- **Geographical Expansion**

Ancient Egyptians knew only the lower part of the Nile-the last 750 miles before the river meet the Mediterranean Sea. Their domain ended at a point where jagged granite cliffs and boulders turn the river into churning rapids called a cataract. Riverboats could not pass this spot, known as the First Cataract, to continue upstream to the south. Between the First Cataract and the Mediterranean lay two very different regions. Upper Egypt (to the south) was a skinny strip of land from the First Cataract to the point where the river starts to fan out into many branches. Lower Egypt (to the north, near the sea) consisted of the Nile delta region, which begins about 100 miles before the river enters the Mediterranean. The delta is a broad, marshy, triangular area of land formed by deposits of silt at the mouth of the river. This rich land provided a home for many birds and wild animals. The Nile provided a reliable system of transportation between Upper and Lower Egypt. The Nile flows north, so northbound boats simply drifted with the current. Southbound boats hoisted a wide sail. The prevailing winds of Egypt blow from north to south, carrying sailboats against the river current. The ease of contact made possible by this watery highway helped unify Egypt‘s villages and promote trade. However, there is no simple co-relation between the beginning of agriculture and pottery- making. This and other kinds of craft production are dependent on factors like environment and social and economic needs and pressures. There are hunter-gatherers who make pottery and who grind and polish stone tools. There are farmers who do neither. Certain tools like flint sickles and adzes and axes were used around 11,000 BP. in Southwest Asia by groups who were selectively hunting and herding and harvesting wild wheat and barley. In the Tehuacan Valley of Meso- America, the earliest cultigens are found around 7,000 BP. pottery 4,300 BP. and polished stone axes much later around 3,200 BP. Granaries were dug to store the crop.

6.3 Political History

In Fayum (Egypt), dating back to about 6300 BP, straw-lined pits were found filled with grains of domesticated wheat and barley. Weaving is also more likely to develop under more sedentary conditions. It requires a steady supply of fibers, wool, flax or cotton. The domestication of goat and sheep in West Asia and of the llama and other animals like guanaco and vicuna in the Andes (South America) led to the beginning of weaving only when the fleece of these animals grew suitable for

spinning and weaving. This happened when certain mutations had occurred due to domestication. Thus, since the earliest domesticated sheep had hairy coats, woolen textiles developed long after the beginning of sheep herding. This further establishes the point raised earlier in the context of domestication of animals that the herders could not have knowingly selected sheep for ‗woolliness'. As far as the tools are concerned, the early settlers made bone needles, including net making needles, awls and fishhooks. changes in the economic and social roles of men and women. Working on the fields with a hoe (before the introduction of the plough), pottery-making, weaving, tending to the animals, collecting ripened seeds, grinding flour and cooking, besides other kinds of household activities, came to be performed by women. In farming societies, the desire for more children to fuel the agricultural workforce, further added to the responsibilities shared by women. Clark Larsen's study has shown that men carried on hunting and fishing after the adoption of agriculture, perhaps at a more leisurely rate, whereas women took on the taxing field and household chores.

6.4 Economic Condition

- **Agriculture**

The fertile bank of Nile deposited in its inundation and irrigated during farming seasons was the real cause behind the prosperity of this grate civilization. Every acre of the soil in ancient Egypt belonged to the Pharaoh and other men could use it only by his kind indulgence. Every tiller of the earth had to pay him an annual tax of ten or twenty per cent in kind. Large tracts were owned by the feudal barons or other wealthy men. Cereals, fish and meat were the chief items of diet.

In spite of large tract of fertile land the lot of the peasant was hard. The free farmer was subject only to the middleman and the tax-collector who dealt with him on the most time-honored of economic principles, taking all that the traffic would bear out of the produce of the land. The peasant was subject at any time to the exploitation, doing forced labor for the King, dredging the canals, building roads, tilling the royal lands or dragging great stones and obelisks for pyramids, temples and palaces. Probably a majority of the laborers in the field were moderately at ease, accepting their poverty patiently. Many of them were slaves, captured in the wars or bonded for debt. Sometimes slave-raids were organized and women and children from abroad were sold to the highest bidder at home. Thus, in ancient Egypt condition of farmer was in utter despair but owing to availability of fertile land agriculture was highly productive. The ruling class by exploiting the tiller of land led their life in luxury and built huge structure which still shows the glorious civilization which was once flourished on the bank of river Nile.

- **Industry**

The fertile land and hard work of the peasantry resulted in surplus production. The surplus food was laid aside for workers in industry and trade. Unavailability of minerals forced ancient Egyptian to import those from Arabia and Nubia. The great distances offered no

temptation to private initiative and for many centuries mining was a government monopoly. Copper was mined in small quantities, iron was imported from the Hittites, gold mines were found along the eastern coast, in Nubia and in every vassal treasury.

- In its early dynasties period Egypt learned the art of making Bronze by mingling copper with tin. They utilized bronze to manufactured different equipments. Egyptian workers made brick, cement and plaster of paris; they glazed pottery, blew glass and glorified both with colour. **Trade**

Trade was comparatively primitive; most of it was by barter in village marketplace. Foreign commerce grew slowly, restricted severely by the most up-to-date tariff walls. The various kingdoms of the Near East believed strongly in the "protective principle," for customs dues were a mainstay of their royal treasuries.

6.5 Social Condition

- **The Marriage System.**

The government of the Pharaohs resembled that of a dictator like Napoleon, even to the incest. Very often the king married his own sister occasionally his own daughter to preserve the purity of the royal blood. It is difficult to say whether this weakened the stock. The words brother and sister in Egyptian poetry, have the same significance as lover and beloved in the modern days. In addition to his sisters the Pharaoh had an abundant harem, recruited not only from captive women but from the daughters of the nobles and the gifts of foreign potentates. Some of the nobility imitated this tedious extravagance on a small scale, adjusting their morals to their resources.

- **The Position of Women.**

The common people satisfied themselves with monogamy. Family life was apparently as well ordered as wholesome in moral tone and influence as in the highest civilizations of our time. Divorce was rare until the decadent dynasties. The husband could dismiss his wife without compensation if he detected her in adultery; if he divorced her for other reasons he was required to turn over to her a substantial share of the family property. The position of woman was more advanced than in most countries today. The monuments picture them eating and drinking in public, going about their affairs in the streets unattended and unharmed and freely engaging in industry and trade. Greek travelers were amazed at this liberty. Women held and bequeathed property in their own names. Hatshepsut and Cleopatra rose to be queens, and ruled and ruined like kings.

It is likely that this high status of woman arose from the mildly matriarchal character of Egyptian society. Not only was woman full mistress in the house but all estates descended in the female line. Men married their sisters not because familiarity had bred romance but because they wished to enjoy the family inheritance, which passed down from mother to daughter and they did not

care to see this wealth give aid and comfort to strangers. The powers of the wife underwent a slow diminution in the course of time, perhaps through contact with the patriarchal customs of the Hyksos and through the transit of Egypt from agricultural isolation and peace to imperialism and war. Even then, however, the change was accepted only by the upper classes. The Egyptian commoner adhered to matriarchal ways. Possibly because of the mastery of woman over her own affairs, infanticide was rare. Families were large, and children swarmed in both hovels and palaces. The well-to-do were hard put to it to keep count of their offspring.

Even in courtship the woman usually took the initiative. Hence modesty as distinct from fidelity was not prominent among the Egyptians. They spoke of sexual affairs with a directness alien to our late morality, adorned their very temples with pictures and bas-reliefs of startling anatomical candor and supplied their dead with obscene literature to amuse them in the grave. Dancing-girls, were accepted into the best male society as providers of entertainment and physical edification. They dressed in diaphanous robes or contented themselves with anklets, bracelets and rings. Evidences occur of religious prostitution on a small scale as late as the Roman occupation. The most beautiful girl among the noble families of Thebes was chosen to be consecrated to Amon. When she was too old to satisfy the god she received an honorable discharge, married, and moved in the highest circles.

- **Character, Games, Appearance and Costumes etc.**

If we try to visualize the Egyptian character we find it difficult to distinguish between the ethics of the literature and the actual practices of life. Very frequently noble sentiments occur and some of the elders give very laudable advice to their children. In general the Egyptians were enamored of size given to gigantic engineering and majestic building, industrious and accumulative practical even in the midst of many ultra mundane superstitions. They were the arch-conservatives of history. The more they changed, the more they remained the same. Through forty centuries their artists copied the old conventions religiously. They had no sentimental regard for human life and killed with the clear conscience of nature. Egyptian soldiers cut off the right hand or the phallus of a slain enemy and brought it to the proper scribe that it might be put into the record to their credit. In the later dynasties the people long accustomed to internal peace and to none but distant wars lost all military habits and qualities until at last a few Roman soldiers sufficed to master all Egypt.

They played many public and private games, such as checkers and dice.They gave many modern toys to their children, like marbles, bouncing balls, tenpins and tops. They enjoyed wrestling contests, boxing matches and bullfights. At feasts and recreations they were anointed by attendants, were wreathed with flowers, feted with wines, and presented with gifts.

From the painting and the statuary we picture them as a physically vigorous people, muscular, broad-shouldered, thin-waisted, full-lipped and flat-footed from going unshod.

6.7 Art of Writing and Literature

The priests imparted rudimentary instruction to the children of the well-to-do in schools attached to the temples. In the ruins of a school which was apparently part of the Ramesseum a large number of shells has been found, still bearing the lessons of the ancient pedagogue. The teacher's function was to produce scribes for the clerical work of the state. The chief method of instruction was the dictation or copying of texts, which were written upon potsherds or limestone flakes. The subjects were largely commercial because the Egyptians were the first and greatest utilitarian; but the chief topic of pedagogic discourse was virtue and the chief problem, as ever, was discipline. Discipline was vigorous.

6.8 Science and Technology

The scholars of Egypt were mostly priests, who, despite all their superstitions, laid the foundations of Egyptian science. According to their own legends the sciences had been invented some 18,000 B.C. by Thoth, the Egyptian god of wisdom, during his three thousand year-long reign on earth and the most ancient books on science were composed by this learned deity.

- **Origins of Egyptian Science**

At the very outset of recorded Egyptian history we find mathematics highly developed. The design and construction of the Pyramids involved a precision of measurement impossible without considerable mathematical lore. The dependence of Egyptian life upon the fluctuations of the Nile led to careful records and calculations of the rise and recession of the river; surveyors and scribes were continually re-measuring the land whose boundaries had been obliterated by the inundation, and this measuring of the land was evidently the origin of geometry. Nearly all the ancients agreed in ascribing the invention of this science to the Egyptians.

- **Mathematics, Astronomy and the calendar**

The ancient Egyptian used established numerals only fell just short of the decimal system. They had no zero and never reached the idea of expressing all numbers with ten digits. They idea of multiplication and division tables are as old as the Pyramids. The oldest mathematical treatise known is the Ahmes Papyrus, dating back to 2000-1700 B.C. This refers to mathematical writings five hundred years more ancient than itself. Egyptian geometry measured by.

- **Medical Science.**

The glory of Egyptian science was medicine. Like almost everything else in the cultural life of Egypt, it began with the priests, and dripped with evidences of its magical origins. Among the people amulets were more popular than pills as preventive or curative of disease. Disease was to them a possession by devils and was to be treated with incantations. Several papyri devoted to medicine have come down to us. The most valuable of them, named from the Edwin Smith who discovered it, is a roll fifteen feet long dating about 1600 B.C., and going back for its sources to much earlier works; even in its extant form it is the oldest scientific document known to history.

It describes forty-eight cases in clinical surgery, from cranial fractures to injuries of the spine. Each case is treated in logical order, under the heads of provisional diagnosis, examination, diagnosis, prognosis, treatment, and glosses on the terms used.

The Egyptians tried to promote health by public sanitation, by circumcision of males and by teaching the people the frequent use of the enema. In order to prevent sicknesses they look after the health of their body by means of drenches, fasting and emetics, sometimes every day and sometimes at intervals of three or four days. For they say that the larger part of the food taken into the body is superfluous and that it is from this superfluous part that diseases are engendered. Herodotus mentions that the Egyptians purge themselves every month, three days.

6.9 Decline of Egyptian Civilization

After the death of Tutankhamun, the romantic Rameses II, last of the great Pharaohs, mounted the throne. This handsome and brave monarch, added to his charms by his boyish consciousness of them and his exploits in war, which he never tired of recording, were equaled only by his achievements in love. After brushing aside a brother who had inopportune rights to the throne, he resumed many expeditions to different region such as Nubia and into many Asiatic provinces and extended the Egyptian boundary and replenishes the treasury of Egypt. He had his victories commemorated without undue impartiality on half a hundred walls commissioned a poet to celebrate him in epic verse and rewarded himself with several hundred wives. When he died he left one hundred sons and fifty daughters to testify to his quality by their number and their proportion. He married several of his daughters, so that they too might have splendid children. His offspring were so numerous that they constituted for four hundred years a special class in Egypt, from which, for over a century, her rulers were chosen. He seems to have ruled Egypt well. He built so lavishly that half of the surviving edifices of Egypt are ascribed to his reign. He completed the main hall at Karnak, added to the temple of Luxor, raised his own vast shrine, the Ramesseum, west of the river, finished the great mountain-sanctuary at Abu Simbel, and scattered colossi of himself throughout the land. Commerce flourished under him, both across the Isthmus of Suez and on the Mediterranean. He built another canal from the Nile to the Red Sea, but the shifting sands filled it up soon after his death. He yielded up his life in 1225 B.C., aged ninety, after one of the most remarkable reigns of history. After his death the decline of Egypt began. The following factors are responsible for the collapse of this mighty civilization of Nile

- **The conquest of Egypt**

The nations along the northern shores of the Mediterranean ripened and blossomed, the nations on the southern shores faded and rotted away. Egypt lost her trade, her gold, her power, her art, at last even her pride. One by one her rivals crept down upon her soil, harassed and conquered her and laid her waste. In 954 B.C. the Libyans came in from the western hills and

laid about them with fury; in 722 the Ethiopians entered from the south, and avenged their ancient slavery; in 674 the Assyrians swept down from the north and subjected priest-ridden Egypt to tribute. For a time Psamtik, Prince of Sai's, repelled the invaders, and brought Egypt together again under his leadership. During his long reign, and those of his successors, came the "Sai'te Revival" of Egyptian art: the architects and sculptors, poets and scientists of Egypt gathered up the technical and esthetic traditions of their schools, and prepared to lay them at the feet of the Greeks. But in 525 B.C. the Persians under Cambyses crossed Suez, and again put an end to Egyptian independence. In 332 B.C. Alexander sallied out of Asia, and made Egypt a province of Macedon. In 48 B.C. Caesar arrived to capture Egypt's new capital, Alexandria, and to give to Cleopatra the son and heir whom they vainly hoped to crown as the unifying monarch of the greatest empires of antiquity.

6.10 Contributions Egyptian civilization

In 30 B.C. Egypt became a province of Rome, and disappeared from history. For a time it flourished again when saints peopled the desert, and Cyril dragged Hypatia to her death in the streets (415 A.D.). Again when the Moslems conquered it (ca. A.D. 650), built Cairo with the ruins of Memphis and filled it with bright-domed mosques and citadels it revived in a different manner. But these were alien cultures not really Egypt's own, and they too passed away. Today there is a place called Egypt, but the Egyptian people are not masters there. Long since they have been broken by conquest and merged in language and marriage with their Arab conquerors; and the feet of weary pilgrims who travel thousands of miles to find that the Pyramids are merely heaps of stones. Perhaps greatness could grow there again if Asia should once more become rich,and make Egypt the half-way house of the planet's trade.

On all sides gigantic ruins, monuments and tombs, memorials of a savage and titanic energy scattered. And on all sides the hostile, engulfing sands, blown about forever by hot winds and grimly resolved to cover everything in the end. Nevertheless the sands have destroyed only the body of ancient Egypt. Its spirit survives in the lore and memory of our race. The improvement of agriculture, metallurgy, industry and engineering. The apparent invention of glass and linen, of paper and ink, of the calendar and the clock, of geometry and the alphabet. The refinement of dress and ornament, of furniture and dwellings, of society and life. The remarkable development of orderly and peaceful government, of census and post, of primary and secondary education, even of technical training for office and administration. The advancement of writing and literature, of science and medicine. The first clear formulation known to us of individual and public conscience, the first cry for social justice, the first widespread monogamy, the first monotheism, the first essays in moral philosophy; the elevation of architecture, sculpture and the minor arts to a degree of excellence and power never reached before and seldom equaled since. These contributions were not lost, even when their finest exemplars were buried under the desert or overthrown by some convulsion of the globe.

Summary

- The narrow strip of land on either side of the river Nile is green and fertile while the western part of North Africa is a desert. The area has hardly any rainfall and except along the Nile, cultivation is difficult in Egypt. It would be entirely a desert but for the Nile it is no wonder that Egypt is called the ‑Gift of the Nile‖.

- Regular flood of Nile was an important feature of Egypt. The flood comes when the grounds are parched and when it subsides it leaves a new layer of enriching mud. From ancient this annual deposit of silt has served as an excellent fertilizer. These natural advantages made Egypt one of the great centres of civilization.

- Historians divide the history of Egypt into three periods: The Old Kingdom, The Middle Kingdom and the New Kingdom. The Old Kingdom is also called the Age of the pyramids. During this period, Memphis, situated near modern Cairo was the capital. The civilization of Egypt with its advances in art, religion and sciences was developed during the period 3000-2000 B.C and during The Middle Kingdom (2000-1750 B.C).
- In the 18^{th} century B.C, Egypt was overrun by invaders called the Hyksos, which came from the east. Their rule was short; soon the Egyptian kings regained their land, and The New Kingdom was founded. Under the New ruling dynasty Egyptian army was reorganized and new tactics of warfare and the horse-drawn chariot were adopted. This enabled the Egyptian kings to conquer many lands.
- The Egyptian king was called the Pharaoh. He had absolute powers. He was also looked upon as God and his statues were put in temples. His deeds and victories were inscribed on temple walls. Next to the Pharaoh came priests, officials, artists and craftsmen. Below these people were the farmers who lived beyond the cities and then came the slaves who were generally the prisoners of war and owned by the king.
- Agriculture was the most important occupation of the people. The rivers fertilized the land every year and the people worked together to build canals to make it possible to grow crops all the round year. Thus they could cultivate a wide area. The chief crops grown were wheat, barley and millet. They also grew dates, figs, apples, peaches and mulberries.
- Like the people of other civilizations, Egyptians also domesticated animals. Goats, dogs, asses, pigs and geese were common. The horse was brought to Egypt by the Hyksos and was used to draw war chariots. Flax was grown in plenty of Egypt. The Egyptian people wore linen garments. During the period of middle kingdom, potter‘s wheel came into use. They started using metal on a large scale gradually. They made beautiful stone vases and the carpenters of Egypt made beautiful furniture inlaid with ivory and precious stones, which was well preserved in the royal tombs.

By about 1000 B.C, the great days of Egypt were over. The Pharaoh had to fight for their very existence against the invaders from the areas to the south of Egypt in Africa or the new powers across the Mediterranean Sea, from Crete and Cyprus. In quick succession Egypt was conquered and became part of the empires of Assyrians, Iranians and Romans.

- Finally with the invasion of Alexander the last ruling dynasty of Ancient Egypt was overthrown.

Key Terms

Artefacts: An object made by workmanship of man Booty: spoil taken in war Chronology: science for computing or arranging units of time

Citadel: Fortress on commanding height

Corvee: Doing forced labor for the King

Cosmopolitan: One free from local or regional prejudices

Decipherment: to finding out meaning of an old died script.

Dolichocephalic : A condition where the head is longer than would be expected, relative to the width of the head.

Embalm: To treat a corpse with preservatives in order to slow decay

Estate: Landed property

Evisceration: Process by which a body is emptied of its internal organs

Frankincense: Sweet-smelling gum resin, from a tree, burned as incense

Hieroglyph: Pictorial representation of writing, sacred character

Inscription: Writing embossed on walls or pillars

Legitimise: To hold justifiable

Mastabas: Simple rectangular structures with a single burial chamber used as tombs for ancient Egyptians

Mausoleum: Magnificent tomb

Millennium: One thousand years

Mummification: Ancient Egyptian process of corpse preservation achieved through embalming.

Potsherd: Srchaeological term used to describe a fragment of pottery

Scribe: Individual who copies manuscripts and documents

Shaduf: Device used to irrigate fields surrounding the Nile

Sheet-flood: Flood that spreads out on earth surface

Stylus: A kind of writing pen.

Totemism: A system of belief in which each human is thought to have a spiritual connection or a kinship with another physical being, such as an animal or plant.

Self Asesement Questions

1. What insights do we gain from the 'pyramids on the culture and belief of ancientEgyptians? Write a short note.
2. Describe the writing system of the Egyptians. Explain how the writing system evolvedand classify the uses of their writing.
3. Describe the various art forms of Egyptian culture. Tell what purposes their art served.
4. Describe the types, purposes, and styles of Egyptian buildings and monuments. Summarize the building techniques used in construction of the buildings and monuments.
5. How are the remains of ancient Egyptian temples different from what the temples looked like in the past? What are some of the threats endangering the survival of these ancient structures?
6. What is the ancient Egyptians view of death? What is their interpretation of the afterlife?
7. How do you explain the decline of Egyptian civilisations.
8. Discuss the conditions of women in Ancient Egypt.

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UNIT-07 SOCIETY, CULTURE AND ECONOMY OF MESOPOTAMIAN CIVILIZATION

STRUCTURE

Learning Objectives

The chapter deals with civilizations in Mesopotamia, the earliest among the ancient river valley civilizations. In Mesopotamia civilization flourished on the banks of river Euphrates and Tigris. The objectives of this unit are to.

- Make you aware about development of civilization in Mesopotamia.
- Provide a brief sketch on the geography, of Mesopotamia.
- Describe the political, economic, social and religious aspects of various phases of Mesopotamian civilization.
- Enumerate the development of Art and Architecture, script and literature and science and technology of Mesopotamia and
- Assess the contribution of Mesopotamia to subsequent human civilization.

Introduction to Civilizations in Mesopotamia

Two rivers flow from the mountains of eastern Turkey, down through Syria and Iraq and finally debouch in to the Persian Gulf. Six thousand years ago, the waters of these rivers provided the lifeblood that allowed the formation of farming settlements. These grew into villages and then cities. It is here in this land urban civilization flourished for a long period of time and bestow the mankind with the first ever farming and commerce, the horse and carriage, the coinage, the industries, the law and government, the drainage systems, the geometry and astronomy, the calendar, clock and zodiac, the alphabet and script, the literature and music, the sculpture and architecture, the religious system, the cosmetics and jewelry, etc or even more need for a civilized society.

Before dealings with the different phases of urban Mesopotamian civilization let‘s have a brief look into the geography of this region which helps to flourished them. Presently the

region is characterized with a desert climate dominating the landscape between the Persian Gulf and theMediterranean Sea in Southwest Asia. Yet within this dry region lies an arc of land that provides some of the best farming in Southwest Asia. The region‘s curved shape and the richness of its land led scholars to call it the *Fertile Crescent.*

In the eastern part of the Fertile Crescent, the Tigris and Euphrates rivers flow south-eastward to the Persian Gulf. Between them lies a plain that became known as Mesopotamia, which in Greek means ‑land between the rivers.‖ The Tigris and Euphrates rivers flooded Mesopotamia at least once a year. As the floodwater receded, it left a thick bed of mud calledsilt**.** In this rich, new soil, farmers could plant and harvest enormous quantities of wheat and barley. The surpluses from their harvests allowed villages to grow. People first began to settleand farm in southern Mesopotamia before 4500 B.C. Gradually the prosperous agriculture accelerated the process of urbanisation and growth of civilisation. In this Fertile Crescent successively three phase of urban civilisation flourished such as the Sumerian, Babylonian and Asyria.

- **Race**

alongside elaborate judicial procedures and a discriminating attempt to limit marital tyranny. All in all, these 285 laws, arranged almost scientifically under the headings of personal property, real estate, trade and business, the family, injuries and labour, form a code more advanced and civilized than that of Assyria a thousand and more years later.

This unifying legislation was one of Hammurabi's accomplishments. At his command a great canal was dug between Kish and the Persian Gulf, thereby irrigating a large area of land and protecting the cities of the south from the destructive floods of Tigris. Despite the secular quality of his laws Hammurabi was clever enough to gild his authority with the approval of the gods. He built temples as well as forts, and pleased the clergy by constructing at Babylon a gigantic sanctuary for Marduk and a massive granary to store up wheat for gods and priests. These and similar gifts were an astute investment, from which he expected steady returns in the respectful obedience of the people. From their taxes he financed the forces of law and order and had enough left over to beautify his capital. Palaces and temples rose in Babylon, a bridge spanned the Euphrates to let the city spread itself along both banks, ships manned with ninety men plied up and down the river. Two thousand years before Christ Babylon was already one of the richest cities that history had yet known.

The people were of Semitic appearance, dark in hair and features. The common dress for both man and women was a white linen cloth reaching to the feet. In the women it left one shoulder bare and in the men it was enlarged with mantle and robe. As wealth grew the people developed a taste for colour and dyed for themselves garments of different colours. The bare feet

of the Sumerian period gave way to shapely sandals and the male head in Hammurabi's time was swathed in turbans. Women wore necklaces, bracelets and amulets and strings of beads in their carefully coiffure hair. The men flourished walking-sticks with carved heads and carried on their girdles the prettily designed seals with which they attested their letters and documents. The priests wore tall conical caps to conceal their humanity.

It is almost a law of history that the same wealth that generates a civilization announces its decay. Wealth produces ease as well as art. It softens a people to the ways of luxury and peace and invites invasion from stronger arms and hungrier mouths. On the eastern boundary of the new state a hardy tribe of mountaineers the Kassites looked with envy upon the riches of Babylon. Very soon after Hammurabi's death they invaded the land plundered it, retreated, raided it again and again and finally settled down in it as conquerors and rulers, which resulted in the origin of aristocracies in later Babylonian culture.

- **Historical Geography**

The Kassites a people of non-Semitic stock perhaps descendants of European immigrants from Neolithic days. Their victory over Semitic Babylon represented one more swing of the racial pendulum in western Asia. For several centuries Babylonia lived in an ethnic and political chaos that put a stop to the development of science and art. They were expelled after almost six centuries of rule as disruptive as the similar sway of the Hyksos in Egypt. The disorder continued for four hundred years more under obscure Babylonian rulers to until the rising power of Assyria in the north stretched down its hand and brought Babylonia under the kings of Nineveh. When Babylon rebelled, Sennacherib destroyed it almost completely but the friendly despotism of Esarhaddon restored it to prosperity and culture. The rise of the Medes weakened Assyria and with their help Nabopolassar liberated Babylonia set up an independent dynasty and leave this second Babylonian kingdom to his son Nebuchadrezzar II, villain of the vengeful and legendary Book of Daniel.

- **Polity in Mesopatamian**

Nebuchadrezzar was the most powerful ruler of his time in the Near East and the greatest warrior, statesman and builder in all the succession of Babylonian kings after Hammurabi. When Egypt conspired with Assyria to reduce Babylonia to vassalage again, Nebuchadrezzar met the Egyptian hosts at Carchemish (on the upper reaches of the Euphrates) and almost annihilated them. Palestine and Syria then fell easily under his sway and Babylonian merchants controlled all the trade that flowed across western Asia from the Persian Gulf to the Mediterranean Sea.

Nebuchadrezzar again beautify the city of Babylon and patronise the priests. He resisted the temptation to be merely a conqueror. He venture out occasionally to teach his subjects the virtues of submission but for the most part he stayed at home making Babylon the unrivalled capital of the Near East and the largest and most magnificent metropolis of the ancient world.

Nabopolassar had laid plans for the reconstruction of the city; Nebuchadrezzar used his long reign of forty-three years to carry them to completion. Through the centre of the town ran the palm-fringed Euphrates, busy with commerce and spanned by a handsome bridge. Practically all the better buildings were of brick as stone was rare in Mesopotamia. The bricks were often faced with enamelled tiles of brilliant blue, yellow or white, adorned with animal and other figures in glazed relief, which remain to this day supreme in their kind. Nearly all the bricks so far recovered from the site of Babylon bear the proud inscription "I am Nebuchadrezzar, King of Babylon."

In its glorious days in the city of Babylon there was a mountain of masonry an immense and lofty ziggurat, rising in seven stages of gleaming enamel to a height of 650 feet, crowned with a shrine containing a massive table of solid gold and an ornate bed on which each night some woman slept to await the pleasure of the god. This structure taller than the pyramids of Egypt was probably the "Tower of Babel" of Hebraic myth. South of the ziggurat stood the gigantic Temple of Marduk, tutelary deity of Babylon. Around and below this temple the city spread itself out in a few wide and brilliant avenues crossed by crowded canals and narrow winding streets alive, no doubt with traffic and markets and scented with garbage and humanity.

- **Religious & Morality**

Connecting the temples was a spacious way, paved with asphalt covered bricks and overlaid withflags of limestone and red breccias. This broad avenue was flanked with walls of coloured tile,on which stood out, in low relief, one hundred and twenty brightly enamelled lions roaring to keep the impious away. At one end of the Sacred Way rose the magnificent Ishtar Gate a massive double portal of resplendent tiles, adorned with enamelled flowers and animals of admirable colour, vitality and line.

Six hundred yards north of the "Tower of Babel" raised a mound called Kasr on which Nebuchadrezzar built the most imposing of his palaces. At its centre situated his principal dwelling palace. The walls of finely made yellow brick, the floors of white and mottled sandstone; reliefs of vivid blue glaze adorned the surfaces and gigantic basalt lions guarded the entrance of his palace. Nearby, supported on a succession of superimposed circular colonnades were the famous Hanging Gardens which the Greeks included among the Seven Wonders of the World. The gallant Nebuchadrezzar had built them for one of his wives, the daughter of Cyaxares, King of the Medes. This princess, unaccustomed to the hot sun and dust of Babylon pined for the greenness of her native hills. The topmost terrace was covered with rich soil to the depth of many feet providing space and nourishment not merely for varied flowers and plants but for the largest and most deep-rooted trees. Hydraulic engines concealed in the columns and manned by shifts of slaves carried water from the Euphrates to the highest tier of the gardens. Here seventy-five feet above the ground in the cool shade of tall trees and surrounded by exotic shrubs and fragrant flowers, the ladies of the royal harem

walked unveiled, secure from the common eye. While in the plains and streets below the common man and woman ploughed, wove, built, carried burdens and reproduced their kind. This was the city of Babylon in the days of her glory as described by Herodotus, the father of History.

- **Economy**

The fertile soil of this civilisation was ploughed by tenants or by slaves; some of it by peasant proprietors. The waters of the rising rivers were not allowed to flood the land as in Egypt; on the contrary, every farm was protected from the inundation by ridges of earth, some of which can still be seen today. The overflow was guided into a complex network of canals or stored into reservoirs, from which it was sluiced into the fields as needed or raised over the ridges by shadufs buckets lifted and lowered on a pivoted and revolving pole. Nebuchadrezzar distinguished his reign by building many canals and gathering the surplus waters of the overflow into a reservoir one hundred and forty miles in circumference, which nourished by its outlets vast areas of land. The land produced a variety of cereals and pulses, great orchards of fruits and nuts, and above all, the date. From this beneficent mixture of sun and soil the Babylonians made bread, honey, cake and other delicacies. They mixed it with meal to make one of their most

Some inhabitant sustained their life by mining copper, lead, iron, silver and gold from the earth. Tools, which had still been of stone in the days of Hammurabi, began to be made of bronze then of iron and the art of casting metal appeared. Textiles were woven of cotton and wool; stuffs were dyed and embroidered with such skill that these tissues became one of the most valued exports of Babylonia. As far back as we can go in Mesopotamian history we find the weaver's loom and the potter's wheel; these were almost the only machines. Buildings were mostly of clay mixed with straw; or bricks still soft and moist were placed one upon the other and allowed to dry into a solid wall cemented by the sun.

During the heydays of Babylonian civilisation trades multiplied and became diversified and skilled, and as early as Hammurabi industry was organized into guilds of masters and apprentices. Local transport used wheeled carts drawn by asses. The horse is first mentioned in Babylonian records about 2100 B.C., With this new means of locomotion and carriage, trade expanded from local to foreign commerce; Babylon grew wealthy as the commercial hub of the Near East, and the nations of the ancient Mediterranean world were drawn into closer contact for good and ill. Nebuchadrezzar facilitated trade by improving the highways. Countless caravans brought to the bazaars and shops of Babylon the products of half the world.

Government in Mesopotamia never succeeded in establishing such economic order as that which the Pharaohs achieved in Egypt. Commerce was harassed with a multiplicity of dangers and tolls. It was safer, where possible, to take the great national highway the Euphrates, which Nebuchadrezzar had made navigable from the Persian Gulf to Thapsacus. His campaigns

in Arabia and his subjugation of Tyre opened up to Babylonian commerce the Indian and Mediterranean Seas but these opportunities were only partially explored. For on the open sea as in the mountain passes and the desert wastes risk beset the merchant at every hour. Vessels were large but reefs were many and treacherous at any moment pirates might board the ships, robbed the merchandise and enslave or kill the crew. The merchants reimbursed themselves for such losses by restricting their honesty to the necessities of each situation.

These difficult transactions were made easier by a well-developed system of finance. The Babylonians had no coinage but even before Hammurabi they used besides barley and corn ingots of gold and silver as standards of value and mediums of exchange. The metal was unstamped, and was weighed at each transaction. Loans were made in goods or currency but at a high rate of interest, fixed by the state at 20% per annum for loans of money and 33% for loans in kind. Even these rates were exceeded by lenders who could hire clever scribes to circumvent the law. There were no banks but certain powerful families carried on from generation to generation the business of lending money.

Summary

- Mesopotamian civilizations faced challenges from invasions, internal conflicts, and changing environmental conditions. The region was eventually conquered by various external powers, including the Persians and later the Macedonians under Alexander the Great.
- The Epic of Gilgamesh, a literary work from Mesopotamia, is one of the earliest known pieces of literature. It tells the story of a legendary king, Gilgamesh, and addresses themes of mortality, friendship, and the search for immortality.
- Mesopotamians practiced polytheistic religions, with a pantheon of gods and goddesses, each associated with specific aspects of life, nature, or the city. Temples were built to honor and worship these deities.
- About ten thousand years ago, the people of this area began the agricultural revolution. Instead of hunting and gathering their food, they domesticated plants and animals, beginning with the sheep. They lived in houses built from reeds or mud-brick, grouped in villages where they tended their crops. They built granaries to store their grain, and they began developing a token system to record trade and account

Key Terms

Archaeology: A branch of study deals with materials remains of past human society to reconstruct past human history.

Aristocracy: The ruling and wealthy class of society.

Constellations: A group of star in the sky.

Diluvian: Flood, Deluge here related to the primodial deluge found mentioned in the Mesopotamian literature and legend.

Enamelled: A vitreous, usually opaque, protective or decorative coating baked on metal, glass, or ceramic ware.

Epicurean: Devoted to the pursuit of sensual pleasure, especially to the enjoyment of good food and comfort. Epicureanism is also a system of philosophy based upon the teachings of Epicurus, founded around 307 BC

Self Asesment Questions

1. Give a brief account on the influence of geography for shaping of Civilization in Mesopotamia.
2. Describe the writing system of the Mesopotamia. Explain how the writing system evolved and classify the uses of their writing.
3. Describe the various aspects of Polity in Sumerian phase of Mesopotamia.
4. Describe the types, purposes, and styles of Mesopotamian city.
5. Describe the religious belief of the ancient Mesopotamian.
6. Assess the contribution of Mesopotamia to subsequent human civilization.
7. Write short notes on
   a. Hanging Gardens.
   b. Cuneiform script.
   c. Ziggurat
   d. City of Babylon as described by Herodotus
8. Discuss various aspects of society and economy in Ancient Mesopotamis

Further Readings

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UNIT-08 SUMERIAN, BABYLONIAN & ASSYRIAN CIVILISATIONS

STRUCTURE

Learning Objectives

i. Mesopotamia was home to several independent city-states, each with its own government and ruler. Over time, empires such as the Akkadian, Babylonian, and Assyrian empires rose to power, conquering and unifying the region under centralized rule.
ii. Mesopotamians practiced polytheistic religions, with a pantheon of gods and goddesses, each associated with specific aspects of life, nature, or the city. Temples were built to honor and worship thesedeities.
iii. Mesopotamian civilizations faced challenges from invasions, internal conflicts, and changing environmental conditions.
iv. The region was eventually conquered by various external powers, including the Persians and later the Macedonians under Alexander the Great.

Introduction to Mesopotamian Civilisation

The legacy of Mesopotamia lies in its contributions to writing, legal systems, architecture, and cultural developments that laid the foundation for subsequent civilizations in the ancient Near East and beyond. enterprises. Persons who had funds on deposit with such men could pay their obligations by written drafts. The priests also made loans particularly to finance the sowing and reaping of the crops.

It was essentially a commercial civilization. Most of the documents that have come down from it are of a business character sale, loans, contracts, partnerships, commissions, exchanges, bequests, agreements, promissory notes etc. We find in these tablets abundant evidence of wealth.

8.3 Sumerian: Historical & Geographical Background

Modern man first began to settle and introduce farming in southern Mesopotamia before 4500 B.C. It was around 3500 B.C., the people called as Sumerians arrived in Mesopotamia and settled over here. The Sumerians mixed with the local farmers, and their language became dominant in the region. No one knows for sure where the Sumerians came from. Good soil was the advantage that attracted these settlers to the flat, swampy land of Sumer. There were, however, three disadvantages to their new environment. First, the unpredictable flooding of the rivers and arid climatic condition, secondly, the defenceless situation of Summer and the third, the extremely limited natural resources of Sumer such as stone, wood, and metal must had created problems of scarcity of materials for manufacturing of tools or construction of buildings.

These activities required organization, cooperation, and leadership. It took many people working together, for example, for the Sumerians to construct their large irrigation systems. Leaders were needed to plan the projects and supervise the digging. These projects also created a need for laws to settle disputes over how land and water would be distributed. These leaders and laws were the beginning of organized government.

The Sumerians stand out in history as one of the first groups of people to form a civilization. Five key characteristics set Sumer apart from earlier human societies are advanced cities, specialized workers, complex institutions, record keeping, and advanced technology. All the later peoples who lived in this region of the world built upon the innovations of Sumerian civilization. By 3000 B.C., the Sumerians had built a number of cities, each surrounded by fields of barley and wheat. Although these cities shared the same culture, they developed their own governments, each with its own rulers. Each city and the surrounding land it controlled formed a city-state. A city-state functioned much as an independent country does today. Sumerian city-states included Uruk, Kish, Lagash, Umma, and Ur. Semites. In the midst of their struggles these varied stocks unconsciously, perhaps unwillingly, cooperated to produce the first extensive civilization known to history, and one of the most creative and unique

- **Race**

Historians are in doubt about the original home land, ethnic origin and the route of immigration of the Sumerians in Mesopotamia. Perhaps they came from central Asia, or the Caucasus, or Armenia, and moved through northern Mesopotamia down the Euphrates and the Tigris along which, as at Ashur, evidences of their earliest culture have been found; perhaps, as the legend says, they sailed in from the Persian Gulf, from Egypt or elsewhere, and slowly made their way up the great rivers; perhaps they came from Susa, among whose relics is an asphalt head bearing all the characteristics of the Sumerian type; perhaps, even, they were of remote Mongolian origin, for there is much in their language that resembles the Mongol speech. The skeletal remains and sculptural reliefs show them as a short and stocky people, with high,

straight, non-Semitic nose, slightly receding forehead and downward-sloping eyes. Many wore beards, some were clean-shaven, most of them shaved the upper lip.

- **The Sumerian Flood**

In or about 2300 B.C. the ancient poets and scholars of Sumeria started the reconstruction of their ancient history. The poets wrote legends of a creation, a primitive paradise and a terrible flood that engulfed and destroyed it because of the sin of an ancient king. This tradition of legendary flood passed down into Babylonian and Hebrew tradition, and became part of the Christian creed. In 1929 Professor Woolley, digging into the ruins of Ur, discovered an eight-foot layer of silt and clay; this, if we are to believe him, was deposited during a catastrophic overflow of the Euphrates, which lingered in later memory as the Flood. Beneath that layer were the remains of a pre-diluvian culture that would later be pictured by the poets as a Golden Age.

8.4 Polity in Sumeria

The priest-historians of Sumer created a past spacious enough for the development of all the marvels of Sumerian civilization. They formulated lists of their ancient kings, extending the dynasties before the Flood to 4,32,000 years and told such impressive stories of two of these rulers, Tammuz and Gilgamesh, that the latter became the hero of the greatest poem in Babylonian literature, and Tammuz passed down into the pantheon of Babylon and became the Adonis of the Greeks. Perhaps the priests exaggerated a little the antiquity of their civilization. We may loosely judge the age of Sumerian culture by observing that the ruins of Nippur are found to a depth of sixty-six feet, of which almost as many feet extend below the remains of Sargon of Akkad as rise above it to the topmost stratum on this basis Nippur would go back to 5262 B.C. Tenacious dynasties of city-kings seem to have flourished at Kish ca. 4500 B.C., and at Ur ca. 3500 B.C.

These activities required organization, cooperation, and leadership. It took many people working together, for example, for the Sumerians to construct their large irrigation systems. Leaders were needed to plan the projects and supervise the digging. These projects also created a need for laws to settle disputes over how land and water would be distributed. These leaders and laws were the beginning of organized government.

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- **City states of Sumer: Kings and the Government.**

Each city maintained a jealous independence and indulged itself in a private king called Patesi or priest-king. The term priest king indicates by the very word that the government was bound up with religion. By 2800 B.C. the growth of trade made such municipal separatism impossible and generated "empires" in which some dominating personality subjected the cities and their Patesis to his power and wove them into an economic and political unity. The king dwelt in an inaccessible palace, whose two entrances were so narrow as to admit only one person at a time; to the right and left were recesses from which secret guards could examine every visitor, or pounce upon him with daggers. Even the king's temple was private, hidden away in his palace, so that he might perform his religious duties without exposure, or neglect them inconspicuously.

The king went to battle in a chariot, leading an army armed with bows, arrows and spears. The wars were waged frankly for commercial routes and goods. The defeated were customarily sold into slavery or slaughtered on the battlefield. Sometimes a tenth of the prisoners, struggling unsuccessfully in a net were offered as living victims to the thirsty gods. The chauvinistic separatism of the cities stimulated life and art, but led to civic violence and at last destroyed Sumeria.

In the empires social order was maintained through a feudal system. After a successful war the ruler gave tracts of land to his valiant chieftains, and exempted such estates from taxation. These men kept order in their territories, and provided soldiers and supplies for the exploits of the king. The finances of the government were obtained by taxes in kind, stored in royal warehouses, and distributed as pay to officials and employees of the state. To this system of royal and feudal administration was added a body of law, already rich with precedents when Ur-engur and Dungi codified the statutes of Ur. This was the fountainhead of Hammurabi's famous code. It was cruder and simpler than later legislation, but less severe: where, for example, the Semitic code killed a woman for adultery, the Sumerian code merely allowed the husband to take a second wife and reduce the first to a subordinate position. The law covered commercial as well as sexual relations and regulated all loans and contracts, all buying and selling, all adoptions and bequests. Courts of justice sat in the temples, and the judges were for the most part priests; professional judges presided over a superior court. The best element in this code was a plan for avoiding litigation: every case was first submitted to a public arbitrator whose duty it was to bring about an amicable settlement without recourse to law. 88 It is a poor civilization from which we may not learn something to improve our own.

8.4 Economic Condition of Sumeria

The basis of this civilisation was a soil made fertile by the annual overflow of rivers swollen with the winter rains. The overflow was perilous as well as useful; the Sumerians learned to channel it safely through irrigating canals that ribbed and crossed their land. This irrigation system, dating from 4000 B.C., was one of the great achievements of Sumerian civilization, and certainly its foundation. From these watered fields came abounding crops of corn, barley, spelt, dates, and many vegetables. The plough appeared early, drawn by oxen and already furnished with a tubular seed drill. The gathered harvest was threshed by drawing over it great sledges of wood armed with flint teeth.

The Sumerians made some use of copper and tin, and occasionally mixed them to produce bronze; now and then they went so far as to make large implements of iron. But metal was still a luxury and a rarity. Most Sumerian tools were of flint; some, like the sickles for cutting the barley, were of clay; and certain finer articles, such as needles and awls, used ivory and bone. Weaving was done on a large scale under the supervision of overseers appointed by the king, after the latest fashion of governmentally controlled industry. Houses were made of reeds, usually plastered with an adobe mixture of clay and straw moistened with water and hardened by the sun. Cows, sheep, goats and pigs roamed about the dwelling. Water for drinking was drawn from wells.

Goods were carried chiefly by water. Because of its scarcity stone was brought up the Gulf or down the rivers, and then through numerous canals to the docks of the cities. Land transportation was also there. Here and there in the ruins are business seals bearing indications of traffic with Egypt and Indus Valley of India. There was no coinage yet and trade was normally by barter; but gold and silver were already in use as standards of value, and were often accepted in exchange for goods sometimes in the form of ingots and rings of definite worth, but generally in quantities measured by weight in each transaction.

8.5 The Sumerian Society

In Sumerin society rich and poor were stratified into many classes and gradations. Slavery was highly developed and property rights were already sacred. Between the rich and the poor a middle class took form composed of small-business men, scholars, physicians and priests. Medicine flourished, and had a specific for every disease; but it was still bound up with theology and admitted that sickness, being due to possession by evil spirits, could never be cured without the exorcising of these demons. A calendar of uncertain age and origin divided the year into lunar months, adding a month every three or four years to reconcile the calendar with the seasons and the sun. Each city gave its own names to the months.

The priests transmitted education as well as mythology and doubtless sought to teach as well as to rule, by their myths. To most of the temples were attached schools wherein the clergy instructed boys and girls in writing and arithmetic, formed their habits into patriotism and piety,

and prepared some of them for the high profession of scribe. School tablets survive, encrusted with tables of multiplication and division, square and cube roots and exercises in applied geometry.

8.6 Slavery in Babylon

We see in the literature many signs of a busy and prosperous life but we find also at every turn reminders of the slavery that underlies all cultures. The most interesting contracts of sale from the age of Nebuchadrezzar are those that have to do with slaves. They were recruited from captives taken in battle from slave-raids carried out upon foreign states by marauding Bedouins and from the reproductive enthusiasm of the slaves themselves. Most of the physical work in the towns was done by them including nearly all of the personal service. Female slaves were completely at the mercy of their purchaser, and were expected to provide him with bed as well as board. It was understood that he would breed through them a copious supply of children and those slaves who were not so treated felt themselves neglected and dishonoured. The slave and all his belongings were his master's property: he might be sold or pledged for debt; he might be put to death if his master thought him less lucrative alive than dead. If he ran away no one could legally keep him and a reward was fixed for his capture. On the other hand the slave's master paid his doctor's fees and kept him moderately alive through illness, slack employment and old age. He might marry a free woman and his children by her would be free; half his property, in such a case, went on his death to his family. He might be set up in business by his master and retain part of the profits with which he might then buy his freedom or his master might liberate him for exceptional or long and faithful service. But only a few slaves achieved such freedom. The rest consoled themselves with a high birth-rate, until they became more numerous than the free. A great slave-class moved like a swelling subterranean river underneath the Babylonian state.

- **The Law: Code of Hammurabi**

Economic character of Babylonian society necessitated a monarchy supported by commercial wealth or feudal privilege, and protected by the judicious distribution of legal violence. A landed aristocracy gradually displaced by a commercial plutocracy helped to maintain social control and served as an intermediary between people and king. Within the limits of this arbitrary rule the government was carried on by central and local lords or administrators appointed by the king. These were advised and checked by provincial or municipal assemblies of elders or notables who managed to maintain even under Assyrian domination a proud measure of local self-government.

Every administrator and usually the king himself acknowledged the guidance and authority of that great body of law which had been given form under Hammurabi, and had

maintained its substance, despite every change of circumstance and detail through fifteen centuries. The legal development was from supernatural to secular sanctions, from severity to lenience and from physical to financial penalties. In the earlier days judges were priests and to the end of Babylonian history the courts were for the most part located in the temples. In the days of Hammurabi secular courts responsible only to the government were replacing the judgment-seats presided over by the clergy. There is no evidence of lawyers in Babylonia, except for priests who might serve as notaries and the scribe who would write for pay anything from a will to final judgement. The plaintiff preferred his own plea without the luxury of terminology. Litigation was discouraged. The very first law of the Code reads with almost illegal simplicity: If a man bring an accusation against a man and charge him with a crime but cannot prove it the accuser shall be put to death. There are signs of bribery and of tampering with witnesses. A court of appeals staffed by "the King's Judges," sat at Babylon and a final appeal might be carried to the king himself. There was nothing in the Code about the rights of the individual against the state.

8.9 Religion in Babylon

The power of the king was limited not only by the law and the aristocracy but by the clergy. Technically the king was merely the agent of the city god. Taxation was in the name of the god, and found its way directly or deviously into the temple treasuries. The king was not really king in the eyes of the people until he was invested with royal authority by the priests and conducted the image of Marduk in solemn procession through the streets. In these ceremonies the monarch was dressed as a priest, symbolizing the union of church and state and perhaps the priestly origin of the kingship. Even the mighty Hammurabi received his laws from the god. From the Patesis or priest-governors of Sumeria to the religious coronation of Nebuchadrezzar, Babylonia remained in effect a theocratic state, always under the dominance of the priests.

The wealth of the temples grew from generation to generation as the uneasy rich shared their dividends with the gods. The kings, built the temples equipped them with furniture, food and slaves, donate to them land and assigned to them an annual income from the state.

- **Sargon of Akkad**

Meanwhile another people of Semitic race had built the kingdom of Akkad under the leadership of Sargon I and had established its capital at Agade some two hundred miles northwest of the Sumerian city-states. His origin was not royal history could find no father for him and no other mother than a temple prostitute. He called himself King of Universal Dominion and ruled a small portion of Mesopotamia. He invaded many cities, captured much booty and killed many men. East and west, north and south the mighty warrior marched conquering Elam washing his weapons in symbolic triumph in the Persian Gulf, crossing western Asia, reaching the Mediterranean, and establishing the first great empire in history. For fifty-five years he ruled,

while legends gathered about him and prepared to make him a god. His reign closed with all his empire in revolt. Three sons succeeded him in turn. The third, Naramsin, was a mighty builder, of whose works nothing remains but a memorial slab, recording his victory over an obscure king.

- **Achievement of Gudea**

By the twenty-sixth century B.C. Lagash again flourished under Gudea, an enlightened monarch. His stocky statues are the most prominent remains of Sumerian sculpture. Gudea was honored by his people not as a warrior but as a Sumerian Aurelius, devoted to religion, literature and good works; he built temples, promoted the study of classical antiquities in the spirit of the expeditions that unearthed him, and tempered the strength of the strong in mercy to the weak. One of his inscriptions reveals the policy for which his people worshiped him, after his death, as a god. During seven years the maid servant was the equal of her mistress, the slave walked beside his master, and in my town the weak rested by the side of the strong.

- **The Golden Age of Ur**

Meanwhile Ur of the Chaldees was having one of the most prosperous epochs in its long career from 3,500 B.C. to 700 B.C. Its greatest king, Urengur, brought all western Asia under his pacific sway and proclaimed for all Sumeria the first extensive code of laws in history. The vibrating trade on the Euphrates made Ur prosperous. On account of this prosperity Urengur, beautified his city with temples and built lavishly in the subject cities of Larsa, Uruk and Nippur.

8.10 Religion and Morality

King Ur-engur proclaimed his code of laws in the name of the great god Shamash, for government had so soon discovered the political utility of heaven. Having been found useful, the gods became innumerable; every city and state, every human activity had some inspiring and disciplinary divinity. Sun-worship was already old when Sumeria began, expressed itself in the cult of Shamash. Nippur built great temples to the god Enlil and his consort Ninlil. Uruk worshiped especially the virgin earth-goddess Innini, known to the Semites of Akkad as Ishtar the loose and versatile Aphrodite-Demeter of the Near East. Kish and Lagash worshiped a Mater Dolorosa, the sorrowful mother goddess Ninkarsag, who, grieved with the unhappiness of men interceded for them with sterner deities. Ningirsu was the god of irrigation and Abu or Tammuz was the god of vegetation. Even Sin was a god of the Moon; he was represented in human form with a thin crescent above his head. The air was full of spirits beneficent angels, one each as protector to every Sumerian and demons or devils who sought to expel the protective deity and take possession of body and soul.

- **Letters and Arts**

The startling fact in the Sumerian remains is writing. The marvelous art seems already well advanced, fit to express complex thought in commerce, poetry and religion. The oldest inscriptions are on stone and date apparently as far back as 3600 B.C. Towards 3200 B.C. the clay tablet appears, and from that time on the Sumerians seem to have delighted in the great discovery. It is our good fortune that the people of Mesopotamia wrote not upon fragile, ephemeral paper in fading ink, but upon moist clay deftly impressed with the wedge-like point of a stylus. With this malleable material the scribe kept records, executed contracts, drew up official documents, recorded property, judgments and sales, and created a culture in which the stylus became as mighty as the sword. Having completed the writing, the scribe baked the clay tablet with heat or in the sun and made it thereby a manuscript far more durable than paper and only less lasting than stone. This development of cuneiform script was the outstanding contribution of Sumeria to the mankind.

8.11 Assyrian

Meanwhile, three hundred miles north of Babylon, another civilization had appeared. Forced to maintain a hard military life by the mountain tribes always threatening it on every side, it had in time overcome its assailants, had conquered its parent cities in Elam, Sumeria, Akkad and Babylonia, had mastered Phoenicia and Egypt and had for two centuries dominated the Near East with brutal power. Sumeria was to Babylonia and Babylonia to Assyria. The first created a civilization, the second developed it to its height, the third inherited it, added little to it, protected it and transmitted it as a dying gift to the encompassing and victorious barbarians. For barbarism is always around civilization, amid it and beneath it, ready to engulf it by arms or mass migration or unchecked fertility. The new state grew about four cities fed by the waters or tributaries of the Tigris: Ashur, which is now Kala'at-Sherghat; Arbela, which is Irbil; Kalakh, which is Nimrud; and Nineveh, which is Kuyunjik just across the river from oily Mosul.

The god Ashur gave his name to a city and finally to all Assyria. There the earliest of the nation's kings had their residence, until its exposure to the heat of the desert and the attacks of the neighbouring Babylonians led Ashur's rulers to build a secondary capital in cooler Nineveh named also after a god, Nina, the Ishtar of Assyria. Here, in the heyday of Ashurbanipal, 300,000 people lived, and all the western Orient came to pay tribute to the Universal King

- **Assyrian life**

The economic life of Assyria same like that of Babylonia, for in many ways the two countries were merely the north and south of one civilization. The southern kingdom was more commercial, the northern more agricultural; rich Babylonians were usually merchants, rich Assyrians were most often landed gentry actively supervising great estates. The same rivers

flooded and nourished the land and the same method of ridges and canals controlled the overflow. The same irrigation technology raised the water from ever deeper beds to fields sown with the same wheat and barley, millet and sesame. The same industries supported the life of the towns; the same system of weights and measures governed the exchange of goods and though Nineveh and her sister capitals were too far north to be great centres of commerce, the wealth brought to them by Assyria's sovereigns filled them with handicrafts and trade. Metal was mined or imported in new abundance, and towards 700 B.C. iron replaced bronze as the basic metal of industry and armament. Metal was cast, glass was blown, textiles were dyed, earthenware was enamelled, and houses were well equipped in Nineveh. Industry and trade were financed in part by private bankers, who charged 25% for loans. Lead, copper, silver and gold served as currency; and about 700 B.C. Sennacherib minted silver into half-shekel pieces one of our earliest examples of an official coinage.

The people fell into five classes: patricians or nobles; craftsmen or master artisans, organized in guilds and including the professions as well as the trades; the unskilled but free workmen and peasants of town and village. Serfs bound to the soil on great estates and slaves captured in war or attached for debt, compelled to announce their status by pierced ears and shaven head, and performing most of the menial labour everywhere.

Like all military states, Assyria encouraged a high birth rate by its moral code and its laws. Abortion was a capital crime. Though women rose to considerable power through marriage and intrigue, their position was lower than in Babylonia. Wives were not allowed to go out in public unveiled. Prostitution was accepted as inevitable, and was regulated.

- **Polity**

Penology began with the law of equivalent retaliation. If a man knocked out an eye or a tooth or broke a limb of a patrician precisely the same was to be done to him. If a house collapsed and killed the purchaser the architect or builder must die, if the accident killed the buyer's son, the son of the architect or builder must die. Gradually these punishments in kind were replaced by awards of damages; a payment of money was permitted as an alternative to the physical retaliation, and later the fine became the sole punishment. The penalty varied not merely with the gravity of the offense but with the rank of the offender and the victim. A member of the aristocracy was subject to severe penalties for the same crime than a man of the people but an offense against such an aristocrat was a costly extravagance. In such rough ways, through thousands of years, those traditions and habits of order and self-restraint were established which became part of the unconscious basis of civilization.

Within certain limits the state regulated prices, wages and fees. What the surgeon might charge was established by law; and wages were fixed by the Code of Hammurabi for builders, brick makers, tailors, stonemasons, carpenters, boatmen, herdsmen and labourers. The law of inheritance made the man's children, rather than his wife, his natural and direct heirs. The widow

received her dowry and her wedding-gift, and remained head of the household as long as she lived. The sons inherited equally, and in this way the largest estates were soon re-divided and the concentration of wealth was in some measure checked.

He provided if not political at least economic protection. If a man practise brigandage and be captured that man shall be put to death. If the brigand be not captured the man who has been robbed shall in the presence of the god make an itemized statement of his loss, and the city and governor within whose province and jurisdiction the robbery was committed shall compensate him for whatever was lost.

As the priestscould not directly use or consume this wealth, they turned it into productive or investment capitaland became the greatest agriculturists, manufacturers and financiers of the nation. Not only did they hold vast tracts of land; they owned a great number of slaves or controlled hundreds of labourers, who were hired out to other employers or worked for the temples in their diverse trades from the playing of music to the brewing of beer.

- **Temples and Palaces**

Behind these apparent beginnings of culture were doubtless many centuries of development, in Samaria and other lands. Nothing has been created, it has only grown. Just as in writing Sumeria seems to have created cuneiform, so in architecture it seems to have created at once the fundamental shapes of home and temple, column, vault and arch. The Sumerian peasant made his cottage by planting reeds in a square, a rectangle or a circle, bending the tops together, and binding them to form an arch, a vault or a dome; this, we surmise, is the simple origin or earliest known appearance, of these architectural forms. Among the ruins of Nippur is an arched drain 5000 years old; in the royal tombs of Ur there are arches that go back to 3500 B.C., and arched doors were common at Ur 2000 B.C.

Summary

- With the Assyrians came came an increased emphasis on celestial divination, providing a new occupation for Babylonian scholars. The Babylonians took to making long lists of astronomical observations and in time, this led to the development of mathematical astronomy, which used arithmetical schemes to produce extremely detailed tables of predictions of astronomical phenomena.
- The last of the great Neo-Assyrian kings, Assurbanipal (669-627), collected a vast library at his palace at Nineveh. In 1849, this library was rediscovered by the British archaeologist, Sir Henry Layard, and the modern discipline of Assyriology was born.
- Assurbanipal ruled over the Assyrian empire at its peak. In the abrupt way that characterizes Mesopotamian history, his empire outlived him by less than twenty years. It was followed by a brief period of Babylonian hegemony before Babylon in turn fell to the Persians, former nomads who ruled until Alexander conquered the known world. But

this is to bring us into modern times.

- Mesopotamia, the land between the rivers, derives its name and existence from the rivers Tigris and Euphrates. These two rivers created the Fertile Crescent in the midst of surrounding inhospitable territory.

Key Terms

Hebraic: The term Hebraic law refers to a set of ancient Hebrew Law as found inthe Torah of the Hebrew Bible also known as Mosaic Law

Lexicography: The principles and practices of dictionary making.

Mesopotamia: Modern day Iraq, land between river Euphrates and Tigris.

Patesi: Priest King in Mesopotamian City.

Penology: A section of criminology that deals with the philosophy and practice of various societies in their attempts to repress criminal activities, and satisfy public opinion via an appropriate treatment regime for persons convicted of criminal offences.

Plutocracy: Government by the wealthy and aristocratic people.

Sacerdotal: Relating to priests or the priesthood.

Shadufs: Hand-operated device for lifting water, invented in ancient times.

Theocratic: A government ruled by or subject to religious authority.

Ziggurat: Ziggurats were massive structures built in the ancient Mesopotamian valley.

Self Asesment Questions

9. Give a brief account on the influence of geography for shaping of Civilization in Mesopotamia.
10. Describe the writing system of the Mesopotamia. Explain how the writing system evolved and classify the uses of their writing.
11. Describe the various aspects of Polity in Sumerian phase of Mesopotamia.
12. Describe the types, purposes, and styles of Mesopotamian city.
13. Describe the religious belief of the ancient Mesopotamian.
14. Assess the contribution of Mesopotamia to subsequent human civilization.
15. Write short notes on
    a. Hanging Gardens.
    b. Cuneiform script.
    c. Ziggurat
    d. City of Babylon as described by Herodotus
16. Discuss various aspects of society and economy in Ancient Mesopotamis.

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BLOCK 03: ANCIENT AMERICAN CIVILISATION

Unit 09: Polity, Society, Science & Technology of Chinese Civilisation

Unit 10 Origin and Decline of Maya Civilisation

Unit 11: Polity, religion, society of the Incas

Unit 12: The Aztec-society, Cosmology, Economy

BLOCK 03: ANCIENT AMERICAN CIVILISATION

UNIT 09 POLITIES, SOCIETY, SCIENCE & TECHNOLOGY OF CHINESE CIVILISATION

STRUCTURE

Learning Outcomes

i. Inventions and Technological Advances
ii. Silk Road trade routes, facilitating cultural excha nge
iii. Economic interactions between East and West
iv. The construction of the Great Wall of China is a monumental achievement
v. The Chinese civil service examination system, which originated in the imperial era.
vi. In recent decades, China has experienced a rapid economic rise, becoming a global economic powerhouse. The economic reforms initiated in the late 20th century have transformed China into one of the world's leading economy.

Introduction

In ancient China, civilization developed much like it did in Mesopotamia, Egypt and the Indus Valley. But while these other civilizations grew side by side, knew of each other and had trade relationship in between them, Chinese civilization developed independently, with very little influence from the cultures to the west. An urban civilization did not emerge in China until about2000 BC, about a thousand years later than in Mesopotamia, but it emerged as a large and highly developed kingdom.

The dynamic and rich civilization of the Chinese flourished at the eastern end of mainland China. Eastern China is a vast watershed drained by two large river systems which rise on the Tibetan plateau and Kunlun Mountains and flow eastward to the Pacific. The Yellow river traverses the north China plain. The Yangtze and its valley lie to the south. Smaller rivers and valleys converge on present-day Canton. The climate in the south is semi-tropical and monsoon-

drenched. China has been protected by the Gobi Desert in the north, the Tibetan plateau and Pamir and Himalaya mountains in the west, the forests of Southeast Asia in the South and the Pacific Ocean in the east. From the Shang Dynasty in 1700 BC to the Ching (Qing) Dynasty (1644-1912 AD) there were twenty four dynasties ruled over this vast stretch of land in the Chinese mainland.

With a dense population from early times, the Chinese have achieved high levels of productivity and exported many sought-after goods such as iron, porcelain, and silk. With a common language, paper to print it on, and a varied and distinctive cuisine, the people have been rightfully proud of their cohesive and distinctive culture. They have traditionally viewed themselves as living in ―The Middle Kingdom‖ - that is, the centre of the known world, but have sometimes seen neighbours and outsiders as "barbarians" from whom they demanded tribute.

In this chapter we intended providing you an insight into the civilisation that flourished in China during the Bronze Age. Yangtze and Yellow river provide suitable conditions for transition of the early agricultural societies to the stage of civilisation in China. The yellow river civilisation of China continuously flourished for a long time and in the present time also its influence is strongly visible in traditional Chinese societies. This chapter will discuss various aspects of ancient Chinese civilisations. By the end of this chapter the learners would be able to:

- know about the major geographic zone and their influence on ancient Chinese civilisation.
- learn the the social, political, economic and cultural system of this civilisation, the common and unique features and the chronological sequence in which these social and economic changes under successive ruling dynasties.
- describe the development of religious beliefs and various sects in ancient China and
- discuss the scientific and technological advancement of Chinese civilisations etc

Because of the constrain of space and time in this chapter we will not be discussing the complete history of China but would focus on some main aspects of the ancient Chinese history. This chapter will also discuss the state, society, culture and religion in the ancient China.

9.3 Growth of Civilisation in China: From Prehistory to Civilisation

Like in Mesopotamia, Egypt, and the Indus River valley, civilization in China developed around a great river. The Yellow River carried floodwater and sediment to the land around it, making the area incredibly fertile and thus an excellent place for the Stone Age inhabitants of the area to experiment with agriculture. While the Yellow River was the main cradle of Chinese civilization, people also settled around other rivers, such as the Huai and the Yangtze. By around 4000 BC, villages began to appear. They cultivated a number of crops, but most important was a grain called millet. Besides millet, they also cultivate soybeans, wheat, hemp and Rice. Although Rice was cultivated in this period, but it was not yet the important staple that it would later

become in the Chinese diet. The Neolithic Chinese domesticated animals such as pigs, dogs, and chickens. Silk production, through the domestication of silk worms, probably also began in this early period.

The earliest cultivators lived in wattle-and-daub pit dwellings with wooden support posts and sunken, plastered floors. Their villages were located in isolated clearings along slopes of river valleys. Archaeological finds of weapons and remains of earthen walls suggest tribal warfare between villages. Little is known of the religion of these people, although some evidence suggests the worship of ancestral spirits. They practiced divination by applying heat to a hole drilled in the shoulder bone of a steer or the under shell of a tortoise and then interpreting the resulting cracks in the bone. They buried their dead in cemeteries with jars of food. Tribal leaders wore rings and beads of jade.

During the Neolithic period in China, there were multiple groups of people, mostly around the Yellow River, with separate emerging cultures. Some of these various cultures include the Yangshao culture (4800 to 3000 BC), the Majiayao culture (3800 to 2000 BC), the Dawenkou culture (4300 to 2400 BC), the Qijia culture (2200 to 1800 BC), and the Longshan culture (2600 to 2000 BC). Over time, they influenced each other more and more and pottery, art, and artifacts recovered by archaeologists show greater homogenization as time went on. By 2000 BC a more unified Chinese culture was developing, and there is also evidence of urbanism and the use of early writing among the Chinese. All of this took place about a thousand years later than in Mesopotamia, Egypt, and the Indus River valley.

Chinese mythology tells a different story. It holds that the universe was created by Pangu, after which the Three Sovereigns and Five Emperors, a series of legendary sage emperors and heroes (such as the Yellow Emperor), helped create man and taught the ancient Chinese to speak, use fire, build houses, farm, and make clothing. While these events are mythological, at the root of them may be lies ancient memories of very early kings and rulers who emerged among the prehistoric Chinese. According to these myths, the last of the great Five Emperors left his throne to Yu the Great, who founded China‘s first dynasty, the Xia (or Hsia) dynasty. Yu supposedly began the practice of passing power from father to son, which was the necessary step for the creation of a dynasty. According to mythology, his ancestors ruled China for nearly five hundred years, until the last Xia king became corrupt and cruel. This led to his overthrow by Tang, who founded a new dynasty, the Shang dynasty.

There is much debate among scholars about how much of this mythology is true. Many argue that the Zhou (Chou) dynasty, which ruled China much later, invented the idea of the Xia dynasty. It was necessary because the Zhou created the idea of the Mandate of Heaven, which states that there could only be one legitimate ruler of China at one time. This meant that the various small states that comprised Neolithic and Bronze Age China, and which had probably been forgotten, were not useful for their concept of history. They had to create the idea that

China had always had one ruler and thus they created the idea of an ancient Xia dynasty. Also, since the Zhou had overthrown the legitimate Shang dynasty, they wanted to connect themselves to a more ancient line of kings, so they invented the Xia and gave them a history of ruling the country before the Shang.

However, the Xia dynasty may not be a complete fabrication. Archaeologists have discovered advanced Bronze Age culture in China, which they call the Erlitou culture. Its capital, Erlitou, was a huge city around 2000 BC, with two possible palaces, a drainage system and what seems to have been a very high population. This may be the people referred to in Chinese mythology as the Xia. In addition, for a long time it was believed that the later Shang dynasty may also have been purely mythological, until archaeology proved that it had been real.

Indeed, while the existence of the Shang dynasty was still in doubt, at the start of the twentieth century scholars realized that objects being sold by Chinese merchants as ―dragon bones,‖ which were crushed to make a traditional Chinese medicine consumed to treat a variety of ailments, were actually important pieces of historical evidence called oracle bones. Oracle bones are pieces of bone or turtle shell used by the ancient Chinese, especially Chinese kings, in attempts to predict the future. The ancient kings would inscribe their name and the date on the bone, along with a question. They would then heat the bone until it cracked and then interpret the shape of the crack, which was believed to provide an answer to their question. Shang rulers long thought to be merely mythological figures had carved their names onto such oracle bones, attesting to their actual existence.

Archaeologists have also found ancient cities that correspond with the Shang dynasty. A city at Zhengzhou appears to have been a Shang capital and it contained palaces, workshops, and city walls. Another important but slightly later Shang city that has been excavated is Anyang.

9.4 Dynastic Rule in China

The first three dynasties to rule China were the Xia (or Hsia) dynasty, the Shang dynasty, and the Zhou (or Chou) dynasty. They did not yet rule the huge area that makes up modern China, but they controlled a massive swath of territory around the Yellow River. While the first Chinese emperors did not rule until China was unified under the later Qin (Ch'in) dynasty, in this early period China was ruled by kings. For the most part, there was only one king at a time, who effectively ruled of all of China. Under the Zhou dynasty, however, the power of the kings weakened and many powerful men called themselves ―kings‖ at the same time, as they vied for control of the country. It was only at this point that there emerged the concept of a Chinese emperor, or *Huangdi* (a term that had previously been used for the mythological leaders who were said to have ruled China at the beginning of time), who would rule over all these various kings. In the above section in brief we have discussed about the Xia dynasty, let‘s have a brief look in to the various aspects of the Shang and Zhou Dynasty and the subsequent history of

Chinese civilization.

- **Shang Dynasty**

While scholars still debate whether the Xia dynasty-according to traditional legends the first Chinese dynasty-actually existed or not but almost no one doubts anymore that the Shang dynasty existed and ruled China during its Bronze Age. Thus, the Shang dynasty is generally considered China‘s first historical dynasty. It was under the Shang that writing first emerged among the Chinese, making it the beginning of the historical China. The Shang ruled from around 1600 to 1046 BC.

- **The Discovery of the Shang: The Oracle Bones**

For a long time, scholars doubted that the Shang dynasty ever actually existed. It was only with the discovery of the Shang oracle bones, pieces of bone or shell used for divination, that it was confirmed that the Shang dynasty really did exist. After this, archaeologists started searching out Shang sites, and in the middle of the twentieth century began to excavate Shang cities.

Both archaeology and oracle bones are important sources of evidence about the Shang dynasty. The oracle bones are especially useful, as they provide the bulk of the writing we have about the Shang. The king or professional diviners employed by the king would carve the name of the king and the date onto the bones, and write questions such as –Will we win the upcoming battle?‖ or –How many soldiers should we commit to the battle?‖ Such questions reveal a great deal about what was important to Shang society. Many of the oracle bones ask questions about war, harvests, and childbirth. Once the question was inscribed in the oracle bone, the bone was heated until it cracked. The cracks were then interpreted, and on the other side of the bone the king or diviner would write his interpretation of the crack. Later, they would record on the bone whether the prediction came true. These interpretations and verifications present even more information about the Shang. In addition, the names on the bones verify the reigns of historic Shang rulers long thought to be legendary.

- **Shang Writing**

The inscriptions on Shang oracle bones are the oldest surviving form of Chinese writing. The writing on the oracle bones shows evidence of complex development, indicating that the written language had been around for a long time before the first evidence of it appears. In fact, we can read the writing on the oracle bones because the language was already very similar to the modern Chinese writing system. Unfortunately, however, there are only few examples of Shang writing outside of the oracle bones. There are some inscriptions on bronze objects but most documents, such as government paperwork, receipts, and books, were written on bamboo strips and silk. These decomposed long ago and are lost to us forever.

- **Shang Cities**

According to legend, the Shang dynasty was founded when Cheng Tang overthrew the evil last king of the Xia dynasty. Tang supposedly founded a new capital for his dynasty at a town called Shang, near modern-day Zhengzhou. It seems to have functioned as a sacred capital, where the most sacred temples and religious objects were housed.

However, the effective capital of the kingdom moved from city to city, as different kings ruled from different cities, probably as a result of regional power struggles within the kingdom. The last and most important of these was a city called Yin, near modern-day Anyang, which acted as capital for the last 300 years or so of the dynasty, from about 1400 to 1046 BC. Anyang was a huge city, about 2,400 hectares in size. It was spread out in a multitude of different sectors, each one more like an individual village. Anyang also had an extensive cemetery with thousands of graves of what seem to have been nobles, along with eleven particularly large tombs, which may have belonged to the eleven Shang kings, who apparently ruled from Anyang. All of the kings‘ tombs were looted long ago, but some smaller graves escaped looting long enough for archaeologists to excavate, and even these small graves were filled with enormous numbers of jade, bronze and bone objects. They point to the enormous wealth of the rulers of the city, and many of the tombs would have required huge numbers of laborers in order to construct. These aristocratic tombs were also surrounded by the bodies of human sacrifices, sometimes just skulls, and the bones of human sacrifices have also been found inside of the tombs of Shang elites.

- **Shang Religion**

The human sacrifices found in Shang cities, particularly in the tombs of powerful Shang figures, indicate that they believed their servants would continue to serve them in the afterlife. For this reason, when a Shang aristocrat or ruler died, his or her servants would be killed and buried with the aristocrat. Alternatively, human sacrifices may have been enemy warriors captured in battle.

For the Shang, what a person was buried with was important because they believed that a person would live on in the afterlife and take along the things they were buried with. The Shang believed the dead had great powers, and they worshipped their ancestors. They believed that failing to properly do this would mean that the ancestors would remove their protection from the living, allowing disaster to strike. People who lived under the Shang would consult their ancestors through oracle bones to seek their approval for any major decision and to learn about their future success in harvesting, hunting, or battle. They believed that the ancestors could confer good fortune in these things, and in order to appease the ancestors they made offerings of food and drink.

In addition to their ancestors, the Shang worshipped a supreme god called Shangdi, who ruled over lesser gods who embodied the sun, the moon, the wind, the rain, and other natural forces and places. Nonetheless, they believed that Shangdi was distant from man, and for the most part Shangdi could only be reached through the worship of their ancestors. Shang kings, however, believed they could communicate with Shangdi, and many oracle bones seek out his approval for the decisions of the kings.

- **Shang Technology**

Since the Shang ruled China during its Bronze Age, perhaps the most important technology at the time was bronze casting. They cast bronze objects by creating molds out of clay, carving a design into the clay, and then pouring molten bronze into the mold. They allowed the bronze to cool and then broke the clay off, revealing a completed bronze object.

The upper class had the most access to bronze, and they used in for ceremonial objects, such as ritual vessels used to make offerings to the ancestors. Bronze objects were also buried in the tombs of Shang elite. The Shang government also used bronze for military weapons such as swords and spearheads. Bronze weapons gave the Shang a distinct advantage over their enemies. Another military technology that allowed the Shang to excel at war was the chariot. Under the Shang, the Chinese domesticated the horse. The horse would still have been too small to ride at the time, but the Chinese gradually developed the chariot, which harnessed the power of horse. The chariot was a devastating weapon in battle, and it also allowed Shang soldiers to moved vast distances with great speed.

These military technologies were important, because it seems that the Shang were constantly at war. A significant portion of oracle bones used by Shang kings were concerned with battle-how many men to commit, whether the king could expect victory, etc. These armies pushed the borders of the Shang kingdom further and brought back with them precious resources and prisoners of war, who could be enslaved or used for human sacrifice. The oracle bones also show a deep concern about the barbarians living outside the empire, who were a constant threat to the safety and stability of the kingdom, and the military had to be constantly ready to fight them.

- **End of the Shang**

The Shang dynasty was overthrown in 1046 BC by the Zhou (Chou). The Zhou were a subject people living in the western part of the kingdom. Supposedly, they rebelled against the last kings of the Shang and overthrew them. The Zhou founded a new dynasty. Under their rule, they moved away from worship of Shangdi in favor of Tian (heaven). They created the idea of the Mandate of Heaven. According to this idea, there could be only one legitimate ruler of China at a time, and this king reigned with the approval of heaven. A king could, however, loose the approval of heaven, which would result in his downfall. The Zhou claimed that the Shang kings had become immoral, that because of their excessive drinking, luxuriant living and cruelty, the Shang had lost heaven‘s approval of their rule. The Zhou dynasty claimed to be replacing the Shang and they would rule China for the next eight hundred years.

- **The Zhou Dynasty**

To the west of the area of Shang rule, in the valley of the Wei River, a tributary of the Yellow River, lived the Zhou people. Culturally closer to the Neolithic black-pottery people, they were less civilized and more warlike than the Shang. References to the Zhou in the Shang oracle bones indicate that the Shang had relations with them- sometimes friendly, sometimes hostile. According to the traditional historical record, the last Shang kings were weak, cruel, and tyrannical.

By 1047 B.C.E., they had been debilitated by campaigns against nomads in the north and rebellious tribes in the east. Taking advantage of this opportunity, the Zhou made alliances with disaffected city-states and swept in, conquering the Shang. In most respects, the Zhou continued the Shang pattern of life and rule. The agrarian-based city-state continued to be the basic unit of society, and it is estimated that there were about 200 of them in the eighth century B.C.E. The Zhou social hierarchy was not unlike that of the Shang, with kings and lords at the top, officials and warriors below them, and peasants and slaves at the bottom. Slaves served primarily as domestic servants. Development of China‘s ideographic writing. The Zhou also maintained the practice of casting bronze ceremonial vessels, but their vessels lack the fineness that set the Shang above the rest of the Bronze Age world. King Wu, the leader of the Zhou (Chou), overthrew the last king of the Shang Dynasty. King Wu died shortly after this victory, but his family, the Ji, would rule China for the next few centuries. Their dynasty is known as the Zhou Dynasty.

9.5 The Imperial Era of China

Though China was nominally ruled by the Zhou kings for centuries, in reality, from 711 BC to 221 BC, a period of nearly 500 years, China was divided between rival kingdoms ruled by various warlords. Though this period saw the birth of many important aspects of Chinese culture, such as philosophy, literature and scientific discoveries, it was also a very difficult time, as China struggled with disunity and constant fighting. The rise of the Qin Dynasty in

221 BC united China for the first time in centuries and began the imperial era of Chinese history. From this period, rulers of China called themselves *Huangdi*-emperors and ruled a much expanded and more centralized Chinese state.

The Qin Dynasty hardly outlasted its first emperor, Qin Shi Huang, but the imperial system created by the Qin dynasty established the form in which China would be ruled for the next two millennia. The Qin Dynasty was followed by the Han Dynasty, which continued many of the Qin policies, while modifying some of the harsher aspects of the previous dynasty with Confucian ideals of government. Built on such an imperial model, the Han Dynasty ruled China for over four hundred years.

- **The Qin Dynasty**

Emerging from the chaos of the Warring States period, the Qin (or Ch'in) Dynasty conquered its rivals and unified the country. The Qin dynasty was one of the shortest in all of Chinese history. It lasted only about fifteen years. But it was one of the most important dynasties, because it united China for the first time in centuries as a single state-in many ways.

- **Foundations of the Unification**

The forces that allowed the Qin to grow from a small state to a power that dominated China had developed before the first Qin emperor was born. The state started out as a fief in the west bestowed by King Ping, the first of the Eastern Zhou kings, from the lands around the old Zhou capital in the west. As one of the powerful states of the time, Qin competed with its rivals during the Eastern Zhou period. But for centuries it was just one of several states, none of which could overpower the others.

Qin was home to perhaps the strongest traditions of Legalism, however, which advocated the importance of the state at the expense of the individual. Rooted in Legalist philosophy, the Qin were known for being ruthless and ignoring gentlemanly etiquette and proper battlefield protocol in order to win at all costs. Perhaps one of the most important figures in building the Qin state into a force capable of dominating China was the Legalist statesman Shang Yang. Inthe fourth century BC he became the adviser to the Qin king and from this position embarked on a number of reforms. As a Legalist, he believed that all people should be loyal foremost to the state, and enacted laws to force subjects of the kingdom to act in ways that helped the state. He forced them to marry early, have many children and produce certain quotas of food. He discouraged commerce in favor of agriculture. Most importantly, he stripped the nobility of power, and centralized authority in the king.

9.6 The Chinese Polity

The social and political order of ancient China was one of the most stable and most highly organised among the old world civilisations. It would not be wrong to say that seldom have so many people over such a wide geographical area been bound together by a single

political structure and set of social and cultural norms, values and traditions, for such a length of time. The capacity of this order to withstand the shocks of civil war, natural calamities and alien invasion and to accommodate significant social and economic development and growth of population, was truly remarkable. Because of its unusual stability, continuity and sophistication, no student of world history and civilization can afford to be ignorant of the political structure and social system of traditional China, or of the ideological and spiritual outlook on which these were based. In the subsequent paragraphs, we will only discuss the main features of the Imperial State of ancient China.

Polity in ancient China has been characterised in many different ways. It has been called a form of *"oriental despotism"*, or a *bureaucratic society*. While none of these characterisations by themselves is adequate, in the course of reading this section you will find that they all refer to various key features of China's traditional polity that distinguish it most clearly from other river valley civilisations.

- **The State**

Perhaps the most remarkable product of Chinese civilization was the Imperial State. With a tradition of more than 2000 years, and lasting in basically unchanged form for nearly 1000 years. Its iron frame held China together as a single political unit through most of its recorded history down to modern times. Presiding over it was the Emperor, the "Son of Heaven" whose authority and prestige was acknowledged by peoples even outside China's administrative boundaries. However its most distinctive feature was rule through a highly structured bureaucracy or elite corps of officials, the so-called *mandarins*, who were in the main recruited through a system of examinations based on scholarship.

This state came into being in a recognisable form in 221 B.C., when the ruler of Qin, one of the many feudal states competing for supremacy at that time, unified China and proclaimed himself the First Emperor. For the first time, the entire realm was divided into standard administrative units and ruled directly by the Emperor through his officials. Although this system underwent substantial modifications under later dynasties and even collapsed altogether for a period of three and a half centuries after the fall of the Han dynasty (around 220 A.D.), it remained the norm and the basic pattern of governing in ancient China.

- **The Scope of the Chinese Empire**

One of the basic tensions in the Chinese Empire was the contradiction between its universalist self-image and the actual territorial limits of its administrative power. Being the pre-eminent power in East Asia and separated by natural barriers such as formidable mountains, desert wasteland and seas from any other power comparable in size and strength, it was natural that the Chinese considered their Empire to be inclusive of "all under Heaven" (*Tian Xia*). The Emperor of China was seen not just as the ruler of those provinces directly governed by him, but

as a benevolent authority presiding over peoples far and near. This image was reinforced by the theory and practice of the so-called *tribute system*, in which envoys of a wide variety of non-Chinese states arrived more or less regularly at the Imperial court to pay their respects to the Emperor bearing gifts that were considered a form of tribute.

The net result was that the boundary between what constituted China and what China wasoutside China was never as clearly demarcated as it would have been, say, in Europe, or as it is in modern times. For the most part, the pattern was as follows: the Emperor directly ruled over a core area of about 18 provinces through a bureaucracy. Regions around the periphery continued to govern themselves according to their own systems, and were by and large left to themselves as long as they did not pose a threat to or openly challenge the authority of the Chinese Emperor. In certain periods under a particularly ambitious Emperor, the political and military power of the Chinese Empire was extended into these regions to the west and north. At other times, it was the rulers of these regions who took advantage of conditions of crisis or decay in China proper and who invaded the Chinese Empire either fully or in part.

- **The Emperor**

The basic function and responsibility of the Emperor in China was to maintain order-both the political-social order and also the natural order of things. In the first sense, the Emperor was the supreme civil and military head. All officials were directly appointed by him and were directly accountable to him. In all periods, severe punishments could be and were often imposed on officials who fell out of favour with the Emperor. He was expected to personally go through the staggering number of documents and proposals put before him on all matters connected with government, and to take decisions on those. He was the supreme lawmaker and the final court of appeal in all cases. He also commanded the armed forces. The Emperors made sure that military power was highly centralised and no regional warlords were allowed to emerge. He was also, in a significant sense, the cultural head of his people, and great importance was attached to his role as the patron of learning and art.

For these reasons, the political system in China has been characterised as a despotism or autocracy. There were, however, some restraints on the arbitrariness of an Emperor. In the first place, because of the great veneration paid to ancestors, the Emperor could not be seen as acting contrary to the precedent set by the Emperors before him, particularly those of his own ruling house. Secondly, there was a tradition of high officials criticising an Emperor who strayed from the accepted norms, and the Emperors were expected to respect their words or at least let them speak without punishment. There was even a specific group of officials known as the censors whose job was to criticise the Emperor when they thought it necessary.

The cosmological role ascribed to the Emperor also put some restraints on his freedom of action. The Emperor was considered to be the intermediary between Heaven and Earth. Not only was he held responsible for maintaining order among men, but he was also held responsible for

maintaining the natural order of things. Unusual natural disturbances, such as major earthquakes, floods, the appearance of comets, and so on, were interpreted as omens that all was not well on earth and that the Emperor was failing in his duties. Very often, natural disasters went hand in hand with social and political unrest, resulting in widespread belief that the Emperor had lost the ―Mandate‖ given to him by Heaven to rule and that his subjects were justified in rebelling against him. The Emperor may have been the ―Son of Heaven‖; but unlike in some other ancient societies, the special relationship with Heaven was not enjoyed by the *individual* who was the Emperor, but was the prerogative of the institution-in other words, whoever occupied the imperial throne was considered to be the Son of Heaven and to enjoy Heaven's Mandate. All Emperors and ruling houses were thus aware of the impermanence of their position, and the theory of the *Mandate of Heaven* was often skilfully manipulated by their advisors and officials to get an Emperor to adopt a particular course of action or to change his ways.

- **The Bureaucracy**

Throughout its long history, China was subjected to as much warfare, internal rebellion, foreign invasions, and changes of the ruling house, as any other society. Inspite of these unrest there was an unusual stability of its unified imperial state and of the institutions that were part of it. And the factor behind this stability was the tradition of rule by an established, centrally-directed bureaucracy, that survived even the most violent upheavals.

Over the course of a long period, the bureaucracy in China acquired its own distinctive method and style of functioning, its own elaborate set of rules governing recruitment, promotion, transfer and even appearance and behaviour. Individually, a bureaucrat or official could be treated most arbitrarily by his Emperor and even be put to death. But collectively, the imperial bureaucracy survived even the most tyrannical Emperors, and no Emperor could rule without their expertise in managing the affairs of a realm as vast and complex as China.

The bureaucrats were indeed ―experts‖, but they were experts in the management of men and human affairs in general and by and large were not technocrats with specialised knowledge of certain subjects. They presided over the key posts in the administration. The civil administration in China was divided into the central and the provincial administration.. The provinces were headed by governors or governors-general, below whom were the officials in charge of circuits, prefectures and districts. Newly appointed officials usually began by presiding over the administration of a district, and worked their way up the provincial administration or else were appointed to work in one of the Six Boards in the capital.

9.7 Chinese society

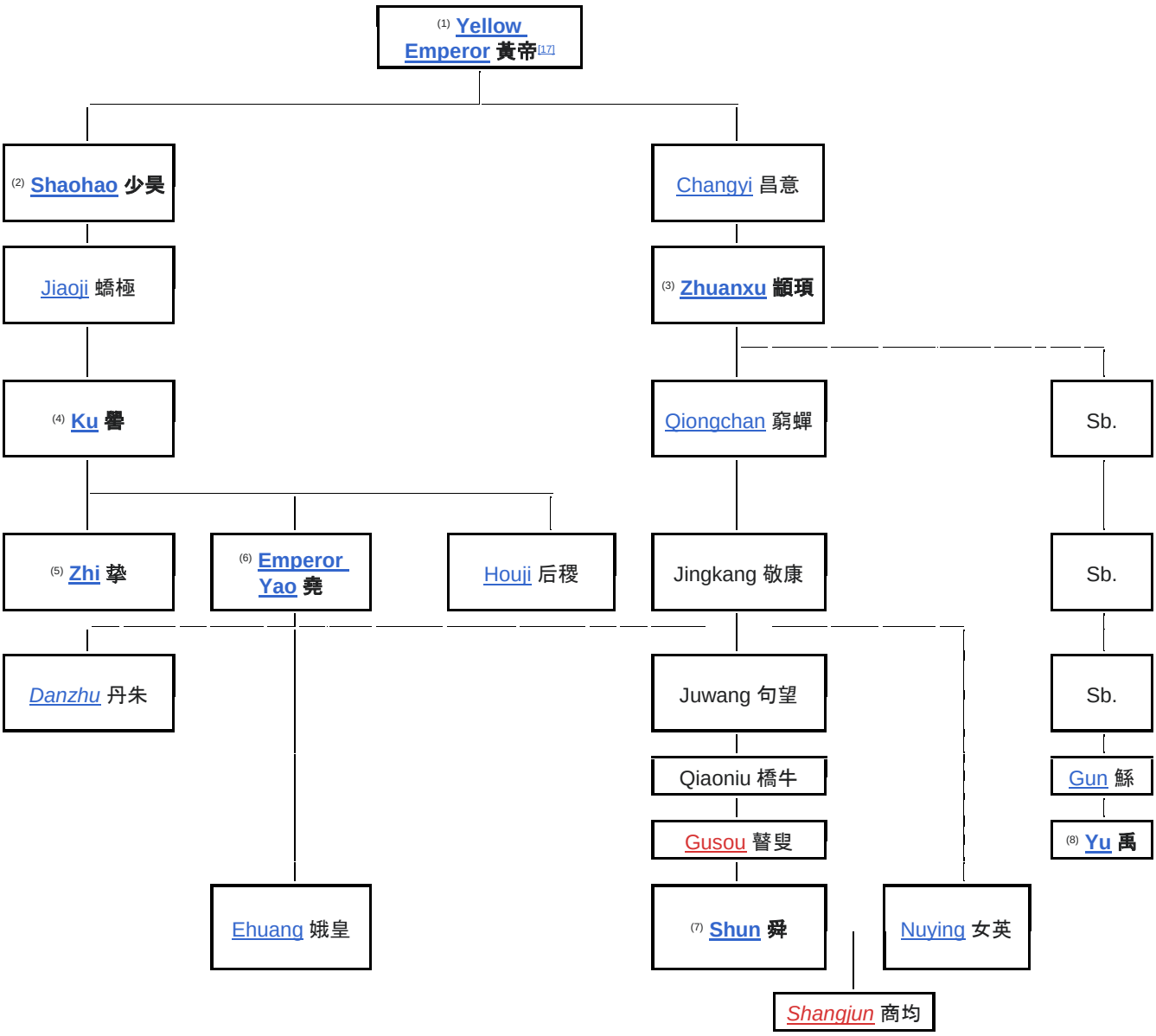
Social order and harmony were highly valued in China, and each social group knew what was expected of them, and how to behave with other groups. In this section, we will explore ancient China's social structure, and the roles and daily life of key groups in Chinese society.

- **The Social Hierarchy in China**

Ancient China's society was dominated by loyalty to the family unit. The group was more important than the individual. Like most ancient societies, China had a strict social hierarchy. At the top were the wealthy and privileged - the emperor and imperial family. Next came the scholars, eunuchs and officials (shi). This social class arose in order to provide the large number of educated officials needed to govern an empire the size of China. In spite of their wealth, merchants were not next in line in the social hierarchy. That place was held by peasants and farmers (nong), who were considered more socially important, as they provided the food for all in the community. Next in line were the artisans and craftsmen (gong) who created items for general use and beauty. The merchants (shang), whose only role was to make money, were last on the list.

- **The emperors**

Family tree of ancient Five Emperors



by a series of dynasties for almost 4000 years. From 221 bc, when China was united under Qin Shi Huang Di, China‘s rulers were emperors. The personality of the emperor, his intelligence and energy (or lack of it) had a major influence on the age. Often, a dynasty ended because the ruler was corrupt, cruel or weak. That ruler had a problem if there was flood, famine or defeat in war. The people would see this as a sign from heaven that the emperor (the _son of heaven‘) no longer had divine permission to rule. This idea is known as the **mandate of heaven**. At these times, it was considered natural that the people should rebel, and that a new dynasty would be installed.

- **Scholars and eunuchs**

The civil scholars were the administrators who ran the day-to-day government of the empire. Scholars had to pass rigorous examinations (open to men only) and were schooled in the teachings of Confucius. During some of the later Chinese dynasties, power struggles developed in the court of the emperor between the civil scholars and the eunuchs. Eunuchs were originally part of the emperor‘s palace staff to guard his many wives. Boys were brought up specifically to be eunuchs. As children, they had their testicles removed to ensure that they would not pose a sexual threat to the emperor‘s wives. Living in the palace, they became close to the imperial family and some eunuchs gained great political influence. They became the political rivals of the civil scholars, and both competed for influence in the emperor‘s decisions. Hostility from scholars also came from their resentment of the eunuchs‘ influence without having gone through the rigorous examinations. Eunuchs generally came from poorer, uneducated backgrounds.

Records were kept by civil scholars, who also wrote the histories of ancient China. Generally, the result was praise for other civil scholars, while eunuchs were often depicted as evil and dishonest, and were blamed for periods of bad government. Many of the surviving historical accounts dealing with the eunuchs are biased. This is another example of why historians must always read their sources carefully and look for potential bias in historical reports.

- **Peasant farmers**

Peasant farmers in ancient China were poor, but their role and work ethic were highly respected. They worked hard to provide the country‘s people with food. Planting and harvesting rice, in particular, is back-breaking work. By contrast, wealthier merchants were seen to contribute very little to society. Land in ancient China was owned by the emperor or nobles. Farmers could live on the land in return for working it. They also had to pay heavy taxes (in the form of produce, such as rice), and provide other services such as serving in the army or labouring on building projects and in salt mines.

Chinese civilization first arose on the basis of settled agricultural communities in the North China plain. The bulk of Chinese society consisted of peasants. From early times these tillers of the soil were not serfs but had the status of freeholders who were obliged to pay taxes

directly to the state. Over time, however, the burdens of paying taxes, dealing with greedy government agents and living from diminishing plots of land caused increasing numbers of peasants to become rent-paying tenants on the lands of big landowners. As tenants, they continued to be intensely exploited, with rents in some areas amounting to half of the harvest.

Peasant farmers in ancient China were poor, but their role and work ethic were highly respected. They worked hard to provide the country‘s people with food. Planting and harvesting rice, in particular, is back-breaking work. By contrast, wealthier merchants were seen to contribute very little to society. Land in ancient China was owned by the emperor or nobles. Farmers could live on the land in return for working it. They also had to pay heavy taxes (in the form of produce, such as rice), and provide other services such as serving in the army or labouring on building projects and in salt mines.

- **Artisans and craftsmen**

At various times in China‘s long history, its arts and crafts led the world, particularly in the Song and Ming dynasties. Craftsmen were not always rich but they were generally held in higher regard than merchants and traders. They were respected for their skills and the quality of their products. From the time of the Han Dynasty, Chinese craftsmen produced porcelain. Chinese porcelain became so well-known that in many English-speaking countries, porcelain plates and cups have always been referred to as _china‘. Chinese craftsmen also produced silk and invented and produced a range of other important manufactured goods, including, paper and the printing press.

- **Merchants**

The merchant class included traders, animal breeders and moneylenders. They were a wealthy group, but were considered the lowest social class in ancient China. People believed that they did not contribute to the whole society but worked only for their own gain. Some merchants would buy land to farm to improve their social status.

- **Role of Women in Ancient China**

Ancient China was very much a male-dominated society. The family name and family line could only be carried on by sons. A woman and her family would always hope for a _good‘ pregnancy where the newborn would be a boy. During the Han Dynasty, a well-educated woman named Ban Zhao wrote a text called *Lessons for Women.* The lessons were based on the idea that women should always obey the

men, and their own wishes would take second place to those of men. They included this set of rules:

- As young girls, women were first meant to obey their fathers.
- As grown women, they were then meant to obey their husbands.
- As widows in later life women were meant to obey their sons.

- In ancient China, it was felt that the best age for a girl to marry was 16. Once a couple was married, there were seven acceptable reasons why a man could divorce his wife
- disobedience – a woman had to obey her husband and her parents-in-law
- infertility –a woman was obliged to have children, especially boys
- adultery – a woman had to be faithful to her husband
- jealousy – a woman could not act in a jealous manner
- illness – if a woman had an incurable illness, her husband could find a new wife
- theft – if she stole anything, her husband could demand that she leave him

Women had more respect in families where their work was important to the survival and prosperity of the family group. In peasant families, women earned respect as workers, although they were still subordinate to men. In richer families, women were seen more as servants and even playthings for men. The status of women in wealthy families is evident in the introduction of foot binding for women from the time of the Song Dynasty.

- **Marriage in Ancient China**

A wedding was arranged by parents in an effort to advance themselves socially, politically, or financially. In traditional Chinese society a girl married into her husband‘s family and gave up all contact with her own parents. A bride was subservient to everyone in the new household but especially to her husband‘s mother, for whom she worked without rest. Wife and mother-in-law were jealous rivals for the affection of the husband and son. Publicly a husband and wife were indifferent toward each other, never openly acknowledging the existence of the other. In private the wife would have to struggle to win her husband‘s respect, and only through her grown sons did she have any real hope of security. No wonder she then exhibited little affection toward her son‘s bridge, and the cycle repeated itself.

- **Everyday Life in Ancient China**

The daily experiences of people in ancient China depended on whether they were male or female, wealthy or poor, and whether they had the opportunity to receive an education. It also depended on where they lived, considering the range of climates and geographical features across China; and when they lived, considering the long span of China‘s ancient history. However, some generalisations can be made about everyday life in Chinese society.

- **Family and Clan**

The basic unit of Chinese society was the family or household rather than the individual. This was so even in government records and tax registers. The Chinese family was patriarchical, with a strict hierarchy of relationships. Filial piety, or obedience to one‘s parents, was one of the cardinal social virtues. This was reinforced by the practice of venerating one‘s ancestors, a very important tradition in Chinese society.

The average size of the family in China was not big, particularly among the peasantry. But the ideal of the large joint family, presided over by the family patriarch and with all the sons and their families living under one roof, was cherished and implemented where feasible particularly among the upper class. Even where all members did not live together, kinship links were zealously maintained. This accounted for the typically Chinese phenomenon of largeclans, consisting of all those who could trace their kinship with each other through the male line. Clans had certain definite functions in the society. Clan members jointly observed rituals, administered common property such as burial plots and ancestral halls, looked after the welfare of members in need, sponsored the education of talented younger males, settled disputes among themselves, maintained genealogies, imparted moral-ethical training and education to younger members and enforced discipline. Clans often transcended class lines, containing both wealthier and poorer members, but the existence of clans nevertheless did not mitigate the class divisions in the society as a whole. In theory, the State approved of large and well-knit families. Families were where people were taught the qualities of obedience, loyalty and respect for hierarchy – all qualities which the imperial government liked to see among its subjects. Families could also be expected to keep in check deviant tendencies among its members, and thus helped the State to maintain order. However, in practice, the State was also wary of clans emerging as rival centres of power, and kept a close watch on the activities and behaviour of the more powerful clans.

- **Lifestyles of the Chinese**

Although many emperors lived in constant fear of traitors, they enjoyed a pampered life of great luxury. Food was plentiful, as were priceless treasures and beautiful embroidered or painted silk garments. It was not unusual for emperors to have several wives and concubines.

Nobles and their families also led very privileged lives. Their palaces were likely to be two storeys or more, and have bathrooms and beds. The price paid for such wealth and comfort was total obedience to the emperor. Leisure time might be spent drinking tea or rice wine while playing board games or being entertained by dancers and musicians. Music, thought to have special powers, was a regular part of palace life. Instruments included bronze bells, chimes, harps, flutes, drums and a stringed instrument called a zither.

The poor were mostly the peasant farmers. They wore simple clothing that was practical for farm work, made out of hemp or cotton in summer and wool in winter. Farmers typically lived in single-storey mud-brick huts with straw roofs. Usually there was only one room and sanitation was poor. Like the farmers of ancient Egypt, they used a device similar to a shaduf to raise water from rivers and canals. Very few could afford an ox or horse to help them plough the fields, so much of the work had to be done by hand.

- **Growing up in ancient China**

In farming villages, girls and boys would work – planting and harvesting in the fields, feeding animals and looking after younger brothers and sisters. Girls in poorer households would spend their childhood learning to cook, weave cloth and help around the house. Boys who could be spared from the fields would be educated in village schools or in a town. They would learn to read and write, compose essays and poetry, and spend many hours memorising the teachings of Confucius. This was their preparation for the rigorous examinations to become a scholar, with a new life as a government official if they passed. Poorer boys could also increase their social status by becoming a eunuch in the emperor‘s court. Boys from wealthy families were educated at home by a tutor.

Although education was valued in ancient China, for much of its history the Chinese did not think it was important to educate women. In earlier dynasties, girls were not typically educated. But later, in the 6th century A.D, Buddhist temples established schools for boys and girls. Here they learned to read and write, and learn about Buddhist ideas. Much later, during the Ming Dynasty, many women in wealthy households did learn to read and write.

- **Food and diet**

In southern China, rice was the staple crop. It was eaten as a food and it was made into wine. In the cooler, drier north, millet (a type of grain) and sorghum (a cereal grass) were harvested. Wheat took much longer to become part of the Chinese diet. It was not until about 1500 years ago that it became a popular food, second only to rice.

Meat was costly and only a common dish for the wealthy. For the less wealthy, meat was eaten only on special occasions. Normally, the daily diet was simple: grains such as wheat, millet or rice mixed with soy beans, vegetables and sometimes fish. Chopsticks were used as an eating utensil in ancient China, possibly since Stone Age times. They were made from bamboo, ivory or bones. In wealthy households, they were made of precious metals.

Fresh water was stored in communal wells, and cooking was done in the open. Because timber was in short supply in many parts of China, food was typically chopped into smaller pieces, as they are in stir fries today, which needed less heat to cook quickly and therefore less fuel.

The diet of people in ancient China was also influenced by their beliefs. For example, some forms of Buddhism forbade eating meat so their protein came from foods such as soy bean curd (tofu). Eating habits were also linked with Daoist beliefs about the balance in nature, the yin and yang. Foods were categorised as _heating‘ or _cooling‘, and were eaten and combined in ways that were thought to preserve a balance in the body. Tea has been drunk in China for over 2000 years. It was first drunk for medicinal qualities, and become more of a social tradition from the time of the Tang Dynasty.

- **Martial arts**

Martial arts or kung fu can be traced back to the Xia Dynasty, and was originally a self-defence and combat technique practised by the military. _Kung fu‘ can be translated as _skill achieved through hard work‘. Confucius considered marital arts to be one of the ideal practices, and his influence spread the practice of martial arts outside of the military.

Different schools and styles of martial arts developed over time, influenced by other aspects of Chinese culture such as religious beliefs. Martial arts took in the Daoist belief in striving for a balance of yin and yang. Kung fu masters of martial arts strive to keep opposites in balance-fast and slow, sharp and gentle, loud and soft- and learn to use the chi (the energy force of the universe).

One of the most famous styles of kung fu originated from a travelling Buddhist monk from India. Legend has it that he reached the Shaolin temple (a Buddhist monastery) soon after it was established in the 5th century ad. He taught martial arts to the monks to improve their health, and the temple and its warrior monks have been famous throughout China ever since. In later dynasties, weapons and fighting techniques were modified so that kung fu became a common activity, as a sport or exercise. Various forms are now practised in China and around the world.

9.8 The Religious Tradition

The prevalence of religion in ancient China is one of the most debated subjects among historians, sociologists and anthropologists. On the one hand, by far the most influential and dominant belief system of the Chinese was Confucianism, which was totally unconcerned about questions such as the existence of God or an afterlife, and which had a pronounced this-worldly orientation. China also lacked a tradition of a strong, centrally organised religion or priesthood. On the other hand, no one can deny the Chinese fascination with the supernatural, or the proliferation of gods, goddesses and spirits who were venerated with great devotion by Chinese from all walks of life in countless temples and shrines in every corner of the land. The Chinese had both a profound moral tradition, as well as a rich tradition of religious worship, but their most important moral and ethical beliefs did not *derive* from an organised religion.

In this section, we will discuss some of the early religion prevailed during most ancient period. This sections also discuss Confucianism, Taoism and Buddhism in China and their influence in the society and culture of ancient China.

- **Early Chinese Religion**

One of the most important deities during the Shang Dynasty was Ti. Ti means "Deity Above," or "the Lord on High." He was believed to punish people who offended him and reward those who pleased him.

Ti was in charge of all the gods and spirits in the pantheon. The Chinese had spirit gods that represented things found in nature, from specific mountains and streams to the stars in the sky. There were also two gods of the earth, "the God of the Soil," and "Sovereign Earth." They were subject to Ti.

Ti had a royal court in heaven made up of all of the worthy ancestors who had died. These ancestors served Ti and helped him govern. The Chinese worshipped their ancestors, who acted as intermediaries between the gods and humanity. They believed that after death, they would experience a celestial court life very much like the court life they lived on earth. Some of the kings of the first dynasties wanted to bring their servants and officials with them to the afterlife to ensure that their quality of life would be the same. Accordingly, servants and officials were often sacrificed at the funerals of their lords. For example, the Count Wu, who lived during the Ch'in Dynasty (256-206 BC), ordered 66 people sacrificed at his funeral.

Only the noble Chinese who died could become objects of worship. This meant that only the nobility had ancestors to whom they could pray, while the dead of the poor were simply forgotten. However, the Chinese saw worship not as an individual exercise, but one performed for the good of the entire society. For this reason, the poor also enjoyed the benefits of the ancestors' intercession.

The ancient Chinese also had people on earth who acted as mediums for communication between the divine and human beings. Among these intermediaries were priests, who did a number of jobs, from reading prayers to conducting sacrifices or funerals. Priests were highly specialized. Some knew the specific ceremonies performed for hunters before leaving on an expedition. Other priests knew ceremonies for sacrificing to a certain god.

Another type of intermediary in ancient Chinese religion was the augur. An augur asked questions of the gods on behalf of humans, and then used various techniques of divination, such as oracle bones, to find the answers. The augur would ask a question about the future, such as how the harvest would turn out or who was going to win a battle. He would then punch holes in certain places of a tortoise shell or the shoulder-bone from an ox. Then the bone was held over a fire for a short time, until the bone cracked from the heat. Ink was rubbed on the bone to make the cracks more evident, and allow the augur to read the pattern and discern the god's answer.

- **Confucianism**

The term Confucianism refers to the teachings of the philosopher Confucius who lived in the 6th century BC. Living in an age of great turbulence and the breakdown of social and political institutions, Confucius‘ primary concern was to find a way out of the chaos and to restore order and moral values. The centre-piece of his philosophy was the notion that this could be achieved if truly moral men were to emerge. Such men were not born with the right moral qualities, however, but actively cultivated these through education and the observance of rites, propriety and proper relationships. The cardinal relationships in society were considered to be those between parents and child, sovereign and subject, husband and wife, elder brother and younger brother-all relationships between superiors and inferiors – and between friends. Confucius stressed the supreme importance of certain qualities, such as benevolence, filial piety, loyalty, sincerity, and so on. If the right men were in charge of all affairs, Confucius believed, then peace and harmony and virtue would be restored in the society.

Even during his lifetime, Confucius gathered around him a number of devoted disciples. But it is with the adoption of the teachings of Confucius and his school as the official orthodoxy several centuries later, from the time of the Han dynasty (203 B.C. to 220 A.D.), that Confucianism became an all-pervasive influence. It moulded the behaviour and thinking of Chinese and reinforced their key institutions in various significant ways. In the first place, it lent a positive, or pro-active, element to the Chinese outlook. The solution to man‘s problems lay not in escape from earthly life or the denial of desires, but in actively cultivating the right qualities and rectifying things on this earth. Secondly, It placed great emphasis on education and on public service. The upright scholar-official was the model of the Confucian gentleman. Thirdly, it stressed the need for order and performance of one‘s social and public duties. This made it a most suitable philosophy to reinforce the imperial State. Fourthly, it accepted hierarchy in the social order and preached the need for obedience and submission to authority, equating the relationship of a sovereign to his subject with that of parent to child. Finally, by stressing the notion of rule based on ―virtue‖ or moral authority rather than military power or rules and regulations, it worked to temper or soften the harsher aspects of imperial power, and reinforced the tradition of civilian rule.

- **Religious Traditions Associated with Confucianism**

Confucius himself was hardly concerned with notions of God or an afterlife. Nevertheless, Confucianism as it grew developed a cosmology and metaphysics, some elements of which were derived from ancient pre-Confucian religious traditions, and some of which developed later, partly as a response to the challenge posed by Buddhism and Taoism. The practice of ***ancestor worship***, observed by Chinese from all walks of life was an ancient Confucian tradition. The memory of ancestors was kept alive in numerous tangible ways,

through various forms of veneration. Apart from this was the notion of ***Heaven*** and of ***Fate***. It was believed that Heaven determined destiny on all matters ranging from affairs of State to the most personal aspects of an individual‘s life. However, because Heaven, Earth and Man were considered to part of a single trilogy, the actions of men were considered capable of influencing the course imposed on them by Heaven. Trying to predict or understand what Heaven had in store for men, or the practice of ***divination***, was another feature of the Chinese religious tradition. The concept of ***Yin*** and ***Yang***, or the unity of negative and positive elements, and of the ***Five Elements***, were also part of the Confucian belief system.

- **Taoism**

The concept of Tao existed in China since the early stages of its religious development. Tao is literally translated as "the path" or "the way." The term has no conclusive definition, but refers to a wide force in nature and is considered the source of all things. Taoism developed around the same time as Confucianism. According to legends, the most consequential Taoist writing was composed by Lao-tzu. Lao-tzu was born c. 600 BC and later became a librarian for the royal court in Loyang. He was wise enough to see that the Chou Dynasty was nearing its downfall, so he packed up his things and headed west. As he approached the boundary of Chinese territory, a border guard stopped Lao-Tzu and asked him to write down his wisdoms. Lao-Tzu obliged him by writing a book. Then the sage left China for good. This book, which scholars possess today, contains profound sayings written in a simple style.

Taoism in its purist form calls the follower to pursue Tao. This means that he or she should not try to alter nature or force it to do something it was not meant to do. Instead, a follower must remain inactive and avoid making plans. For example, actions considered contrary to Tao included building a house or damming a river. It was also against Tao to deny the good nature of humanity. This meant that the artificial rules made by Confucianism were unnecessary. Most Taoists were members of the educated elite. However, some of the less educated classes learned about Taoism and altered it somewhat. Their beliefs included more magic and alchemy than the purest form of Taoism.

Undoubtedly, the great variety of gods and goddesses and spirits in the Chinese pantheon and the rich tradition of religious worship, owed its origins not to Confucianism but to the influence of Taoism. Taoism began roughly in the same period that Confucius lived, as a simple mystical philosophy put forward by its founder, Lao Zi. In contrast with Confucianism, Taoism was not concerned with the affairs of society or the State or moral values, but with the exact opposite-with Nature, with spontaneity and a whimsical attitude towards life. However, as it evolved, Taoism took on a variety of elements, including a pantheon of gods and a group of priests which helped it to spread among the masses, though it never became an organised religion on the lines of Buddhism. It exerted a profound influence on Chinese poetry and painting, with

their lyrical quality and recurrent theme of man in Nature. Among the scholar official class, it offered a kind of philosophical retreat from the rigidity as well as the unending cares and responsibilities of social and public life. It was often said that a scholar-official was a Confucian when in office and a Taoist when out of office.

- **Buddhism**

Buddhism was absorbed gradually into China after its first introduction from India around the 1st century A.D. Its influence peaked in the 5th to 8th centuries A.D., when it enjoyed the patronage of Chinese rulers, and the Buddhist *sangha* became very powerful. Both Buddhism and Taoism gained ground precisely in those periods when the imperial system was in severe crisis and when Confucianism, as the ideology of the imperial system, suffered from a loss of credibility. In particular, Mahayana Buddhism, with its profound philosophy about the nature of suffering in this world, and its uplifting concept of compassion and salvation for mankind through sacrifice, filled a philosophical and spiritual need among Chinese in this period in a way that Confucianism could not. In the centuries of political chaos and mass dislocation that followed the breakup of the Han dynasty, the Buddhist *sangha* that extended beyond the confines of the family and the State provided a vital form of social integration.

- **Some General Characteristics of Religion in China**

So far as important features of religion in ancient China is concerned following are noteworthy. Religion in ancient China was very eclectic. In other words, as it was practised by the people, the different religious traditions were not considered mutually exclusive. An individual could follow Confucianism, Taoism and later Buddhism without feeling the need to identify himself with one only. This permitted different traditions to remain in the background, but not disappear completely, when another tradition was on the rise. Full-fledged religious wars among groups of people were almost non-existent.

The State in general tolerated different religious faiths, and persecuted them only when it was feared that they were becoming rival centres of power or were undermining established social norms. Rarely were persecutions unleashed on the grounds of doctrinal heresy alone. Thus, the 3 or 4 major instances of persecution of Buddhism usually resulted in the disbanding of the monasteries and their lands, and the return of monks and nuns to lay life, rather than in wholesale extermination or reconversion. The moral dimension of Chinese deities was not strong. Rather, gods and goddesses were worshipped because of their believed power to help or harm an individual or group.

9.9.1 Science and Technology of Ancient China

Education was available only to a privileged few in ancient China. However, the Qin and Han periods still saw dramatic developments in science and technology. Many technological and scientific, inventions and developments were brought about in ancient China. These

technological inventions were way before the whole world started using them. So far as science and technologies in ancient period of China under discussion is concerned, the Chinese achieved some remarkable steps in medicine, astronomy, navigation and metallurgical advancement and many more. This section will discuss these advancements in brief in the subsequent paragraphs.

- **Metallurgy**

Like other river valley civilisation, ancient Chinese also have knowledge regarding casting of Bronze and Iron. While bronze was the most advanced mode of technology throughout the late Shang and early Zhou, sometime during the sixth century B.C., China developed iron technology. The spread of iron technology improved agricultural techniques and yields, thus making greater populations possible, and also improved technologies of war. It is possible to trace many of the differences between Chinese social patterns of the Spring and Autumn period and those of the Warring States era to the entrance of China into the Iron Age. For example, the abandonment of chariot warfare and the mobilization of huge infantry forces grew in part from the availability of iron weaponry, and in fact this type of transition in warfare is linked to the advent of the Iron Age in societies other than China.

Ancient China developed both wrought (hammered) and cast iron processes. From an early date, perhaps about 500 B.C., the bellows-driven smelter became common. Large forges equipped with a line of bellows could drive temperatures extremely high, allowing advances in iron technology which placed China from one to two millennia in advance of European technologies, which employed relatively brittle wrought iron until a much later date. Sophisticated experimentation resulted in an ability to forge steel, which was used in the highest quality weaponry, such as famous swords from the states of Han and Chu, the colorful names of which appear periodically in contemporary accounts.

Iron mine technology was also very advanced. Likely sites were identified by land configurations and iron-related surface minerals. Perpendicular shafts were driven up to 150 feet down, with horizontal shafts, supported by wood-beam frameworks, dug at various levels. Systems of ropes and pulleys allowed the ore to be raised to the surface, and other debris was lifted to higher, exhausted shafts, where it was deposited as fill to stabilize the mine and to facilitate proper air flow. During the Warring States period, virtually every state possessed domestic mines and ironworks, where weaponry and agricultural tools, such as spades, adzes, hoes, and so forth, were manufactured.

- **Astronomy**

Early Chinese astronomers learned that the year was slightly longer than 365 days. Han dynasty astronomers further refined these calculations. In 28 B.C. astronomers in China first observed sunspots; Europeans did not make similar observations until the A.D. 1600s. Sometime before A.D. 100 Chinese astronomers built instruments to track the movements of planets.

- **Medical Sciences**

Chinese scholars, especially the Daoists, were very interested in chemistry. They discovered substances for dyeing cloth and glazing pottery. They also developed medicines based on herbs and minerals. Perhaps the most widely known Chinese contribution to medicine is the therapy known as acupuncture. Its development stemmed from the Daoist belief that good health depends on the movement of life-force energy through the body. Illness or pain results when something interferes with that movement. In acupuncture the doctor inserts needles into certain points of the body to enable the life-force energy to move properly. Some modern researchers believe that these needle insertion points may have less electrical resistance than other parts of the body and thus may affect the nervous system. Medicine in China was a characteristic mixture of empirical wisdom and popular superstition. It had its beginnings before recorded history, and produced great physicians long before Hippocrates. Already under the Chous the state held yearly examinations for admission to medical practice, and fixed the salaries of the successful applicants according to their showing in the tests. In the fourth century before Christ a Chinese governor ordered a careful dissection and anatomical study of forty beheaded criminals; but the results were lost in theoretical discussion, and dissection stopped. Chang Chung-ning, in the second century, wrote treatises on dietetics and fevers, which remained standard texts for a thousand years. In the third century Hua-Tu wrote a volume on surgery, and made operations popular by inventing a wine which produced a general anaesthesia; it is one of the stupidities of history that the formula for mixing this drink has been lost. About 300 A.D. Wang Shu-ho wrote a celebrated treatise on the pulse." Towards the beginning of the sixth century T'ao Hung-ching composed an extensive description of the 730 drugs used in Chinese medicine; and a hundred years later Ch'ao Yuan-fang wrote a classic on the diseases of women and children. In ancient China soap was a rare luxury, but lice and vermin were easily secured. The simpler Chinese learned to itch and scratch with Confucian equanimity. Medical science made no ascertainable progress from Shih Huangti to the Dowager. European medicine invaded China as an annex to Christianity; but the sick natives, until our own time, confined their use of it to surgery and for the rest preferred their own physicians and their ancient herbs.

- **Magnetic Compass**

About 2000 years ago, the Chinese noted that a magnetic rock (a lodestone) always pointed the same way (north–south) when suspended or floated. It was then discovered that by rubbing fine metal pointers on a lodestone, its magnetic properties were transferred to the pointers. It is unknown when this knowledge was used to create the first magnetic compass. However, it is thought that the concept had been brought to Europe by the 10th century A.D, through Arab traders and the Silk Road. Until then, consulting the stars was the only way of working out directions at sea.

As mentioned above, compass was one of the most important technological developments in ancient China, as it promoted and aided exploration that was initiated by Chinese rulers. The development of compass made China the first imperial power in the world. Chinese empire indeed was termed as an imperial power till the end of monarchy in China and the royal place was also known as Imperial Palace. Origins of manufacturing compass can be traced to 4th century BC, China. The book titled *Book of the Devil Valley Master* aptly describes the property of lodestone, the lodestone makes iron come or rather it attracts iron. Lodestone was the first material that was used to make the compass in China.

The first properly developed compass that was made from lodestone probably appeared during Song dynasty. Records survived from the dynasty dated 1040-44 AD, describes the device made from lodestone as a direction finder. This device or rather the first compass made from lodestone, was shaped like a small fish and was kept on a piece of wood, floating in a bowl of water. Official records from the Song dynasty describe it as a "fish-shaped stone pointing to south". Chinese explorers used this compass for many centuries, facilitating trade with far off lands bringing prosperity to Chinese merchants. The compass was also widely used in land explorations. Chinese writers describe it as an orientation in obscurity of night.

The compass is of much greater antiquity. If we may believe Chinese historians, it was invented by the Duke of Chou in the reign of the Emperor Cheng Wang (1115-1078 B.C.) to guide certain foreign ambassadors back to their home lands; the Duke, we are told, presented the embassy with five chariots each equipped with a "south-pointing needle. Very probably the magnetic properties of the lodestone were known to ancient China, but the use of it was confined to orienting temples. The magnetic needle was described in the Sung-shu, an historical work of the fifth century A.D., and was attributed by the author to the astronomer Chang Heng (139 A.D.), who, however, had only rediscovered what China had known before. The oldest mention of the needle as useful for mariners occurs in a work of the early twelfth century, which ascribes this use of it to foreign probably Arab navigators plying between Sumatra and Canton.

- **Paper Making and Printing**

The exact era or dynasty, during which the Chinese invented technology of paper manufacturing, is uncertain. But the technology certainly led to many more advancements as it facilitated scholars, philosophers and writers of Chinese civilization. Paper that was invented in ancient China was not only used as a medium of writing, but creative Chinese innovators also used it as a raw material for manufacturing bags as well as paper currency. History of paper making can be traced to Han dynasty, which ruled from 202 BC to 220 AD, when court official Cai Lun set to the task of making paper. He deployed mulberry fibres, waste material such as old rags and hemp waste. He also made use of fishing nets to bind the materials together. Some archaeological findings however, suggest that paper in ancient China may have been invented

during the 8th century BC. Initially this crude form of paper was not used for writing. It was deployed as a means of wrapping and padding. By the end of 3rd century AD, it had become a popular medium of writing, and by 6th century it was even used as toilet papers. Paper was first produced in about 150 B.C. The earliest paper was made from fishing nets, hemp, old rags, and tree bark. By the middle of the A.D. 700s, the use of paper had spread throughout Central Asia and the Middle East, where it replaced papyrus as the main writing material.

The invention of printing is regarded as one of the most important inventions, due to the fact that it made books cheaper. Cheaper books ensured an educated society. Many dynasties, courtiers and scholars from ancient China contributed to the development of printing press. Printing technology started evolving from sometime around 868 BC, with the printing of the first printed book *the Diamond Sutra*. The book was printed with the help of the wood block printing. It had become a very advanced technology by the end of the Song dynasty. Writer Shen Kuo, who was also a courtier of Songs, promoted the use of printing for the spread of knowledge. Bi Sheng, who was an artisan, invented the movable ceramic printing. Inventors like Hua Sui also attempted to invent the metal castings and rollers for movable printing.

- **Gunpowder**

Although a late discovery and not coming under the period under discussion, one of the few destructive inventions of ancient Chinese civilization was that of gunpowder. Discovery of gunpowder led to invention of firearms and revolutionized battlefields in Asian Continent. Chinese alchemists, who were searching for an elixir of life, accidentally discovered the explosive property of gunpowder, sometime around 9th century AD. By the end of the 10th century Asian powers had introduced grenades, crude bombs and firearms on battlefields. Use of cannons and bigger fire arms also became prevalent. Among the technologies of ancient China, gunpowder and firearms is regarded as most useful, popular and also most destructive.

Besides the above mentioned inventions and discoveries the ancient Chinese also to their credit have some other scientific innovation such as the first seismograph (to detect earthquakes), made by the astronomer Zhang Heng, (ad 78–139)and was named as *Houfeng Didong Yi*, who is also said to have been the first to use a grid system on maps. The Chinese innovate the knowledge of silk weaving, manufactured wooden wheel barrow, created rudder on their lighter boats, manufactured mechanical clocks six centuries earlier than in Europe, produced matches, umbrellas and kites.

Thus, the Chinese invented a seismograph that registered even the faintest of earthquakes. They also invented paper, which was first produced and used in China in or about 150 B.C. and had spread throughout Central Asia and the Middle East, where it replaced papyrus as the main writing material. The Chinese also invented the sundial, the water clock, and the process of printing. Many more inventors and scientists have played significant roles in development of

many different technologies of ancient China. The Chinese have displayed their technological capabilities in many other disciplines like manufacture of arms, agriculture, textile industry, civil engineering, medicine and even archaeology. Many of these technologies have been lost with advancement of time.

9.10 Estimates of the Chinese Civilisation

The intellectual discovery of China was one of the achievements of the Enlightenment. As Diderot wrote of the Chinese, –these peoples are superior to all other Asiatics in antiquity, art, intellect, wisdom, policy, and in their taste for philosophy‖. And Voltaire said –The body of this empire has existed four thousand years, without having undergone any sensible alteration in its laws, customs, language, or even in its fashions of apparel. The organization of this empire is in truth the best that the world has ever seen." This respect of scholars has survived closer acquaintance and in some contemporary observers it has reached the pitch of humble admiration. Will Durant while introducing the Chinese civilisation in his monumental work on the Oriental Heritage remarked that –like most other peoples of the earth the Chinese consider themselves the most polished and civilized of all nations. Perhaps they are right, despite their political corruption and chaos, their backward science and sweated industry, their odorous cities and offal-strewn fields, their floods and famines, their apathy and cruelty, their poverty and superstition, their reckless breeding and suicidal wars, their slaughters and ignominious defeats. For behind this dark surface that now appears to the alien eye is one of the oldest and richest of living civilizations: a tradition of poetry reaching as far back as 1700 B.C.; a long record of philosophy idealistic and yet practical, profound and yet intelligible; a mastery of ceramics and painting unequalled in their kind; an easy perfection, rivalled only by the Japanese, in all the minor arts; the most effective morality to be found among the peoples of any time; a social organization that has held together more human beings, and has endured through more centuries, than any other known to history; a form of government which, until the Revolution destroyed it, was almost the ideal of philosophers; a society that was civilized when Greece was inhabited by barbarians, that saw the rise and fall of Babylonia and Assyria, Persia and Judea, Athens and Rome, Venice and Spain, and may yet survive when those Balkans called Europe have reverted to darkness and savagery.‖

Thus, while estimating the isolated civilisation of China we can say that most perfect type of humanity as a normal phenomenon has been elaborated in ancient China and China has created the highest universal culture of being hitherto known and the greatness of Chinese civilisation visible in all circumstances.

Summary

- China was a vast country of great diversity, and it is not easy to make generalisations about its traditions and institutions. These were by no means stagnant, and evolved

considerably over the course of her long history. Nevertheless, one cannot help being struck by the remarkable continuity and coherence of its traditions and institutions, and the way in which they interacted with and reinforced each other.

- An agrarian society composed of closely knit families and lineages formed the basis of one of the most sophisticated and powerful empires of the pre-modern world. The social structure and political power were closely intertwined. The Confucian ethical system pervaded both the family and the imperial system, while other great religious traditions lent richness and diversity to the cultural and spiritual life. This entire complex civilization lasted right through to the early 20th century when it was finally brought down by a combination of internal decay and external pressures.
- Chinese civilization developed around major rivers, especially the Yellow River. Like in Mesopotamia, Egypt, and the Indus River valley, the people of the Neolithic period who lived there domesticated plants and animals.
- By 2000 BC, cities developed in China, and the various cultures of the area began to merge into a larger, more unified Chinese culture.
- We know a great deal about prehistoric China through Chinese mythology, but we cannot tell how much of this is true and how much is fiction.
- The first two Chinese dynasties were the Xia (Hsia) and the Shang. At one point these were both believed to be purely mythological, but discoveries have revealed that the Shang really did exist. It is still unknown if the Xia were real.
- While the Shang were once believed to be mythological, it is now accepted that they were a historical dynasty who ruled China from 1600 to 1046 BC. The most important sources of information about them are archaeology and questions written on oracle bones. Oracle bones tend to ask questions about warfare, harvests, and childbearing.
- The earliest Chinese writing we have comes from the Shang dynasty, though it was already in an advanced form by this period, suggesting that it had been developing for a long time before then. Even most Shang writing, which would have been recorded on bamboo strips and silk, has been lost.
- Shang cities were incredibly large and show significant social stratification. Rich tombs of the elite have been found, and they include human sacrifices.
- Shang religion was centered on ancestor worship and veneration of the Supreme Being, called Shangdi.
- Shang technology, especially bronze weapons and the use of horses and chariots, gave the Shang a military edge over their enemies.

- The Shang dynasty was overthrown around 1046 BC by the Zhou, who replaced them as rulers of China.
- The Zhou Dynasty overthrew the Shang Dynasty, and developed the Mandate of Heaven. This justified their deposition of the Shang because it held that although there could be only one ruler of China, if such a ruler became corrupt he would be overthrown.
- Under the Zhou, the *fengjian* system developed, in which nobles were given land to rule in a feudalistic manner, governing their own fiefs under the authority of the king. As the power of the Zhou kings weakened, the nobles who ruled their own fiefs became increasingly independent, as these fiefs turned into small states.
- In 711 BC, a rebellion by a noble combined with a barbarian invasion overthrew the Zhou king. Though the Zhou Dynasty survived, it moved its capital eastward. This was the end of the Western Zhou period, and the beginning of the Eastern Zhou period, when the Zhou kings became little more than powerless figureheads.
- The first part of the Eastern Zhou period was the Spring and Autumn period. This period saw warfare between the small Chinese states, but also the blossoming of Chinese philosophy in the Hundred Schools of Thought.
- Some of the most important philosophies to develop in the Eastern Zhou period were Confucianism, Mohism, Daoism, and Legalism.
- The second part of the Eastern Zhou period was the Warring States period, which saw intense warfare between the seven surviving Chinese states. In 221 BC, the Qin emerged victorious, defeating the other states and unifying China once more.
- The state of Qin was rooted in Legalist philosophy, and the reforms of the Legalist statesman Shang Yang, including encouragement of agriculture and a weakening of the nobility, helped make Qin the most powerful state at the end of the Warring States period. Under Ying Zheng and his adviser Li Si, the Qin state conquered the other Chinese states. Ying Zheng declared himself emperor (*Huangdi*) and changed his name to Qin Shi Huang. This marks the beginning of the Qin Dynasty.
- Qin Shi Huang, with the help of Li Si, centralized the state, imposed standard weights and measures, standard writing, and improved travel and communication. They created a loyal bureaucracy. However, Qin Shi Haung‘s rule was autocratic, and he had books burned and scholars killed in an attempt to impose Legalist thought.
- After the death of Qin Shi Huang, the Qin Dynasty collapsed, lasting only fifteen years. Nonetheless, its unification of China served as an example, and China was soon to be reunified by the Han.

- The Han Dynasty was founded by Liu Bang, who became known as Emperor Gaozu after he defeated the Chu in a struggle for control of China.
- The Han had to deal with disloyal aristocrats and nomadic invaders, but a strong centralized state aided them in weathering these challenges.\
- The Han continued many Qin policies, such as a strong bureaucracy and a centralized state, but the Han were more concerned for their subjects, and Emperor Wu‘s adoption of Confucianism as the state ideology helped create bonds between the people and the government.
- Under Emperor Wu, China reached its farthest territorial extent up to that point, and his reforms helped the empire thrive.
- Later, civil unrest and a brief usurpation by Wang Mang caused the Han to move their capital from Chang‘an to Luoyang. This marks the start of the Eastern Han period.
- The Eastern Han period was one of prosperity and progress, during which important innovations were made, such as in paper and porcelain production. Nonetheless, by the second century AD, the Han began to decline.

- By the end of the second century AD, weak emperors under the control of eunuchs and powerful independent warlords fractured the empire. The warlord Cao Cao attempted to reunify China under the Han, but he was defeated in 208 AD at the Battle of Red Cliffs. This marks the end of the Han Dynasty and the beginning of the Three Kingdoms period.

Key Terms

Acupuncture: the ancient Chinese practice of inserting needles in specific points on the body to manipulate the flow of energy or Qi.

Autocracy: A system of government in which a supreme power is concentrated in the hands of one person

Confucianism: An ethical and philosophical system developed from the teachings of the Chinese philosopher Confucius

Contention: The act or an instance of striving in controversy or debate.

Daoism: A philosophical and religious tradition that emphasizes living in harmony with the Tao (modernly romanized as "Dao").

Despotism: A form of government in which a single entity rules with absolute power. That entity may be an individual, as in an autocracy, or it may be a group

Huangdi: Huangdi lays the foundation of Chinese civilization and from whom everyone can find the merits of Chinese people living since ancient times. Used by the Zhou as the title of Chinese Emperor.

Legalism: In Chinese history, Legalism was a philosophy emphasizing strict obedience to the legal system. It was one of the main philosophic currents during the Warring state period.

Lodestone: A naturally magnetized piece of the mineral magnetite. This metal is used by the ancient Chinese for manufacturing of navigational compass.

Meritocracy: A political philosophy that holds power should be rest upon an elite group of people whose progress is based on ability and talent rather than on class privilege or wealth.

Mohism: The doctrines of Mo-Tze, Chinese sage of the 5th century B.C., who advocated government by an absolute monarch and universal love

Oracle Bones: Are pieces of shell or bone, normally from ox scapulae or turtle plastrons, which were used for pyromancy - a form of divination -in ancient China, mainly during the late Shang dynasty

Porcelain: Porcelain is a ceramic material made by heating materials.

Quanrong: An invading barbarians in ancient China.

Shangdi: A supreme god called Shangdi worshipped during Shang dynasty, who ruled over lesser gods who embodied the sun, the moon, the wind, the rain, and other natural forces and places.

Wang: In Warring States period the rulers of the independent states had begun to use the title of king or *wang*.

Self Assesment Questions

1. How the bureaucracy in China was unique? What role did it play in running the state?
2. How would you describe the social hierarchy of classical China?
3. Describe the historical origins, central ideas, and spread of major religious and philosophical traditions of Confucianism in ancient China.
4. Compare and Contrast Confucianism and Daoism.
5. What was the impact of the Warring States period?
6. What was the great advantage of the Chinese written language?
7. How did the Zhou Dynasty justify their overthrow of the Shang?
8. What is the significance of Oracle Bones?
9. Describe ancestor worship‘s importance during the Shang period.\
10. Write short notes on
    a. Spread of Buddhism in China
    b. Family in China

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UNIT-10 **MAYA CIVILIZATION**

POLITY, SOCIETY, ART, RELIGION, BELIEF AND PRACTICES

Structure

Learning Objectives

This chapter deals with one of the most mysterious ancient civilizations of mankind that is the Maya civilisation flourished in Central America. After reading this chapter, you will be able to know about:

- The origin and growth of the Maya civilisation in central America that is inMexico.
- The successive phases of the Maya and their salient features,
- The nature of political establishments, governance, settlements, economy, calendar and other traits of these civilisations, and
- The decline and legacy of the Maya Civilisations.

Introduction

The American continent came in touch with the Europeans around the end of the 15th century. Very little was known about the history, polity and society of these regions. It was believed that the history of the region cannot be traced to early civilizations as in case of Asia, Africa and Europe. Later on archaeological excavations and researches have shown the existence of human habitation which is more than 10,000 years old. It has also come to light thatfrom around 2500 BC to the first century AD a number of cultures flourished in the region. Many of these grew into civilizations of substantial size. We have chosen three importantcivilizations as representative of Latin America and we will discuss each of these civilisation in three separate chapters in this unit. These are Mayas and Aztecs in Central America and the Inkas in the Andes in South America.

There are other civilizations also whose remains have been found in both these places. But we chose these ones for the following reason. First of all the Maya and the Inkas are the most extensively studied ones so far. And in cultural representation of Latin American life mostly these are invoked. The Aztecs have been chosen, as they were the ones whose destruction has been witnessed by the colonial powers of Europe. These are the civilizations about which extensive literature exists in European languages and mostly in English.

- **The Maya Civilization**

Mayan Civilization is one of the most mysterious ancient civilizations of all time. Until now, no one is certain on who the Mayan were, how they lived, and the reason behind the sudden collapse of their civilization. Mayans are believed to have developed their country and their civilization towards the north of the Gulf of Mexico, which is situated in between North and South America, called the Peninsula of Yucatan. With respect to modern day geography, the region that was occupied by the ancient Maya comprised of the states of Yucatan; Campeche; Tabasco; the eastern half of Chiapas; the territory of Quintana Roo; the Republic of Mexico; the Department of Peten in Guatemala; and the adjacent highlands to the south; the contiguous western section of theRepublic of Honduras; and all of British Honduras. It covers 125,000 square miles. The whole area of the Maya region lies south of the tropic of cancer and north of the equator. The region is mostly covered by rainforest and with a tropical climate except for the Guatemalan Highlands that has lower temperatures.

The Maya civilization flourished between 500B.C. and 1000A.D. The Maya Civilization did not present itself as an empire or unified political entity, but was a cultural unit of scattered urban and rural centres, both small and big, though many of the centres were related or rather connected with causeways. Also, the political influence of some of the large centres was evident from the use of their emblem glyphs on the monuments at smaller centres. The administrative structure also suggests that some centres were subordinate to larger city-states.

At certain stage, four huge primary regional centres were emerging, each with its own emblem glyph and ruling dynasty. These were Tikal, Calakmul, Copan, and Palenque. In fact, throughout their history the Mayan recognized only four centres as paramount, each representing one of the cardinal directions. Their monumental architecture, fine art, hieroglyph or writing, astronomy and calendar make them one of the most sophisticated civilizations of the world. In the subsequent paragraphs we will discuss all the above mentioned aspects of this Latin American civilisation.

- **The Origins and Development of Mayan Civilization**

The Mayan Empire, centered in the tropical lowlands of what is now Guatemala, reached the peak of its power and influence around the sixth century A.D. The Maya excelled at agriculture, pottery, writing, calendars and mathematics, and left behind an astonishing amount of impressive architecture and symbolic artwork. Most of the great stone cities of the Maya were abandoned by A.D. 900, however, and since the 19th century scholars have debated what might have caused this dramatic decline. Within that expanse, the Maya lived in three separate sub-areas with distinct environmental and cultural differences: the northern Maya lowlands on the Yucatan Peninsula; the southern lowlands in the Peten district of northern Guatemala and adjacent portions of Mexico, Belize and western Honduras; and the southern Maya highlands, in the mountainous region of southern Guatemala.

Most famously, the Maya of the southern lowland region reached their peak during the Classic Period of Maya civilization (A.D. 250 to 900), and built the great stone cities and monuments that have fascinated explorers and scholars of the region to this day.

While the Roman Empire was declining in western Europe, the Maya were creating an advanced civilization in the Americas. Mayan civilization reached its height between B.C.E 300 and 900 C.E. During this time, Mayan culture spread over much of Mesoamerica, including part of present-day southern Mexico, Belize, most of Guatemala, and parts of Honduras and El Salvador**.** The landscape in which the Maya lived varied greatly. In the south, pine forests covered the mountain highlands. In the northern and central regions were rainforests, grasslands, and swamps. These areas are known as the lowlands. Thick jungle covered the southern part of the lowlands. This is where Mayan civilization reached its highest development. Today this area is called the Peten region of Guatemala.

The Maya built their civilization in part on ideas they inherited from a people called the Olmec. The Olmec lived in the jungle areas on the east coast of Mexico. Their civilization reached its peak between 1200 and 500 B.C.E. Like early civilizations in other parts of the world, the Olmec civilization was based on agriculture. By 2000 B.C.E., people in parts of Mexico had turned from hunting and gathering to farming as their main source of food. A particularly important crop was maize, or corn. Farming allowed the Olmec to create permanent settlements. The Olmec established farming villages throughout the region. They also created trade routes that stretched for hundreds of miles. By 1400 B.C.E., the Olmec had a capital city

that boasted palaces, temples, and monuments. They were the first Mesoamericans to develop large religious and ceremonial centers. They were also the first to use a solar calendar. The Maya would build on all these achievements.

Around 1500 B.C., the Maya began to establish villages in the highlands and lowlands of Meso-America. Most of their highland villages were located in what is now southern Guatemala. This mountainous region contained many minerals. In general, this area had a dry, cool climate. The lowland villages of the Maya were located in what is now northern Guatemala, Belize, and the Yucatán Peninsula in southern Mexico. The Yucatán lowlands tended to be hot and dry. Hot, humid rain forests covered the lowlands farther to the south. This area had fertile soil that was good for farming. The development of Mayan society was similar to the development of Olmec society. As farming thrived in the Mayan homelands, the Maya were able to grow more food. With more food, the Maya became healthier and their population grew. In time, some Mayan farming villages grew into great cities.

- **Three Periods of Mayan Civilization**

Mayan civilization began to arise in eastern and southern Mexico around 2000 B.C.E. Historians divide the history of Mayan civilization into three main periods: Pre-Classic, Classic, and Post-Classic. The long Pre-Classic period lasted from about 2000 B.C.E. to 300 C.E. During this time, the Maya farmed the land and lived in simple houses and compounds, or groups of buildings.

Gradually, Mayan culture became more complex. As the Mayan population grew, settlements became larger. The Maya began constructing public buildings for governmental and religious purposes. About 50 B.C.E., they began to adapt the writing system of the Olmec and develop their own system of hieroglyphic writing. Mayan civilization reached its peak during the Classic period, from around 300 to 900 C.E. The achievements upon which we will discuss in this chapter date from this time.

During the Classic Period, the Maya adapted and developed ideas they had learned from the Olmec. For example, they improved on Olmec building techniques. Even though the Maya lacked metal tools and had not discovered the wheel, they built enormous stone cities that boasted elaborate and highly decorated temple-pyramids and palaces. The Maya also built observatories for studying the heavens. They charted the movements of the moon, stars, and planets. They used their knowledge of astronomy and mathematics to create complex and highly accurate calendars.

Mayan society during the Classic period consisted of many independent states. Each state had farming communities and one or more cities. Atits height, the Mayan Empire included over 40 cities, including Tikal, Copan, Chichen Itza, and Palenque.

Around 900 C.E., the Classic civilization collapsed. The Maya abandoned their cities in the southern lowland area, and the great cities fell into ruin in the jungle. No one knows for certain why this happened. At the end of this chapter, we will look at some theories that may explain the mystery.

To the north, on the Yucatan Peninsula, Mayan cities continued to prosper during the Post-Classic period. This period lasted from about 900 C.E. to 1500 C.E. During this time, the Maya continued their warfare and empire building, but they had fewer great artistic and cultural achievements.

Even at the height of their empire, the Maya were not one unified nation. Instead they lived in many city-states with separate governments. What united them as Maya was their common culture: their social system, languages, calendar, religion, and way of life. Let‘s take a closer look at some aspects of Mayan culture, starting with class structure.

- **Society of the Maya Civilisation**
    - **Class Structure**

Because the Maya produced surplus food, some people could focus on tasks other than farming. Some became craftspeople. Others became priests or teachers. This division of labour resulted in the development of a class system. During the Classic period, the Maya lived in independent city-states, like Tikal. Within each state, Mayan society was structured like a pyramid. The ruler of each city-state was at the top of the social pyramid. The rest of Mayan society was organized in a series of layers below him.

- **The Ruler**

The highest authority in the state was the *halachuinic*, a Mayan word that means ―true man.‖ He ruled the state with the help of his advisors. He decided when and where to go to war. The Mayan ruler was considered a god-king. During religious ceremonies, he wore a headdress that was as tall as a person. When he died, a son or other close male relative succeeded him. Mayan rulers were almost always men, but scholars believe that women had considerable influence, probably through family relationships.

- **Nobles and Priests**

The next layer in the social pyramid was made up of nobles and priests. They were the only members of Mayan society who knew how to read and write. The nobles served as officials, and oversaw the administration of the states. They gathered taxes, supplies, and labour for projects like the construction of temples. Nobles led peasant armies in times of war. During battles, they wore elaborate costumes, including gold jewellery and animal robes made from the skin of jaguars.

Priests were important because they maintained favour with the gods. Like nobles, they inherited their position from their fathers. Priests led rituals, offered sacrifices, and foretold the

future. They were consulted to determine the best days for going into battle. In addition to their religious duties, priests were often mathematicians, astronomers, and healers.

- **Merchants and Artisans**

Although the Mayan economy was based mostly on farming, trade and crafts were also important. These functions were carried out by merchants and artisans. The Maya were accomplished traders. They travelled by sea, river, and well-constructed roads to trade with other city-states. Merchants in the lowlands imported valuable products from the highlands. These products included stones such as obsidian and jade; *copal,* a tree sap that the Maya used as incense during religious ceremonies; and *quetzals,* birds with shiny green feathers used in headdresses.

Mayan artisans made a wide variety of objects, many of them designed to pay tribute to the gods. They painted books on paper made from the bark of fig trees. Artists painted murals, or wall paintings, of Mayan life and important battles. They created sculptures for temples and decorative designs on palace walls. The Maya were also skilled weavers and potters.

- **Peasants**

The peasants were the backbone of Mayan society. They worked hard on the land, growing maize, squash, beans, and other crops to feed the population. During the growing season, men spent most of the day in the fields, farming with wooden hoes. Women usually stayed closer to home, preparing food, weaving, and sewing. When they were not working on the land, peasants spent time building pyramids and temples. In exchange for their work, they sometimes attended royal weddings and religious events. Peasants also served as soldiers during wars.

Most Mayan peasants worked as farmers. Farm families lived in small villages near the big cities. Their homes were simple buildings made of mud or wooden poles with roofs of palm leaves or grass. Mayan farmers grew maize, beans, squash, chili peppers, avocados, pineapples, and cacao. Maize was the most important crop. In fact, the Maya believed that they had been created out of maize.

Mayan farmers used a variety of techniques to grow their crops. In the rain forests, they used slash-and-burn agriculture. In the highlands, they increased the land available for farming by building terraces. In drier areas, they dug irrigation canals that carried water from streams and rivers to their fields. Some Mayan farmers still use these techniques today.

- **Slaves**

At the bottom of the social pyramid were the slaves. Slaves performed manual labour for their owners. Some were born into slavery, but free people sometimes became slaves. Some children became slaves when their parents sold them for money to feed the rest of the family.

War prisoners of humble origin were made slaves. Those of higher rank were sacrificed to the gods. And some people were made slaves as a punishment for serious crimes.

In general, slaves were not treated badly. Sometimes they actually had easier lives than peasants, depending on what job they did and where their masters lived. But slaves were not free to come and go as they pleased. Often they were sacrificed when their masters died. Now that we‘ve looked at the Mayan class structure, let‘s take a look at what daily life was like for the majority of Maya: the peasants.

- **Family Life**

In city-states like Copan (in present-day Honduras), Mayan peasants lived in one-room huts built of interwoven poles covered with dried mud. Several family houses were often grouped around a courtyard. A house containing the kitchen was often placed directly behind the main house. Peasant families worked hard, but ceremonies and rituals provided a break from work and a chance to honour important events.

- **Duties of Family Members**

Life for Mayan peasant families was not easy. Mayan women rose before dawn to get the fire burning in the fireplace. With the help of her daughters, a Mayan woman cleaned the corn that had been boiled and left to soak and soften overnight. Then she set to work at the grinding stone, pounding corn into meal. She patted the meal into *tortillas* (a Spanish word meaning ―little breads‖) or *tamales* and cooked them over the fire. These might serve as the morning meal, or they might be saved for dinner. On special days, they might also have hot chocolate, a drink the Maya made from cacao beans.

During the day, women and older girls cared for small children and for the family‘s few animals, like ducks and turkeys. They swept their homes, and they gathered, spun, and wove cotton into cloth.

Mayan fathers and sons ate their morning meal quickly before leaving to work the fields. When they weren‘t busy with the crops, men and boys hunted and trapped animals. They also helped construct large buildings such as palaces and temples. In times of war, peasant men served as soldiers.

- **Special Occasions**

Although Mayan families worked hard, they also took time to celebrate the important events in their lives. The birth of a child was a time of rejoicing. As soon as possible after the birth, the family called in a priest to perform a ceremony much like baptism. The priest forecast the baby‘s future and gave advice to help guide the parents in raising the child.

At three months of age, girls went through another ceremony. The number 3 was special to Mayan women because it represented the three stones of the fireplace. In the three-month ceremony, the baby girl was introduced to the tools she would use throughout her life. Small

items were placed in the baby‘s hands, such as tools for spinning and weaving, carrying water and cooking, and soaking and grinding maize.

A similar ceremony was held for boys at four months of age. The number 4 was special to Mayan men. It represented the four sides of the plot of land where a boy would spend his life. The baby boy was given farmer‘s tools, such as axes and planting sticks, and the spears, knives, and traps of a hunter.

Another important ceremony in every Mayan child‘s life was the coming-of-age ceremony. Girls went through this ceremony at the age of 12, boys at 14. The long ceremony involved confessions, cleansing with water, and reciting the rules of behaviour. Finally, the priest cut a white bead from the boys‘ hair and removed a string of red shells from around the girls‘ waists. Boys and girls had worn these symbols of innocence since they were quite young.

- **Marriage Customs**

The next big event for a Mayan youth was marriage. Men usually married around the age of 20. Girls married when they were as young as 14. The bride and groom did not choose each other. Instead, marriages were negotiated by the village *atanzahab,* or matchmaker. These negotiations were not simple. Families had to agree on how much food and clothing would be given to the bride‘s family. They also had to agree on the number of years a young man would work for his new wife‘s family.

Once the details of a marriage were worked out, the villagers built a hut for the couple behind the home of the bride‘s parents. When the home was ready, the bride and groom put on clothing woven for the occasion. After a priest blessed the marriage, the villagers celebrated. Clearly, rituals and ceremonies were an important part of daily life to the Maya. Let‘s look more closely at Mayan religious beliefs and practices.

- **Religious Beliefs and Practices**

Religion was very important to the Maya. The Maya built their cities around ceremonial and religious centers. Their magnificent temple pyramids rose high above the jungle canopy, like mountains reaching into the sky. Temple plazas provided gathering places for people to attend rituals and ceremonies.

Scholars have learned about the Mayan religion from studying present-day Mayan practices, ancient artefacts, and documents written during the Post-Classic period. Here are some of the things they have discovered.

- **Beliefs and Rituals**

The Mayan religion was polytheistic, which means it included many gods. In fact, the Maya believed in more than 160 gods. The primary Mayan gods were forces or objects in nature that affected people‘s daily lives, like the god of rain, the god of corn, and the god of death. Many gods had animal characteristics. The jaguar was especially important to the Maya. The

main god was called Itzamna. The Maya believed that this god created the world. They also worshiped a sun god, a moon goddess, and the gods of death, war, rain, and maize. The Maya often represented these gods as animals.

The Maya believed that the gods had created the world and could influence or even destroy it. The same god that sent life-giving rain could also ruin the crops with hailstones. So, it was extremely important to honour the gods. To get help from the gods, the Maya fasted, prayed, and offered sacrifices. Most of these sacrifices were animals, such as turkeys or deer. Occasionally, the Maya made human sacrifices. In addition, the Maya expected their rulers to communicate with the gods on their behalf. Unlike the ancient Egyptians, who looked forward to life after death, the Maya viewed the afterlife as an unhappy existence.

According to Mayan beliefs, only priests could explain signs and lead people through rituals aimed at pleasing the gods. Priests performed sacrifices and conducted ceremonies. They consulted sacred books, read omens, interpreted signs, and predicted the future. No decision was made without seeking the gods‘ advice. No action was taken without first honouring the gods. The Maya honoured their gods with offerings such as plants, food, flowers, feathers, jade, and shells.

The Maya believed that blood gave the gods strength, so they also made blood offerings by sacrificing animals and, sometimes, humans. The people who were sacrificed were usually orphans, slaves, and nobles captured during war.

In the ancient city of Chichen Itza, on the Yucatan Peninsula, humans were sacrificed by being thrown into a sacred well whose water level was 60 feet below the ground. Any victims who survived the fall were pulled from the water and asked what message they had brought back from the gods.

Human sacrifice played a role in an ancient Mayan game called *pok-a-tok.* Every Mayan city had at least one ball court where the game was played. Scholars believe that there were two teams of nobles. Players tried to hit a solid rubber ball through a stone ring by using their leather-padded elbows, wrists, and hips. People from all levels of Mayan society watched and placed bets on the outcome of the game. Slaves, land, and homes could be won and lost during a game. Surviving art from the ball courts shows members of the losing team being sacrificed and the captain of the defeated team being beheaded.

- **The Sacred Calendar**

The Maya used their knowledge of mathematics and astronomy to develop a complex calendar system. The Maya had three different calendars. The haab year was of 18 periods or months, of twenty days each, plus a terminal period of five days called Uayeb (the empty or unlucky days). The second was the tzolkin, a sacred calendar of 260 days. The third calendar was the ‒long count,‖ which reckoned the number of days since the mythical beginning of the Maya

era, which was dated 4 Ahau 8 Chamhu for reasons inexplicable till date (equivalent to B.C. 3111). In this calendar, 20 kins or days made a Maya month (uinal). 18 Uinals and 5 Uayeb made a tun (year) of 365 days. Next came the katun, a period of 7200 days or 20 years. And 52 years made a cycle of years. The nine known Maya time periods, such as days, months etc., had corresponding glyphs. Glyph actually was their language to record, which has so far not been completely deciphered. Only those glyphs, which pertain to calendars etc., have been somehow read .

The second calendar was the sacred or ritual calendar. It was called the *tzolkin*, or Sacred Round. The Sacred Round was based on 13 months of 20 days each, making 260 days in all. It had two cycles that worked together to identify a particular day. One cycle was made up of the numbers 1 to 13. The other cycle was a set of 20 day names. Each of the day names represented a particular god. Every 260 days, a given combination of numbers and day names, such as Ik, would occur.

Only priests could ―read‖ the hidden meaning of the Sacred Round. Priests used the sacred calendar to determine the best days to plant, hunt, cure, do battle, and perform religious ceremonies. To this day, there are calendar priests in southern Mexico who use the 260-day calendar in this way.

Like Mayan art and architecture, the calendar system reflects a highly advanced civilization. This civilization was made possible by the ability of the Maya to create a stable food supply. Next you‘ll learn about the agricultural techniques the Maya used to ensure that they had sufficient food.

Recording an event is important for every civilization. The Egyptians used the papyrus; the Sumerians used the clay tablets and others. Mayans have their own books to record events. However, most of the books were destroyed during the invasion of the Spaniards. Around four are spared and is being kept at libraries at various locations. Besides the books, there is the stela, which can be considered as a stone monument erected to commemorate certain important events. The dates are normally recorded according to certain format. Firstly, there are the initial series. contained the long count and the calendar round. Usually the long count and calendar round are present, but such is not the case with the other glyphs. The initial series begin with the ―initial series introductory glyph‖. After the series introductory glyph, it is the glyphs for the long count. For example, if e date is 9.0.19.5.4, the Mayans would merge the glyph for 9 and glyph for baktun together. The rest of the long count calendar is written with the same format. In a stela, the Mayans normally record one long count date only. For subsequent dates that might appear in

the stela, they used a certain number, called distance number to indicate. This number represents the distance of a certain event from the long count date stated earlier. However, they still refer to that certain day‘s calendar round date.

- **Philosophy of time among the Mayans**

The Mayans were actually obsessed with time. They built a lot of monuments including altars and stela to mark the passage of time. Inscribed on the monuments would be the series of glyphs that record the date, the gods and lunar information. In addition to that, Venus is rather important in Mayan culture Information on Venus can be found also among the glyphs.

The Mayans considered the days as divine whereby gods are assigned to the days. This is evident in certain villages in Guatemala where some form of the Mayan calendar still survives up to this day. They conceive the dates and time as burdens to be carried by their various gods. As there are a lot of numbers and date in the Mayan calendar, the system actually employed many divine bearers together for a day.

One thing that inevitably emerges when talking about the Mayan calendar is the enormous influence of astronomy. As already mentioned, the Mayans of Mesoamerica considered measurement of time a crucial part of their religious and social lives: almost each visible astronomical object had a corresponding deity or _god‘ associated with it; the movements of the Sun, the Moon, planets and constellations implied certain consequences on people‘s normal day-to-day concerns. Furthermore it was important to tell apart one season from another to determine when the right time for agriculture was; otherwise the people would simply starve. Thus it can be inferred that astronomical observations were of great importance to the success of the Mayan civilization: from their agriculture to theology to time keeping, the prevalence of astronomical and cosmological observations was widespread.

- **Agricultural Techniques of the Maya**

The Maya were creative, skilful farmers. They used their knowledge of calendars and seasonal change to help them become even better at growing food. But Mayan farmers faced many challenges. In the end, crop failure may have played a key role in the collapse of the Classic Mayan civilization.

The primary Mayan food was maize, or corn. Other typical Mayan crops were beans, squash, and chili peppers. Fortunately, beans and squash, when eaten with corn, supply people with a naturally healthful and balanced diet.

One of the most difficult challenges the Maya faced was how to grow enough food to feed their growing population. Farming was not easy in the regions where they lived. Their land included dense forests, little surface water (such as lakes or streams), and poor soil.

The Maya responded to this challenge by developing different agricultural techniques for the various environments in which they lived. In the mountainous highlands, they built terraces,

or earth steps, into the hills to create more flat land for planting. In the swampy lowlands, the Maya constructed raised-earth platforms surrounded by canals that drained off extra water. This technique helped them to grow more food without having to increase the amount of land they used.

A different technique was used in the densely forested lowland areas. In city-states like Palenque (in present-day Mexico), the Maya used slash-and burn agriculture. First they cleared the land by cutting and burning plants and trees. Then they planted their crops. Unfortunately, this kind of farming wears out the soil. Lowland soil was not very rich to begin with, so land that was planted for 2 to 4 years had to be left to rest for 2 to 10 years. Slash-and-burn farmers had to have a lot of land, since each year some areas were planted while others were recovering.

The Mayan agricultural system worked as long as settlements were spread out and not too large. As populations increased, the Maya had trouble raising enough food to feed everyone. In the constant quest for land, they drained swamps and cleared hillsides. They also used household gardens in the cities to increase the amount of land available for growing food.

The commoners or the peasants used to serve the men of upper class in many ways. As labourers, both skilled and unskilled, they built the enormous plazas and pyramids; as skilled artisans they needed to cut and lay stones, to plaster, to carve and cast and as unskilled labourers they filled the ditch with mud and helped the skilled craftsmen in numerous ways. They were the primary producers also. The Maya agriculture was quite varied with innumerable kinds of crops, fruit bearing plants, dye producing plants etc., all of which needed different kinds of attention and labour, though maize was the primary crop. Beside maize, they planted beans, grew squash and pumpkin, sweet potato, sweet cassava, a kind of turnip. Land and salt pits were communally owned. Individual community members were assigned plots of land to cultivate and grow food. Availability of water was a regular problem for the Maya in spite of the fact that the entire zone used to get high rainfall. Except the settlements, which were near rivers, availability of water was difficult. In the lowland settlements, the surface soil was thin and could not retain water, the rainwater used to seep into the subsoil, due to the porous limestone. Tikal repeatedly suffered droughts though it was in the wettest area. There the engineers had cemented an entire ravine of porous lime stones near the plaza and had created a giant sized reservoir.

There was Chac, the rain god, who had to be propitiated (appeased) before the agricultural operations. There was also Yum Kaax or the corn god, who had to be worshipped. There was a ritual for every activity of planting, sowing and harvesting,. In one of the Maya codices it was stated, ‒This is the record of year-bears of the unial…‖ This was a weather forecasting based on the observations of the last year. ‒In the ninth month, Chen (moon), and the tenth Yax (Venus), planting was to be done during certain lucky days.‖ The scribe-priest or the chilan, used to guide the peasants on this, yet much of this was based on the observation of earth-

bound man or the peasant, who related them to the priests. The priest in turn put it all down in glyph script so that it could be remembered. The high priest, called Ahkin, was also the teacher in Maya society. A Bonampak mural details the role and power of the High priest in the Maya society. He used to teach how to compute years, months, days, festivals and ceremonies, fateful days and seasons, in short, to read glyph and to interpret the almanac. But this was not taught to the men of the lower class. It was reserved for the nobles and the priests‘ sons. The Maya peasants used to store food grains for rainy days. The lower section of the Maya society was also made to pay the tax or tribute. Maize was the first tax. Part of a farmer‘s surplus was turned over to the _state‘ depositories. Then, as a form of work-service tax, the personal maize fields of priest and nobility were cultivated and harvested. Construction was also a part of personal tax. The houses of the upper classes were built by the common men at their own expense. The causeways were built as part of the work service; it was carried out by corvee (forced labour) by the clans that lived near the road. Working for the construction of Public building, was the principal labour tax. It is quite evident that enormous religious centres, temple cities, causeways, ball courts, etc. presupposed a complex social organization with mechanism to appropriate work/service and products. The nobles, priests, and civil and military officials lived on the tax-tribute of the man of the lower rungs of society. In addition a sizeable number of artisans, who decorated the temples, carved the stelae, were supported out of the accumulated surplus brought to the official storage chambers by the tax-paying Maya. Whether the necessity of labour made the Maya people to fight and capture slaves is not known. But they used to go into wars, capture slaves and employ them for various tasks as well as sacrifice some of them to propitiate their gods.

Beside working in the fields, weaving was one of the main occupation of the Maya. Both men and women were engaged in this. They used to carve and make baskets, rope, mat, and pots. Exchange of goods and trade with other people was a regular activity.

- **Settlements and Architecture**

Cities and ceremonial centres are found almost in all Maya settlements and the number of remains of huge structures are staggering. The layout of the cities was somewhat as follows; the central ceremonial court, surrounded by a large plaza where markets were held, then were arrayed the houses of chiefs, priests, and other functionaries, and further away from these were the houses of the common people. There were other structures also from small plazas to enormous reservoirs, broad causeways, ball courts, and smaller monuments. In the highland Maya settlements there were cenotes (pits or wells) for procuring usable water.

The use of lime mortar and corbelled arch, was the distinguishing characteristic of the Maya architecture. In the corbelled arch, the stones are so placed that each projects a little beyond the one below it; eventually the walls meet and a vault is created. To support this type of arch, a weight mass was necessary. As a result of this a comb like design developed into the roof.

This also because an overhanging to act as cantilever to the vaulting. Maya architectural façades, thus had lavish and intricate designs. Besides the spectacular Pyramids the Mayas also constructed ball courts, gateways, sweat/steam baths, vaulted bridges and raised platforms where plays were performed.

Uaxactun (A.D.328) was one of the oldest, though not one of the most elaborate instances, of the cities of the Maya. This city represents the general character of Maya Civilization. The principal temple pyramid, although only 27 feet high, is interesting since it shows the evolution of the pyramid form, which in the nearby Tikal was to reach a height of over 200 feet. The wide stairway was ornamented by stucco-masks some of which were even 8 feet high. In a series of isometric drawings the evolution of the temple complex can be seen. The first structure was a raised stone platform on which rested a wooden house. In the next stage of development, three identical temples were built with similar stairways and decorated roof-crests facing each other. There is evidence of a high priest, buried in the plaza; the floor level was raised to contain his tomb and a similar temple, presumably above the grave, was added. Slowly with the passage of years and evolution of techniques, the temple developed into a complex of buildings.

At Tikal, around first century A.D. three large platforms and two smaller ones were built on the North Acropolis. The large platforms, whose earth and rubble cores were faced with stucco, were about 4 to 4.5 metres high. Their stairways were decorated with painted stucco-masks, probably representing supernatural jaguars. Similar stucco masks were used to ornament the facades of the platforms at Cerros and at other sites. Monumental buildings were also constructed during the Late formative phase at El Mirador, Lamanai, Cuello, and Alter de Sacrifices in Peten, and at Dzibilchaltun in the northern Yucatan. The deities whose representations were carved on the stucco masks and who were worshipped in the temples on the platforms, –may have been claimed as ancestors by the chiefly lineages. The rich burials found within Tikal‘s North Acropolis hint at this sort of special relationship between deities and rulers.‖ Besides the monumental structures that the Mayas built, they had simple native houses for the peasants and other plebians, called the na. It was a type of house where the material used was wood for the wall and palm leaf for thatch.

The Mayas had a system of raised causeways or a road system called scabe or scabeob. These used to connect ancient cities of the Maya. The straight causeways even traversed jungles and swamps. The height of these causeways varied from 2 to 4 feet, the width from 15 to 33 feet and the length from 600 feet to 60 to 70 miles at a stretch. These roadways or causeways were ceremonial, economic and administrative in function. Pilgrims, who had a _right of asylum‘, must have walked along these causeways from the hinterland to the elite/ceremonial/urban centres carrying offerings, tributes, as also goods for trade. The causeways did not only connect

the hinterland with the centre but also connected different many centres. The Mayas also used the sea-route. The first things that Columbus encountered when he landed at Guanaja in 1502 were the Maya boats. At one island he saw and examined one –as long as a galley, 8 feet in breadth, rowed by 25 Indian paddlers,‖ and laden with commodities –cocoa, copper-bells, flint-edged swords, cotton cloth- brought from the mainland, twenty miles distant.

- **Maya Polity**

The head of the Maya city-states were the –real men‖, or the halach uinic. This office was neither elective nor selective. It was hereditary. The office descended from father to son. If the lord died, then it was the eldest son who succeeded him. However, if the sons of the chief were not fit to rule then, a brother or relative of the ruler became the chief. The halach uinic were both the spiritual and temporal authority of their city-states. Subordinate to him and chiefs of other cities, or in other words local governors under the halach uinic, were a set of officials who were known as ahau or more commonly batabob. The batabobs were, more than likely, related to the halach uinic by blood ties.

A batabob was responsible for the governance of his own resident city. He also had a retinue of deputies to assist him. Besides this there was a town council constituted of the chiefs of the various subdivisions of the town. Though nominally under the batabob, they could veto any move by the batabob. These councillors were called ahcuch cabob. The batabob settled disputes, usually contract violations and land disputes. And when the priests made known their oracles (prophesies or advice) as to when the people should sow, reap, or make merry, the batabob saw to it that the functions were carried out. In the time of war, although the batabob was the de facto head of the province, actual command was in the hands of a war captain, known as nacom, who was elected for three years. But at times of necessity the batabob also used to lead his army as against the Spaniards. The batabobs also collected tax and tribute. The commoners used to carry the batabob in a litter (an Indian palki), wherever he used to go. They also used to serve him in many other ways. There were a great many people who made up a bureaucracy, which was quite exacting; governors, bailiffs, war captains, and down to the lowest, the tupil, or a constable. All these officials constituted the upper class and never paid any tax.

- **Achievements of the Maya**

Many of the greatest achievements of the Maya date from the Classic Period. Hundreds of years later, their ideas and practices continued to influence other Mesoamerican groups.

- **Science and Technology**

The Maya made important breakthroughs in astronomy and mathematics. Throughout Mayan lands, priests studied the sky from observatories. They relied on simple methods, such as looking through a forked stick. Still, they were able to track the movements of stars and planets with striking accuracy.

The Maya used their observations to calculate the solar year. The Mayan figure of 365.2420 days was amazingly precise. These calculations allowed the Maya to create their solar calendar of 365 days. Recall that they also had a sacred 260-day calendar. Every 52 years, the first date in both calendars fell on the same day. This gave the Maya a longer unit of time that they called a Calendar Round. For the Maya, this 52-year period was something like what a century is to us today.

Mayan astronomy and calendar making depended on a good understanding of mathematics. In some ways, the Mayan number system was like ours. The Maya used place values for numbers, just as we do. However, instead of being based on the number 10, their system was based on 20. So instead of place values for 1s, 10s, and 100s, the Maya had place values for 1s, 20s, 400s (20 times 20), and so on.

The Maya also recognized the need for zero a discovery made by few other civilizations. In the Mayan system for writing numbers, a dot stood for one, a bar for five, and a shell for zero. To add and subtract, people lined up two numbers and then combined or took away dots and bars.

- **Arts and Architecture**

The Maya were equally gifted in arts. They painted using colors mixed from minerals and plants. We can see the artistry of Mayan painters in the Bonampak murals, which were found in Chiapas, Mexico. The murals show nobles and priests, as well as battle scenes, ceremonies, and a human sacrifice. These pictures have helped scholars learn about Mayan life.

The Maya also constructed upright stone slabs called *steles,* which they often placed in front of temples. Most steles stood between 5 and 12 feet tall, although some rose as high as 30 feet. Steles usually had three-dimensional carvings of gods and rulers. Sometimes the Maya inscribed them with dates and hieroglyphics in honor of significant events.

Another important art was weaving. We know from steles and paintings that the Maya wove colourful cloths in complex patterns. Women made embroidered tunics called *huipiles* and fashioned lengths of cloth for trade. Mayan women use similar techniques today. They still make their huipiles in traditional designs. People from different towns can be distinguished by the colours and patterns of their garments.

In architecture, the Maya built temple-pyramids from hand-cut limestone bricks. An unusual feature of Mayan buildings was a type of arch called a *corbel vault.* Builders stacked stones so that they gradually angled in toward each other to form a triangular archway. At the top of the arch, where the stones almost touched, one stone joined the two sides. The archway always had nine stone layers, representing the nine layers of the underworld (the place where souls were thought to go after death).

- **Language and Writing**

The Maya developed the most complex system of writing in the Americas. They used hieroglyphics to represent sounds, words, and ideas. Hieroglyphic inscriptions have been found on stoneware and other artifacts dating from as early as 50 B.C.E.

Over time, the Maya created hundreds of glyphs. Eventually, scribes could write down anything in the spoken language. They often wrote about rulers, history, myths and gods, and astronomy.

Not all Mayan groups shared the same language. Instead, they spoke related dialects. Today, about four million Mesoamericans still speak one of 30 or so Mayan languages.

- **Decline of the Maya Civilization**

Creative agricultural techniques were not enough to save the Classic Mayan civilization. For about 600 years, the great cities of the southern lowlands thrived. Then, in the space of 50 to 100 years, the civilization that supported these centers fell apart. By 900 C.E., the Maya had abandoned their cities to the jungle.

Around the 9^{th} century A.D., the Mayan construction of buildings seems to have stopped, marking the beginning of the collapse of the civilization. There are many explanations offered by scholars speculating on this question. Some scholars have argued that it was an epidemic such as malaria or yellow fever, or it might have been the social consequence of some calamity such as a drought or earthquake. Some others have suggested that the reason was an agricultural collapse, or peasant uprisings, or severing of trade routes, even an invasion by the Mexicans.

There was a demographic change during the Late Classic phase due to growth of population. Consequently there was a pressure on the limited agricultural resource of the region. There is some archaeological evidence, of the Late Classic time, in the form of human skeletons of commoners mostly. The skeletons attest stunted growth, scurvy, anaemia, and periodontal disease, suggesting malnutrition, which in turn, implies food shortages. To overcome the food shortage, the people might have intensified the use of the natural resources available as shortening of the interval of leaving land fallow or burning forest to clear land to extend cultivation. Such agricultural activities must have led, in the long run, to change in rain-fall pattern, fertility of the soil and so on. It is suggested that this caused agricultural exhaustion and ecological disaster.

Thus leading to the decline of the civilization. But such explanation fails to answer the question as to why the growing population did not increase the kind of agriculture, which they used to practice. Why did they change over to a different and detrimental practice? Some other ways of looking at the agricultural crisis and the decline of the Mayas have to be found. This question becomes more important in the light of the recent archaeological discoveries of the practice of a very intensive agriculture in this civilization. Peasant rebellion being one of the

causes of the decline of the Maya civilization has been largely derived from a reading of the Bonampak (a Maya site) murals (which apparently depicts captured peasant rebels) and the evidence of attacks on the monuments and consequent mutilation and destruction of those monuments, (which were symbols of the elite power and domination). This explanation has its protagonists and detractors. The detractors would say that Bonampak murals may be representing any captured commoners or nobles and not necessarily that of peasant rebels; and that the rebels could not be upsetting the demography of the place if they eliminated the nobles, who were a small fraction only. But the fact is that the elite centre did not constitute the Maya culture or civilization. It was only a part of the culture. And the rebel peasant did not intend to make difference in population figures but must have tried to reconstitute the social relationship. That is why we have flourishing villages even after the collapse of elite centres, as in Belize valley. The relation established between the finding of Fine paste pottery and Mexican invasion seems quite tenuous, if not untenable.

The decline and demise of the Maya civilization was no doubt a complex process. It involved the competition between different settlements over the control of trade routes of the west and war for the same. Rebellion from within can never be ruled out as various nobilities to remain in power used to extract immense amount of surplus from the peasants and producers. These exploited groups might have remained as disgruntled elements of the society. They were no more willing to bear the burden in the name of the divine and were ready to overthrow the system. Here one can ascribe a role for the Aztec or Mexicans, who came as merchants and traders and taking advantage of the situation started dominating over the centres and then controlling and displacing them as well. The decline and demise, however cannot be put as a uniform story for all the settlements, certain variation between settlements might have existed.

Perhaps a combination of factors brought an end to the Classic period. What we do know is that the great cities disappeared. The Maya migrated away from the old Mayan heartland and returned to village life. Stone by stone, the jungle reclaimed the great pyramids and plazas. Although the great Mayan cities are ruins today, Mayan culture lives on. About 2 million descendant of the ancient Maya still live in the southern Mexican state of Chiapas.

Summary

In this reading, you read about the rise of the Mayan civilization.

- This great civilization was developed in three main periods: Pre-Classic, Classic, and Post-Classic. The Maya‘s greatestcultural achievements came during the Classic period.
- In studying this period, you explored the Maya‘s complex social structure and their family life, religion, and farming techniques.

- The Mayan civilization existed in the modern countries of Mexico, Guatemala, Belize,Honduras, and El Salvador.
- The Olmecs learned to farm maize. They created trade routes and permanent settlements. They also developed religious centers and used a solar calendar. The Maya adopted and built on all of those achievements.
- In the Pre-Classic period, the Maya farmed and lived in simple houses. During the Classic period, Mayan civilization reached its peak. The Maya created writing, developed ideas in astronomy and mathematics, and lived in independent city-states. In the Post-Classic period, Mayan cities collapsed in the southern lowlandsbut continued to prosper on the Yucatan Peninsula. There were fewer artistic and cultural achievements.
- Tikal, Copan, Chichen Itza, and Palenque were important Mayan cities.
- Mayan city-states shared the same social system,languages, calendar, religion, and way of life.
- Mayan society was divided in to class structure of ruler, nobles, merchants, peasants, artisans and slave.
- Mayan women and girls cooked meals, and cared for small children and the family‘s animals. They cleaned the home, and gathered,spun, and wove cotton into cloth.
- At the birth of a child, there was rejoicing and the baby‘s future was forecast by a priest. At three months, a ceremony was held for girls to introduce them to the tools they would use in their lives. A similar ceremony was held for boys at four months. Boys came of age at 14 with a special ceremony where a symbol of innocence was removed from them, and girls did the same at age 15. When a bride and groom married, a hut was built for the couple behind the bride‘s parents‘ home. The bride and groom wore special clothes, a priest blessed the marriage, and the villagers celebrated.
- The Maya believed in more than 160 gods. Primary gods were the god of rain, the god of corn, and the god of death. The jaguar was an important animal in the Mayan religion. Gods had created the world and could influence or destroy it.

Key Terms

Ahkin: The high priest and the teacher in Maya society called Ahkin.

Atanzahab: Village matchmaker.

Batabob: A set of officials who were known as ahau or more commonly batabob.

Chac: The rain god, who had to be propitiated (appeased) before the agricultural operations

Chen: In the ninth month, Chen or Moon in Mayan calendar.

Chilan: The scribe-priest called as chilan.

Corvee: Forced labour

Glyphs: Ancient Script of the Maya.

Haab: A Maya calendar year of 18 Months.

halachuinic: a Mayan word that means ―true man‘ spiritual and temporal authority of their city-states

Self Assesment Questions

1. In which modern countries did the Mayan civilization exist?
2. What were some of the significant achievements of the Olmec? How did they influence the Maya?
3. What were key characteristics of Mayan civilization in the Pre-Classic, Classic, and Post-classic periods?
4. What were the main duties of Mayan men and boys?
5. What are three theories for the decline of Mayan civilization? Which one do you think

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UNIT-11 POLITY, RELIGION, SOCIETY OF THE INCA

STRUCTURE

11.1 Learning Objectives

In chapter-I of this Unit, we have discuss about the Maya civilisation of Latin America. Where we have also read about its geographical spread, growth and the reasons for its decline. Inthis chapter we shall learn about another Civilisation of American Continent which was the greatest empire ever seen in the Independent America and that is the Inca Civilisations. This civilisation flourished in the Andes region. After reading this chapter you will be able to know about:

- The geographical location and the origin of the Incas.
- The early polity, settlement pattern, society, militarism and religious beliefs of the Incas.
- The decline of the Mighty Incas.
- The legacy they left for the modern habitant of America.

11.2 The Incas

The Incas, a small ethnic group from the southern Peruvian highlands, created the greatest empire ever seen in the independent Americas. There were about 100,000 of them in 1535. Inca also means ‑ruler,‖ as in *Sapa Inca* (‒unique Inca‖). The Incas appeared on the archaeological landscape by about AD 1000 to 1200, and became imperial rulers in the fifteenth century AD. They called their language *runasimi* (―human speech‖), but today we know it as *Quechua.* The Inka (or Inca) civilization territorially spread over parts of modern

Ecuador, Peru, Bolivia, Chile, and Argentina, or the central Andean highlands, and for a substantial part of their history they were under a single Inca state called Tawantinsuyu, between 12th and 16th centuries

A.D. The Inka civilization or more correctly, the Inka Empire had dominated over other lesser pre-Inkan societies and settlements from 13th Century till the coming of the Spanish Conquistadors in 1532 AD. The Incas of Cusco had dominated over various ‗ethnic' communities in the entire region. The ethnic communities had tension and conflict among themselves, which was probably advantageous to the Spanish conquistadors (Spanish conquerors of Peru & Mexico). The pre-Inkan communities, who were settled agriculturists were the Chavin, Mochica, Nazca, Paraca, and Chimu amongst others. This chapter will give an overview of this mighty empire on the Andes in South America.

- **Sources of Information about the Incas.**

Andeans did not begin to write their own accounts until the beginning of the seventeenth century. Their writings mixed Christian history and theology with rose-colored accounts of the ancient past. Inca archaeology has a long history, but it has usually been focused in the Cuzco heartland. In the last couple of decades, studies in the provinces have greatly enhanced our understanding of the empire.

The western slopes are dry, while the eastern slopes form part of the warm jungles. A rich coastal marine biome provides small fish and shellfish. Periodically, the global climatic event *El Niño* (named after the Christ child because it hits the Peruvian coast near Christmas) causes torrential rains to fall along the coast, destroying crops and irrigation systems.

The central Andean environment has five basic zones that can be exploited for human use: (a) the coastal valleys, which can be irrigated to grow maize, squash, cotton, and other crops; (b) the *yungas,* or piedmonts, which were coveted for their coca lands; (c) *quechua,* the highland valleys, productive for maize in their lower reaches, and for potatoes and quinoa above about 3,600 m; (d) the *puna,* or high grassland, which is the habitat for the two domesticated camelids (llama and alpaca) and their two wild relatives (guanaco and vicuna); and (e) the *montana* and eastern forests, productive in maize, coca, and fruits. In prehistoric age, as remains shows today, about two-thirds of the population lived above 3,300 m (10,000 ft).

- **Predecessors**

The Inca empire was built on thousands of years of predecessor societies, who developed many of the features that the Incas adopted into their empire. Societies based on marked social classes existed from the beginning of the first millennium AD among the Moche of Peru's north coast. Highland states with urban centers arose at Wari, in southern Peru, and Tiwanaku, on the south (Bolivian) side of Lake Titicaca in the mid-first millennium AD. The Wari developed a number of features that the Incas adopted into their empire, including provincial centers linked by a road network and a method of accounting that depended on a kind of knot-record called a *khipu.*

- **The Origins and Early History of Inca Society**

According to the Inca histories, the original eight Incas were called forth from the origin cave called the Inn of Dawn (*Pacariqtambo*) by the creator god Wiraqocha. The ancestral four brothers and four sisters—paired up as couples—emerged from the central of three caves, while two other ethnic groups appeared from the lateral mouths. The principal pair were Manqo Qhapaq and his sister/wife Mama Oqllu. The Incas and their companions slowly made their way north. Along the way, one belligerent brother was tricked into being sealed in the origin cave, another was turned into a pillar of stone, and a third was transformed into a pillar at the site of Cuzco. The Incas recognized Cuzco as their promised land when they saw a grand rainbow traversing the valley and threw a golden rod that stuck in the soil. After winning a series of conflicts with the area‘s inhabitants, the Incas settled into their new home.

The second ruler, Zinchi Roq‘a, succeeded his father and married a local woman, initiating a practice that allowed the Incas to expand their influence in the region through political/marital alliances. The succeeding five rulers slowly consolidated their power through political sagacity, intrigue, and warfare.

Wiraqocha Inka, the eighth ruler, involved the Incas in the conflictive politics of the Lake Titicaca area by forming an alliance with the Lupaqa. During his reign, the Incas were attacked by a neighbour to the west, the Chankas, the resolution of which in the Incas‘ favor touched off the imperial era about AD 1438.

The pre-imperial Inca era, known as the Killke phase, began about AD 1000. It featured small communities occupying an area about 60 km across, centred on Cuzco. The largest Killke towns probably housed a few thousand people. By about AD 1200, the area seems to have been an island of relative peace in an Andean landscape troubled by internecine warfare.

Recent archaeological investigations indicate that the Incas had begun to dominate the Cuzco basin early in the fourteenth century AD. The beginning of the transition from the pre-imperial to imperial styles of material culture and architecture at that time suggests that the region was becoming integrated within a single polity about a century before the narrative histories recalled.

The imperial-era accounts were mournful histories filtered through translators, scribes and Spanish views. So the tales of the meteoric rise of Inca power are filled with all the heroics and exaggerations of the grand sweep of history as told by the victors. Even though many oral histories coincided on important points, there were many contradictions among sources on the nature and timing of crucial events and on the roles of central characters.

The conventional story on this regard goes like that, during the reign of Wiraqocha Inka (eighth ruler on Conventional King List), the Incas were involved in alliances and clashes with several neighbouring societies. When they were attacked by the Chankas, Wiraqocha retreated to

a fort, but one of his younger sons, named Inka Yupanki, successfully defended Cuzco against the onslaught with supernatural help. This son then usurped the throne and took the name Pachakuti, meaning ‒cataclysm.*"*. Modern scholars often follow the chronicler Cabello Valboa by citing AD 1438 as the milestone date when Pachakuti seized the throne. His actions reportedly launched a brilliant string of rapid conquests, so the empire is usually conceived as having endured a scant century. Through a combination of conquest, diplomacy, and enticements, the Incas under Pachakuti dominated Peru‘s southern highlands and much of the Bolivian *altiplano,* and ventured to the central Peruvian coast. He ceded military command to his son Thupa Inka Yupanki about AD 1463 and applied his energies to building Cuzco.

Under Thupa Inka Yupanki‘s military leadership, the Incas dominated the peoples north to central Ecuador. They took the Peruvian north coast. He was elevated to the throne upon Pachakuti‘s death in AD 1471. During the last years of his father‘s life and under his own rule, Thupa Inka Yupanki put down rebellions in the Bolivian *altiplano,* secured northwest Argentina and northern Chile, and took the south and central Peruvian coasts once and for all.

Two of his sons, Waskhar and Atawallpa, waged a horrific dynastic war that Atawallpa won just as the Spaniards arrived in 1535. Despite the dates often cited above, radiocarbon dating suggests that the rise of Inca power probably took more than a century in the Cuzco heartland, beginning by the early fourteenth century, and that the imperial expansion began near the start of the fifteenth century, not in the mid-fifteenth century.

- **The Nature of Inca Warfare**

Diplomacy and reward were essential to the Incas‘ success, but warfare still lay at the heart of the process both symbolically and practically. While they used negotiations to gain dominion over many peoples, the Incas‘ power and self-image hinged on their military capacities. Their armies met considerable opposition over the decades, so that military activities placed enormous demands on their resources. To meet their military goals, the Incas created a network of internal garrisons, frontier forts, and a remarkable logistical system of roads, support facilities, and depots.

The Incas owed much of their success to strategy and logistics, not to tactics, training, or technology. The Inca military excelled in their preparatory organization, as their battlefield command and conduct drew from traditional methods applied on a grander scale. Even in 1532,

the army consisted mostly of modular units of conscripts using their own weapons and led by their own lords, waging war as labour duty to the state.

- **Military Strategy**

When the Incas began their imperial expansion, they were neither the most populous, most powerful, nor richest people of the central Andes. The military situation dictated that the Incas economize in their use of force, because they lacked the resources to enforce hands-on control over all the societies that they dominated. The early imperial-era successes probably owed much to alliances, conscription of defeated foes, and confrontation of target societies with overwhelming force.

The practical methods of annexing new subjects coupled diplomacy and coercion. Customarily, an army that was mobilized in the agricultural off-season approached a targeted society with overwhelming force. Messengers would offer favourable terms of surrender: compliant subject elites received gifts and could expect to retain or enhance their status, while communities were allowed to keep many of their resources.

As the empire matured, the Incas moved from expansion to more stable dominion. The goals of military policy shifted from acquisition toward pacification and securing frontier areas, achieved through founding garrisons, resettling restive peoples, and fortifying frontier hot spots. The need to sustain large forces at great distances from home for extended campaigns also favoured development of a network of storage depots along the roads.

The overall system toward the edges of imperial control can best be characterized as a strategy of defense-in-depth . This approach relies on self-contained strongholds and mobile forces deployed between or behind them.

- **Fortifications and Garrisons**

Fortified strongholds are not abundant in most of Tawantinsuyu. Forts were built near hostile frontiers, primarily in northern Ecuador and along the south-eastern frontier, but the Inca realm did not have a fixed border in the sense that modern nation-states do. The restricted use of forts makes sense in terms of the largely offensive character of Inca warfare, because the Incas did not have to defend a home territory against invasions by major powers, and they usually carried the battle to the enemy. An especially high concentration of Inca forts lay near Quito, especially at Pambamarca, but few fortified sites were found in the heartland.

Most frontier fortresses were neither large enough nor manned with personnel adequate to preclude all potential incursions by outside forces. Instead, they seem to have been designed to deter raids or cut them off from behind.

- **Military Organization**

Even in 1532, the Inca command structure was not complex by the standards of ancient empires. The ruler, as commander-in-chief, drew most officers from his immediate kin. The

king‘s military role changed in emphasis from battlefield command to strategic planning as Inca warfare shifted from chiefly predation to imperial expansion.

In keeping with the dual organization that pervaded Inca rule, two or four commanders were often appointed to lead a campaign or army. At least in late campaigns, military units were organized in a decimal structure, made up of soldiers from particular ethnic groups led by their own lords. Both Inca oral histories and Spanish accounts state that the Incas could field armies in excess of 100,000 at a time, although we should view the high-end estimates sceptically.

- **Recruitment of Personnel**

Military service under the Incas was a broad, but not universal, labour duty of adult males. In principle, all sound, married males whose age grade fell in the range of 25-30 to 50 years were subject to call-up on a rotating basis. They were often accompanied on campaigns by their wives or other close kin. Unmarried men whose age grade fell in the range of about 18 to 25 bore messages and cargo. Many boys were trained in the martial arts in their home communities so that they would be capable warriors when called upon. When a campaign was being planned, the military leaders sent out word to the lords of selected ethnic groups to mobilize the personnel required.

The Incas‘ personal guard was drawn from Cuzco‘s aristocracy, called *orejones* (―big ears‖) for their large ears pools. Later rulers also supplemented their guard with warriors from other societies. On campaign, the guard was a well-ordered force in the low thousands.

Inca armies included few military specialists other than officers and the *orejones.* The notion of a voluntary career soldier or mercenary in the rank and file was outside the scope of Andean military practice, but over time the Incas professionalized the military by settling colonist garrisons and dedicating certain societies to soldiery (e.g., *Chachapoyas*). Many adult males were exempted from service, because (1) they were privileged, (2) they had special skills that allowed them to be assigned to other duties, or (3) their people were thought unreliable.

- **Ritual and Ideology**

Ritual and ideology pervaded Inca militarism from strategy to tactics. The preparation for campaigns incorporated divination, fasts, feasts, and sacrifices. When the Incas marched into battle, they carried an array of idols, or *waq’a,* with them.

- **The Army on Campaign**

When the Incas set off on campaigns, they dispatched multiple contingents, stretching out their departures. Porters, wives, servants, and other personnel formed a substantial entourage that may have approached the number of combatants. The road and *tampu* system were designed largely to assist military operations, but even the provincial centers were not equipped to shelter thousands of soldiers. The large armies apparently camped in tents.

- **Logistics**

Besides the road network, the most renowned aspect of the Inca supply system was the array of storehouses, which stockpiled an enormous variety of food, arms, clothing, and other items throughout the empire. The Incas relied on caravan and human porters for transport.

- **Battle Tactics and Weaponry**

Most battles for which we have accounts were described as either great melees on open terrain or assaults on fortified strongholds. Two favourite tactics were feigned withdrawals coupled with pincer counterattacks and flanking manoeuvres.

The Inca battle formation was organized by ethnic group, each one of which specialized in its own arms and wore its own distinctive martial vestments. Flurries of arrows, sling stones, and javelins preceded hand-to- hand combat by troops who wielded maces, clubs, and spears. The emperors were carried into combat on litters, wielding slings or spears. The Incas‘ preferred weapon was a stone or bronze star mace mounted on a wooden handle. Another favourite was a hard, double-edged, palm wood club shaped like a sword. The bow and arrow were a late addition to the Inca army‘s repertoire, as warriors from the jungle were drafted into service. Soldiers often wore quilted cloth armour that was so effective against Andean weapons that many Spaniards discarded their own metal plate in favour of the lighter protection.

- **Triumphs and Rewards**

Victories in war were celebrated in grand fashion, most prominently by triumphs in Cuzco led by the generals or the emperor himself. To show off the defeat of a foe, the Inca tread upon his head in the Golden Enclosure or in the main plaza in front of the massed throngs of Cuzco‘s residents. Inca rulers fashioned the heads of some foes into drinking cups, while defeated lords were also flayed and the skins of their bellies made into drums that were taken into battle or played at ceremonial events in Cuzco. Individual valour was elaborately rewarded, though clear distinctions were made between the awards granted to nobility and commoners, reinforcing the class structure of Inca society.

11.3 Settlement Pattern and Cities

- **Cuzco: The Navel of the Universe**

A small mountain city, Cuzco consisted mostly of temples, plazas, and housing for the empire‘s royalty, nobility, and their retainers. Our knowledge of Cuzco is patchy, because it was damaged by fire and earthquake in the Colonial period and was periodically renovated by the Spaniards. Even so, we know that the capital formed a spatial metaphor for Inca society and their world. Laid out in the form of a puma, the urban core (40 hectares) was reportedly designed by the first imperial ruler, Pachakuti. The fortified complex called Saqsawaman formed the head, while the body consisted of Upper and Lower Cuzco-sectors occupied by the upper and lower halves of Inca royalty.

Ethnic lords and colonists were settled nearby in a dozen neighbourhoods that echoed their position in the empire. Within the next 60 km lay country homes for living and dead emperors, their kin, other Inca nobility, and privileged ethnic groups. The heartland also housed service personnel-domestic staff, temple attendants, artisans, accountants, and farmers-bringing the total population of greater Cuzco to about 100,000.

The street plan consisted of straight roads that were irregularly arranged to fit the topography of the sloping land and perhaps the puma figure. The central district contained two main avenues that ran the length of the city and were crosscut by six other streets.

Two adjoining plazas lay at Cuzco‘s center: *Awkaypata* (―terrace of repose‖) and *Kusipata* (―fortunate terrace‖). Containing a central platform and covered with sand in which offerings were buried, *Awkaypata* often hosted the mummies of the dead emperors for ceremonies of state.

Royal palaces and religious compounds dominated the central architecture. The compounds facing *Awkaypata* were probably the most impressive. *Hatunkancha* (‖great enclosure‖), *Amarukancha* (―serpent enclosure‖), and *Q’asana* were royal palaces.

The ten royal kin groups (*panaqa*) maintained residences in Cuzco, while the non-royal kin lived in settlements beyond the center. The most important religious complex was the *Qorikancha*, or Golden Enclosure, more commonly known today as the Temple of the Sun. Located a couple of blocks to the southeast of *Awkaypata*, the temple was the focal point in the Incas‘ sacred geography. The temple‘s rooms housed many effigies, most importantly *Punchao*, or the image of the Sun itself. Nearby lay a maize garden with birds interspersed among the plants; the garden was accompanied by a herd of camelids attended by their keepers. All were executed in precious metals. The Creator God‘s temple (*Kiswarkancha*) and *Pukamarka* (‖Red Town‖) were also important shrines.

Saqsawaman, the grandest architectural complex in the empire, lay on a rocky promontory above Cuzco. The facility was actually a combination of ceremonial complex, fortress, and magazine. The zig-zag walls today provide a vantage point for re-enactments of Inca Sun ceremonies. A series of sacred agricultural fields were scattered throughout the city, and Cuzco‘s outskirts boasted a great quantity of storehouses (*qollqa*), from which the inhabitants were provisioned.

- **The Royal Estates**

Every ruler from Wiraqocha Inka onward owned countryside properties and provincial estates. Earlier monarchs may have also had manors. Inca Roq‘a and Yawar Waqaq‘s

descendants lived in villas near Cuzco, where they venerated the mummies of their ancestors. Rulers claimed their properties in many ways, including carving out new estates and commandeering expanses that were already developed. Pachakuti and Thupa Inka Yupanki held estates at locations that commemorated their military victories. Waskhar converted state lands and personnel into his own estate east of Huánuco, and Thupa Inka Yupanki won some estates through a game of chance played with the Sun himself. Rulers also appropriated properties when the dust settled from political conflicts.

Some estates were created through formidable engineering works, as when Wayna Qhapaq‘s holdings in Yucay were reclaimed from swamp and Waskhar‘s estate at Pomabamba was developed by diverting a river to create new land.

The Incas‘ penchant for melding land forms and structures is one of the most distinctive features of their approach to designing the manors. All exhibit elegant terracing, waterworks, and masonry that are seldom seen in the rest of the empire. The estates were designed to provide access to a wide range of farmed, gathered, and hunted resources. As many as 4,000 to 4,500 workers were settled at the manors to serve their lords.

Several of the most spectacular Inca sites have been identified as royal estates of Pachakuti, most prominently Pisac, Ollantaytambo, and Machu Picchu. Pisac‘s main architecture consists of a set of residential structures and a temple complex built around a large carved rock. The slopes below the settlement are graced with splendid terraces that cascade hundreds of meters down slope.

Ollantaytambo, 40 km downriver, exhibits a striking combination of regular layout and architecture tailored to rugged land forms. The site was a planned residential settlement with palaces, religious and defensive structures, storehouses, roads and bridges, terraces, and waterworks. To the west, above a grand set of terraces, lie the complexes now called the Fortaleza and its Temple of the Sun.

Machu Picchu is celebrated as one of the world‘s archaeological splendors. Brought to the world‘s attention in 1912 by Hiram Bingham of Yale University, the site‘s spectacular setting on jungle cliffs imparts enormous grandeur to the manor. The site contains a main, lower area called Machu Picchu (―old hill‖) and an upper area on a sugarloaf peak called Huayna Picchu (―young hill‖). Machu Picchu itself contains sets of agricultural terraces and two complexes of elegant architecture flanking a main plaza. Among the site‘s most striking features are the sixteen fountains and many carved granite outcrops incorporated into the architecture. The most prominent rocks are the *intiwatana*-thought by some to be a sun gnomon-at the peak of the temple complex on the site‘s west side, the nearby monolith carved to imitate the eastern horizon, and the carved bedrock within and underneath the so-called *torreón.* The *torreón* was probably used to record the June solstice and Pleiades‘ rise. Recent archaeological research

shows that the settlement‘s residents formed a typical population cross section, and were not dominated by young virgin women, as was mistakenly reported by the early expedition. Most residents were probably occupied in a combination of farming, craftwork, household service, and ceremony.

Other Well-known Estates includes Wiraqocha‘s main estate lay at Juchuy Cuzco (―Little Cuzco‖), about 30 km north of Cuzco, where his son Pachakuti built him a manor to live out his life after being deposed. Thupa Inka Yupanki‘s best-known estate was a rural villa at Chinchero, about 30 km northwest of Cuzco. Chinchero was a planned residential settlement that contained a large central plaza and platform mound along with agricultural and residential terraces.

Wayna Qhapaq‘s main estate in Yucay was cantered at the residence called Quispiguanca (―white rock‖). Its holdings included forty named parcels where maize, sweet potatoes, and the warm-weather crops of coca, chili pepper, cotton, and peanuts were cultivated. It included woods that were home to deer, while fish and reeds were grown in an artificial pond.

Overall, the royal estates exemplify elite life in the heartland during the imperial era. Their designs, which were modified and adapted to natural features, symbolize an intensive interaction between humanity and the powers of the cosmos. They epitomize how prime resources were converted into private domains held first by the ruler and, after his death, nominally held in a trust for his reverence.

- **Inca Polity**

The traditional view, popularized by the Inca Garcilaso de la Vega, is that the Inca emperor ruled his peoples through a homogeneous political system in which all activities, from birth to death, were regulated. The ruler was a wise, benevolent, and valiant man who took care that no one in his domain went hungry.

That view is largely propaganda, since the land was made up of hundreds of different societies, ranging in their political organization from independent villages to the full-fledged empire of Chimor on Peru‘s north coast. In practice, the Incas tailored a standardized package of policies to local conditions, producing a variegated political landscape, and left subject communities largely to their own devices for their welfare. As a result, Inca government was really an umbrella overlying a highly diverse subject terrain. The intensity of rule in any given region varied according to Cuzco‘s interests, the local conditions, and the response to Inca dominion.

11.4.1 Political Geography in Outline

The name Incas gave to their domain was *Tawantinsuyu*, which means ―The Four Parts Together.‖ The four parts were *Chinchaysuyu* (i.e., the northwest and most prestigious part, which took most of highland Peru and Ecuador and the coast); *Antisuyu*, the northeast part, which took in the eastern jungles and slopes of the Andes; *Kollasuyu*, the southeast and largest

part, which took in south-eastern Peru, highland Bolivia, the northern half of Chile, and part of northwest Argentina; and *Cuntisuyu*, the smallest part to the southwest, which took in the area from Cuzco to the south Peruvian coast.

- **Cuzco's Political Organization**

In it simplest form, Inca government was a monarchy in which rule passed from father to son. The ruler was assisted, counselled, opposed, and perhaps even deposed by the ten royal Inca kin groups, called *panaqa.* They were the descendants of the past Inca rulers, whose mummies continued to participate in political affairs through mediums assigned to speak and listen to them. The structure of government beyond the royalty was a highly stratified affair, based on kinship, class, ethnicity, and hereditary access to positions of power.

The ruler was called the *Sapa Inca* (―unique Inca‖) and was expected to be generous, wise, and valiant. He took an honorific name upon ascending the throne, marrying his sister at the same time. Both his enthronement and death were celebrated with grand ceremonies, including sacrifices of camelids and children.

Women, especially the queen (*qoya*), were powerful figures in Inca politics. They brought counsel, status, and their own wealth into their marriages. Just like their husbands, their mummies continued to participate in politics after their death.

The royal descent groups (*panaqa*) were formed upon the death of the ruler, through a practice called split inheritance. In this practice, the throne passed on to the most able son, while the remaining descendants of the deceased king formed a kin group that attended his mummies and cared for his estates in perpetuity.

In order to reduce conflict over successions, the Incas instituted the practice of royal incest, marrying the ascending ruler to a sister and thus reducing the pool of potentially legitimate candidates for the next transition. They also established a co-regency, in which a designated son took on some of the role of ruler while his father was still alive. Even so, every imperial succession was attended by intrigue, coup or coup attempt, and murder, even of the ruler himself.

- **Inka Religious practices and beliefs**

Inca ideology combined history, religion, belief, and politics. It was built on traditional Andean beliefs, but elevated the Incas, their ancestors, and gods over all others. The Incas believed in an animate landscape in which spirits inhabited the hilltops, springs, rocky promontories, caves, and other natural features. They attended to omens seen in the heavens and made sacrifices to many gods and sacred locations. They used one term-*waq'a*-to describe anything, person, or place with transcendent power.

- **The Inca Pantheon**

Wiraqocha was the creator god, but was not worshiped directly to a great extent. The principal Inca god was *Inti,* the Sun, who was the center piece of the official religion. He was married to *Mama-Quilla,* ‒Mother Moon,‖ and was the father of the sitting ruler. The Sun was represented as a small seated boy made of gold (*Punchao* or ‒Day‖). The High Priest of the Sun (*Willaq Umu*) was probably the second most powerful man in the empire. The Sun had its own set of resources, including farms, herds, and service personnel. Gold was thought to be the sweat of the Sun and silver the tears of the Moon.

Inti-Illapa (the thunder or weather god) was the third most important deity, while *Mamacocha* (Mother of the Lakes and Sea), *Pachamama*(Earth Mother), and *Pachacamac* (Maker of the Earth, deity of earthquakes, and a coastal oracle of great antiquity) were all important members of the pantheon. The Incas built up an elaborate mythology around the stars and constellations. One group of three stars were known as the granary because their appearance signalled the beginning of the agricultural season.

- **Calendar and Astronomical Observations**

The Incas knew a great deal about solar and lunar calendar and maintained calendars based on the cycles of each. They probably adjusted the calendars on a monthly basis, so that they remained coordinated over time. The Incas did not understand the nature of eclipses and the appearance of comets, so those were frightening events that required a vigorous response of sacrifice and ceremony.

- **The Ceremonial Cycle**

The Incas maintained an elaborate ceremonial calendar, based on the solar and lunar cycles. The most important ceremonies were for the June solstice (*Inti Raymi,*or Sun Festival) and the December solstice (*Qhapaq Raymi,* or Magnificent Festival). The Queen‘s Festival, in July or August, featured a purification ritual (*citua*).

- **Cuzco’s Network of Shrines: the *Zeq’e* System**

The *zeq’e* (line) system was an elaborate ritual complex. It contained at least 328 and probably more than 400 shrines (*waq’a*) linked by imaginary lines radiating out from the Golden Enclosure or Terrace of Repose in central Cuzco. The shrines consisted largely of natural features of the landscape (e.g., springs, stones, mountain passes), the built environment (e.g., buildings, burials), and objects (e.g., the brother images of the rulers).

The most common offerings were *Spondylus princeps* (thorny oyster) shell, cloth, coca, and camelids. Human sacrifice was owed to thirty one of Cuzco‘s shrines and was also practiced for the investment and death of a ruler, among other momentous events. The chroniclers wrote that as many as 4,000 individuals-generally children chosen for their beauty-could be sacrificed at a time, but no archaeological evidence supports this scale of sacrifice.

- **Mountaintop Shrines**

Mountaintop shrines have gained importance recently, as archaeologists have found a series of shrines with offerings of gold, silver, and shell statuettes of humans and camels, along with occasional human sacrifices. Among those sites is Llullaillaco, Argentina, the world‘s highest archaeological site (6,739 m), and the better-known Nevado Ampato, Peru. The shrines seem to have been dedicated to the Sun, the Moon, and the sea gods.

11.6 Inca Society

- **The Stages of Life**

The Incas charted the progression of life stages according to people‘s perceived ability to contribute. According to Inca census categories, there ware ten stages, or ―roads,‖ of life for males and ten stages for females. The first road for a male was an adult married man (warrior), holding the decapitated head of an enemy. The female counterpart was a married woman, industriously weaving on a back strap loom. Then came two categories of increasingly older people, followed by the infirm. The last six categories ran in descending order of age, from adolescent boy messengers and marriageable girl spinners down to infants in the cradle.

Childbirth was not an especially celebrated event, but at the age of about two, a child‘s hair was cut and he or she was given a childhood name.

Education for most children consisted of learning the crafts of their parents, such as weaving for girls and hunting for boys. Male children of the nobility were apparently taught more formally in intellectual, cultural, and military affairs. The only girls who were formally trained were the Chosen Women (*aqllakuna*), who were taken from their families at the age of about 10. They lived in separate quarters (*aqllawasi*), were taught religion and to make fine cloth and beer, and were generally given in marriage to favored men or joined the adult women‘s religious order (*mamakuna*).

A girl celebrated the passage to a marriageable state at her first menstruation. Boys celebrated their rite of passage through puberty as a group, at the age of about 14. The male children of the Inca aristocracy went through an elaborate series of processions, sacrifices, races, and other ceremonies; they received their large ear spools at this time.

Marriage bonded both individuals and kin groups. Brides and grooms generally selected their partners from the opposite side of a large group of their kin, called an *ayllu,* which owned and exploited resources collectively.

Death signified a change of status, but not disappearance from the social group, as mummies of the deceased were tended and consulted for many years-even centuries-after death. The status and ethnic identity of the deceased were frequently represented in their burial goods or in aspects of their burial treatments.

- **Gender Complementarily**

Male and female roles were inseparable complements in Inca social life. This relationship was found at the core of economic activities, such as farming and herding, and ceremonial activities. It was also enshrined in Inca mythology and in the Inca pantheon. Kin terms were used to conceive relations between humans and the supernatural.

- **Inka Administration**

By the end of their run of power in 1532, the Incas ruled a population that outnumbered them by about a hundred to one and whose political formations varied widely. The Incas ruled the central part more intensively than the far north and south, and much of the north Peruvian coast. They also built an extensive system of provincial installations linked by a vast road network.

- **Provincial Rule**

The Inca provincial administration is often called a bureaucracy, but it consisted more of an umbrella of ethnic Incas directing regional ethnic lords who would likely have succeeded to office among their own peoples. There were at least eighty provinces, with the most found in the northwest part (*Chinchaysuyu*). A province was thought of more as a population than a region. Each province was divided into two or three parts, each of which was supposed to contain close to 10,000 households.

A province was usually governed by an ethnic Inca, assisted by a variety of functionaries. He was supposed to supervise the census, apply labour requirements, maintain the infrastructure, and pass judgment on disputes.

A decimal administration lay at the heart of provincial rule. In this system, heads of household were organized into a hierarchy that included units of 10, 50, 100, 500, 1,000, 5,000, and 10,000. Each unit from 100 households upward was directed by a hereditary local lord, called a *kuraka.* The decimal administration seems to have been applied in the central part of the empire, where the society most closely resembled the Incas themselves. Periodically, a census was taken of the provincial populations; it was supposed to be updated annually. The census accounted for males and females separately, according to their age grades and marital status.

- **The Knot-record (*khipu*) Recording System**

The Incas kept their records primarily through an ingenious mnemonic device known as a *khipu,* or knot-record. A single *khipu* consisted of a longitudinal cord to which a series of multi-colour pendent cords were tied. The position and colour of each cord held particular significance. Knots were tied at positions along each pendent string. The knot-record keepers (*khipu kamayuq*) memorized additional information that allowed them to interpret each *khipu's* meaning.

We have not yet broken the code of the *khipu,* but scholars think that most *khipu* were dedicated to recording numerical information (for example, census records, tax accounts,

military organization, and calendrics). About a third of the *khipu* were more literary in their content, including histories and even poetry.

In 1923, Leland Locke showed that the system was based on a decimal (base-10) system. He found that units (i.e., 0-9) were recorded at the bottom of the pendent strings, where a single granny knot marked 1, and knots with a certain number of loops recorded that number (e.g., four loops for the number 4). Zero was marked by the lack of a knot in the units position. Tens (i.e., 10, 20, . . . 90) were recorded at the next position up, and so forth through hundreds, thousands, and finally ten thousands. Testimony to the Spaniards about labor obligations shows us the cultural ordering of information on the *khipu.*

- **Regulating Social Life**

The Incas did not have a formal legal code, but applied aspects of their own culture to subject societies. Most of the strictures were intended to protect the rights and perquisites of the elites. Others provided sanctions for sexual misbehaviour, stealing, witchcraft, or disobeying state orders. Some rules were intended to protect the subject populace against abuse by the elites.

- **Provincial Installations**

The Incas managed provincial affairs of state through a network of regional centers and secondary facilities, called *tampu.* John Hyslop estimates that there may have been 2,000 or more *tampu.* The archaeologist Craig Morris (1972) points out that the provincial centers fell into disuse following the Inca collapse, because they formed a kind of artificial urbanism. He observes that they were usually founded in locations without significant local occupation and lacked independent craft, residential, or market activity. Their positioning often reflects more concern for interregional contacts than local affairs. During most of the year, no more than about a quarter of the housing may have been used. The architecture often used local techniques and materials, but the designs were Inca. The great storage facilities and emphasis on temporary housing underscore that they were designed to support travelling armies and part-time occupants. Morris concludes by noting that none of the centers on the main highway had a significant cemetery, indicating that even the Inca personnel felt that they were present only temporarily.

The provincial system met several needs, including administration, ceremony, production and storage facilities, and military requirements. The grandest centers lay along the main mountain highway between Lake Titicaca and Quito. North of Cuzco were Vilcaswaman, Hatun Xauxa, Pumpu, Huanuco Pampa, Cajamarca, Tumipampa, and Quito. South of Cuzco lay Hatunqolla, Chucuito, Chuquiabo (La Paz), Paria, and Charkas.

- **The Architecture of Power**

Inca centers were designed around what Gasparini and Margolies (1980) call the ‒architecture of power‖-buildings and large plazas intended to reinforce the image of the empire‘s might. The Incas did not dedicate buildings to purely administrative functions, such as

accounting or holding audiences. Most centers reflect an intense preoccupation with ceremony and sacred space. At least six sites were called ‒New Cuzcos,‖ built in the conceptual, if not actual, image of the capital such are Huanuco Pampa, Inkawasi, and Hatunqolla in Peru; Quito and Tumipampa in Ecuador; and Charkas in Bolivia. The two main kinds of architecture were enclosed compounds (*kancha*) used for residence and craft production and enormous one-room, elongated halls (*kallanka*) used for hospitality and temporary housing. Other important architectural forms were religious structures, such as the temples to the Sun, and sequestered sectors devoted to the Chosen Women (*aqllakuna*).

- **The Road System**

The Inca royal highway (*qhapaq nan*) unified the empire physically and conceptually. The network linked together about 40,000 km of roadway, based on a highland and coastal route, joined by transverse routes that crossed from the coast to the highlands and into the eastern lowlands. Much of the highway was based on traditional routes, including some that had been built centuries earlier.

The roads provided conduits for rapid communication, personnel movement, and logistical support, while stamping imperial domination on the countryside. Soldiers, porters, and llama caravans were prime users, as were nobles and other individuals on official duty. Other subjects were allowed to walk along the roads only with permission. Relay messengers (*chaski*) were stationed at intervals of about 6 to 9 km to carry everything from news from the battlefront to fresh marine fish for the ruler in the sierra.

The highway has a reputation for straightness, but straight stretches rarely run for more than a few kilometres and the roads are filled with minor adjustments to the terrain. The grandest highways were neatly paved with cobbles or flagstones, but the majority of the roads employed dirt, sand, grass, and other natural surfaces. The finest paved roads were concentrated between the *altiplano* and Ecuador and along the routes that linked that stretch of highway and the coast.

- **Resettlement**

About a quarter to a third of the population was resettled under Inca rule. The most renowned program moved entire communities hundreds of kilometres to create enclaves of colonists called *mitmaqkuna.* The main reasons for resettlement were to disperse societies that posed threats to Inca security, to congregate economic specialists whose products were destined for state use, and to claim a divine mandate over the Andes.

The colonists were supported from state resources only until they could sustain themselves on the lands they received, and they were required to maintain visible markers of their ethnic identity. Even so, they have been notoriously hard to recognize in the archaeological record, probably because their identifying markers were made of cloth. Local resettlement

complemented the long-distance program, as many a community moved down slope, which gave them access to better farmlands and reduced their threat to the Incas.

- **The Varieties of Provincial Rule**

Huanuco, Peru: This region‘s five ethnic groups were intensively integrated into the empire, first as a subject province and then partially as an imperial estate. The elaborate regional centre, Huánuco Pampa, is the grandest Inca site anywhere outside the heartland. One of the ―New Cuzcos,‖ the city covered about two square kilometres, contained more than 4,000 buildings, and could house up to 15,000 people at a time.

Coastal Peru: Peru‘s north coast had already seen 1,500 years of state society when the Incas arrived and the Chimu empire stoutly resisted the Inca advances. The Incas held the Chimu ruler hostage in Cuzco and divided control among local lords who ruled valley-wide territories. Sites built according to Inca canons are rare along the north coast and the Incas governed the dense populace primarily from installations partway into the highlands. The intensive rule on Peru‘s south coast contrasted starkly with these policies. The Incas established important centers at Lima La Vieja and Tambo Colorado, and the Chincha were so esteemed that their lord fell to Spanish arms at Atawallpa‘s side in Cajamarca.

The Lake Titicaca Basin: This region held abundant attractions for the Incas, for the lake lay at the center of the Incas‘ vision of their genesis and the *altiplano*‘s wealth made it an early target for Cuzco‘s expansionist aspirations. In 1532, the peoples living around the lake had been formed into about thirteen provinces, and major colonies were established for economic and religious ends. The most prominent centers in the northwest basin were Hatunqolla and Chucuito, while a major religious enclave was created at Copacabana, near the origin point of the universe.

The South Andes: Southern Kollasuyu, the empire‘s south-eastern quarter, is often considered marginal to Inca interests because of its low population, relative lack of large installations, and distance from Cuzco. Even so, regional surveys have now recorded around 400 Inca sites or settlements with Inca sectors in south Bolivia, Chile, and Argentina. Most appear to have been involved in mining, agriculture, or military activities.

Highland Ecuador: The Incas fused two extremes of imperial strategy in highland Ecuador: indirect rule through local chiefs and construction of their second capital at Tumipampa. Tumipampa and Quito were the most important centers, but Ingapirca is the most spectacular site, and over 100 fortified sites belonging to the Inca era have now been recorded. The lands around Tumipampa were transformed by the resettlement of colonists right around the city.

Frontier Relations: The Incas enjoyed a geographic advantage unique among pre-modern empires-at the apex of their power, no foreign competitor could threaten their

dominance. Even so, Tawantinsuyu‘s frontier traversed over 4,000 km of mountains, jungles, and plains, across which the Incas main the Incas maintained a flexible array of relations. In many areas, they promoted economic and cultural ties beyond the limits of their military and political control.

- **Inka Economy**

The standard view of the Inca economy is that all productive resources-farmlands and herds-were divided into three parts: state, Sun, and community. The influential mestizo author, the Inca Garcilaso, asserted that no one went hungry, because the state and community took care of everyone. Those views contain elements of truth, but they also simplify things and gloss over the difficulties of making a living in the complex Andean environment and the wide variety of economic systems that were drawn into Tawantinsuyu. The Inca economic system did not have an efficient transportation system for bulk goods and did not have a major population center that sucked up the produce of the empire, so the state and Sun provisioning system had to be replicated from each province to the next.

Although there were some kinds of special-purpose money and markets within their domain, the Incas relied primarily on a labour tax for the production of their agro-pastoral and craft products.

- **Foundations of the Inca Economy**

The Incas claimed all resources in the land and created an economy that was independent of the household and community economies, whose products were not taken. Lands and herds were set aside for the state and the state religion, while many communities retained many of their ancestral resources. Some provinces were converted wholesale into state or church domains, while others were barely touched. All wild and mined resources were ostensibly property of the Inca, but in practice many remained in the hands of local societies.

- **Labour Taxes**

The Incas underwrote their economy by requiring that all hale heads of household (*hatun runa,* ‒big men‖) render rotating labour service, which took about two to three months a year. There were about thirty-seven to forty-two different kinds of duties that needed to be fulfilled, ranging from farming and herding to military service, guard duty, and portage to mining and making craft goods.

The rationale for the labour tax was that the Incas claimed all resources in the empire. People were provided with leadership and were given access to their traditional resources in return for their labour duty. Many people were exempt from the general tax, including lords whose households numbered 100 or more and entire ethnic groups that were given over to particular tasks, such as military duty, dancing, and litter-bearing.

- **Specialized Production**

Over time, the Incas came to rely on specialized colonies of farmers, herders, and artisans, resettled from their home communities to lands especially productive in particular kinds of goods. In this way, the Incas produced vast quantities of cloth, pottery, and other craft products. A large number of individuals were separated from their home communities and converted to lifelong servants.

- **State and Agriculture**

Large state farms were founded in several locations, notably Cochabamba (Bolivia), Arica (Chile), and Arequipa and Abancay (Peru), where maize, cotton, coca, fruits, and other crops were grown for state use. Up to 14,000 workers were devoted to individual farms (Cochabamba).

Farms for the Sun were also set up, but they were smaller than those of the state. The entire province of Chuquicache, on the north side of Lake Titicaca, may have been given over to the Sun.

The Incas had an elaborate ceremonial sequence tied to the agricultural cycle. There is a standard sequence in which the plots were reportedly cultivated: the state, the Sun, and the community. That may have been more elite ideology than practice, however, since the ecology of the Andes requires that crops be put in according to the local conditions, not according to state edict.

- **Pastoralism**

The Incas initially requisitioned most of their llama and alpaca herds from existing flocks, drawing heavily from the peoples of the Titicaca basin. Overall, state herds may have numbered in the millions. Prime uses of the herds were for cloth, food, and provisioning and transportation for the military.

- **Storage**

A vast storage system, replicated in Cuzco and throughout the provinces, bridged the gap between production and use. The largest facilities had over 2,500 buildings that contained everything from food to military supplies to feathers for decorating cloth. Local lords kept the system operating for about twenty years after the fall of the empire, not only to supply the Spaniards, but also because they feared the Incas would return and call them to account.

- **Artisan and Artistry**

In a land with no writing and where people spoke scores of languages and subscribed to a wide variety of cultural values, there was no common symbolic system. Standardized Inca craft products thus served the dual role of imprinting the state‘s presence on the social landscape and transmitting messages of power and status. The Incas don‘t seem to have created many objects for display, but had a clear artistic style and aesthetic represented in their artisanry. The Incas

relied on the existing craft and artistic capabilities of their subjects to meet their demands. Inca material objects and architecture were not personalized. There were few representations of humans, even in portable objects. The built environment seems to have provided spaces for ceremony and other activities rather than providing representations of human or godly accomplishments.

Weaving was probably the most highly valued craft, and textiles were the most important ceremonial and status objects. Metal objects were also highly significant, because gold was the sweat of the Sun and silver the tears of the Moon. Regrettably, most objects of precious metals were melted down in the Spanish furnaces. Cuzco-style polychrome pottery is the archaeological hallmark of Inca presence throughout the Andes, but it was probably not especially high in the Inca hierarchy of craft objects, except for its value in underwriting state-sponsored hospitality. Inca stone working was one of the great wonders of the empire, but it was probably mostly accomplished with simple stone and maybe bronze tools. Blocks were shaped in the quarry, dragged to their final positions, and finished in place.

11.7 Decline of the Inka Empire and aftermath

- **The Spanish Invasion**

The invasion of South America that brought down the Inca empire was an extension of the occupation of Mexico and Central America that began soon after AD 1500. Until 1527, a series of expeditions, some led by Francisco Pizarro and his partner Diego de Almagro, had worked their way into Colombia and down the Ecuadorian coast to little profit. In 1528, Bartolomé Ruiz captured a treasure-laden raft along the Ecuadorian coast and a number of boys who would later serve as interpreters for the first encounters with the Incas. News of Ruiz‘s success helped Pizarro to obtain a royal concession as governor of the unknown land and to assemble a force of 168 men, most of whom had already spent ten to twenty years in the Americas. After founding a series of settlements along the coast, Pizarro led his troops to Cajamarca, an Inca provincial center in the Peruvian high-lands, where the Inca prince Atawallpa was resting after just winning an extended dynastic war with his half-brother Waskhar. On November 15, 1532, Pizarro‘s surprise attack captured Atawallpa in Cajamarca‘s main plaza, killing about 7,000 Andeans in the process, without the loss of a single Spaniard. After eight months of captivity, during which he made good on paying a ransom of about $50 million for his release, Atawallpa was garrotted on July 26, 1533, ending independent Inca dominance.

- **On to Cuzco**

Atawallpa‘s death triggered grief in half the empire and rejoicing in the remainder. The Spaniards immediately installed another brother, named Thupa Wallpa, as a puppet through whom to rule. They set south toward Cuzco, overcoming periodic armed resistance, but Thupa Wallpa died along the way, probably of a Spanish-introduced illness. Near Cuzco, yet another

prince, named Manqo Inka, joined the Spaniards as co-ruler, and they entered the capital triumphantly on November 15, 1533. Manqo Inka was installed as ruler in December in a grand ceremony, attended by the mummies of his royal ancestors. By 1536, Manqo Inka had become disenchanted with Spanish co-rule, as the conquistadores pillaged the capital and treated the Incas badly. He raised a rebellion that included failed sieges of Cuzco (1536-37) and Ciudad de Los Reyes (i.e., Lima, 1536). The Spanish victories can be attributed to a coincidence of factors: (a) the Incas‘ initial underestimation of the threat; (b) the political split caused by the civil war, which created a ready-made host of Spanish supporters; (c) the technological superiority of the European arms, armour, and horses; (d) the greater Spanish flexibility and aggressiveness in military encounters; (e) the temporary nature of Andean military service by soldiers and herders drafted into service; and (f) the inability of the Incas to find a leader who could marshal a unified resistance.

- **The Neo-Inca State**

The early Inca defeats did not end their aspirations for self-rule, but simply sent the resistance into the eastern forests at Vilcabamba, where they maintained a neo-Inca state until 1575. Under successive Inca rulers Manqo Inka, Titu Cusi, and Thupa Amaru, the Incas mounted campaigns that harassed the Spaniards from the eastern slopes and punished their Andean collaborators through raids and massacres. Vilcabamba finally fell in 1572 to an expedition mounted by Viceroy Toledo, who executed the last Inca ruler, Thupa Amaru, in Cuzco, despite appeals on the captive‘s behalf by many Spaniards. On September 24, 1572, the last of the Inca kings was marched into the plaza of his ancestors‘ majesty and beheaded, bringing an end to the lineage that had descended from the Sun to rule the Earth.

- **Spanish Rule**

Over the first two decades of Spanish rule, the Andes were driven by civil wars among the conquistadores, which resulted in the murders of both Francisco Pizarro and his estranged partner, Diego de Almagro. Major reformations were imposed by Viceroy Francisco de Toledo in 1570-72, which included moving vast numbers of Andean peoples from their traditional communities to new settlements (*reducciones*) near points of Spanish control. The Spanish civil wars, forced labour, and pestilence wrought devastation on the Andean populace, reducing it by about 50 percent in many places within about forty years of the invasion; in some coastal valleys, the population ultimately fell to as little as 5 percent of its 1532 size.

The Incas and other Andean peoples raised a series of rebellions throughout colonial rule, including a clandestine movement called the Taki Onqoy, or ―Dancing Sickness.‖ As memory of the Incas as living, oppressive rulers began to fade from the popular consciousness, another image of late prehistory as a glorious epoch began to coalesce among Andean peoples, not just the Incas themselves. Over the centuries, the myth of Inkarrí took form. He was a syncretic

figure who blended the Inca with the *rey* (Spanish king), a man who would return to the Andes to free the native peoples from the bondage into which the Spanish conquest had cast them.

- **The Inca Legacy**

The legacy of Tawantinsuyu continues to shape the people and cultures of western South America, especially in the Peruvian highlands where many communities still follow traditional ways of life. Most importantly, life is still defined by links among close kin and an ethic of mutual support. The relationship of the people to the land and sky still retains a vibrancy that is expressed in the knowledge, beliefs, and cycles of ceremonies practiced by many communities. The Incas still retain enormous potency in the self-image of the Peruvian nation. For a time in the 1980s, the national currency was called the *inti,* named after the Sun god of the Incas, and the currency of recent times is still named the *sol,* that is, the Spanish word for the Sun. There is no more compelling reminder of the cultural weight of the Incas in modern society than the protests surrounding the presidential election in Peru in 2000. When a massive rally was staged in Lima to protest the political process, it was called ―The March of the Four Parts,‖ that is, ―The March of the Inca Empire.‖

Summary

In this chapter, you learned about life in the Inca Empire.

- In the 1400s, the Incas began rapidly expanding their power from their base in Cuzco. Eventually they created a huge empire that extended almost the length of the Andes Mountains.
- An impressive system of roads and messengers helped the emperor manage his vast holdings' The strict Inca class structure had three main levels: the emperor and his family, the nobility, and the commoners.
- All Incas belong to ayllus, which provided the empire with crops, goods, and labour. Like other peoples in the Americas, the Incas engaged in many religious practices to maintain a proper relationship with their gods'
- As empire builders, they used a variety of means to bring other groups under their control.

Key Terms

Aqllakuna:	Chosen Women.
Chankas:	The resolution
Chinchaysuyu:	The northwest and most prestigious part, which took most of highland Peru and Ecuador and the coast
Cuntisuyu:	The smallest part to the southwest, which took in the area from Cuzco to the south Peruvian coast
Inti-Illapa:	The thunder or weather god of Inca

Kallanka: Enormous one-room, elongated halls used for hospitality and temporary housing

Khipu: A kind of knot-record called a *khipu*

Killke: The pre-imperial Inca era

Kollasuyu: The southeast and largest part, which took in south-eastern Peru, highland Bolivia, the northern half of Chile, and part of northwest Argentina

Kuraka: A hereditary local lord

Mamacocha: Mother of the Lakes and Sea.

Mamakuna: Adult women's religious order in Inca society.

Pacariqtambo: Origin cave called the Inn of Dawn among the Inca.

Panaqa: Royal kin groups

Puna: High grassland

Qollqa: Storehouses

Quechua: Language of the Incas.

Saqsawaman: Fortified complex in Inca settlements.

Tawantinsuyu: A single Inca state.

Self Assesment Questions

1. How did the Incas account for their own origins and their history before the imperial era?
2. How well does an archaeological perspective on the history of the Cuzco region—and by inference the Incas—correspond to the Incas' own view of things?
3. How did the Incas expand their domain to control such a large expanse of territory in such a short period of time?
4. What sorts of challenges did the Incas meet as they expanded their realm?
5. How could a largely agrarian and pastoral society mobilize the resources that were needed for the great military campaigns that the Incas waged?
6. When the Incas redesigned their imperial capital, Cuzco, what were their priorities?
7. What was the structure of Inca government? On a grand scale, how did they organize their domain?
8. Who were the main gods and what were the main orders in the official Inca religion?
9. What was the basic social order of class, kin, gender, and community within Inca society?
10. What did the Incas do to apply their own culture to their subjects?
11. The Inca empire is renowned for its extensive network of roads and provincial installations. How was the system designed and organized?

12. Why did the Incas build such a vast road system and network of provincial installations throughout the provinces?
13. How did the Incas take advantage of the resources and skills of their subject peoples to create the economy of the state and Sun?
14. What problems did the Spaniards encounter as they sought to bring the Inca empire under their control?
15. What is the Inca legacy today?

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UNIT- 12 **THE AZTEC-SOCIETY, COSMOLOGY, ECONOMY**

STRUCTURE

12.1 Learning Objectives

The chapter deals with the Aztec civilizations. The Aztec built a vast empire in central Mexico, flourished between the 12th and 15th century and finally it was destroyed by invaders from Spain. The objectives of this chapter are to.

- Make you aware about origin and development of Aztec civilization in Mexico.
- Describe the political, economic, social and religious aspects of various phases of Aztec civilization.
- Enumerate the development of Art and Architecture, script and literature and science and technology, Calendar and settlement pattern of the Aztec.
- Provide a brief sketch of the Military establishments and achievements of theAztec
- Assess the decline and contribution of Aztec to subsequent human civilization.

12.2 Introduction

Aztecs, were a Mesoamerican people who built a vast empire in central Mexico. The Aztec Empire flourished between the 12th and 15th century and finally it was destroyed by invaders from Spain. This too, like the Maya, was a Central American civilization. The empire was divided into a number of provinces. Each of the provinces was ruled by a governor who ruled over the tribes inthe region. It was the last indigenous civilization, before the Spanish colonized Mexico.

The Empire of the Triple Alliance-often called the Aztec empire-occupied a somewhat

paradoxical place in Aztec history and society. On the one hand the empire was the dominant political and economic force in central Mexico at the time of Spanish conquest in 1521. On the other hand, the effects of Aztec imperialism on people were sometimes quite modest. Unlike the Roman or Inkan emperors, whose armies and bureaucrats interfered greatly in provincial society, Aztec emperors were content to leave things alone in the provinces so long as people paid their taxes. In this chapter the student will know the origin, geographical extent, political setup and its society and culture. Origin of the Aztec

The Aztecs had a colourful legend about the beginnings of their empire. Originally a wandering group of hunter-gatherers the Aztecs had a belief that one day they would receive a sign from the gods. They would see an eagle perched on a great cactus with his wings stretched toward the rays of the sun. In its beak the eagle would hold a long snake. When they saw this eagle, the Aztecs would know they had found the place where they would build a great city.

In the mid 1200 C.E. the Aztecs entered the high Valley of Mexico, a fertile basin in central Mexico. Several times other groups in the valley pushed the Aztecs away from their lands. In 1325, the Aztecs took refuge on an island in Lake Texcoco. There Aztec priests saw theeagle just as the gods had promised. And so the Aztecs set about building a city they called Tenochtitlan, which means "the place of the fruit of the prickly pear cactus." In time, the island city became the centre of the Aztec Empire.

In the subsequent paragraphs we will discuss more about where the Aztecs came from and how they built their magnificent capital city. In course of our discussion we will come across different aspects of the Aztec peoples such as how this humble band of nomads rose to become the masters of a great empire and about their socio-political and economic life.

The Aztecs in the Valley of Mexico

The Aztec Empire arose in the Valley of Mexico, a fertile area nearly 8,000 feet above sea level. By the time the Aztecs arrived in the mid 1200s C.E, the valley had been a centre of civilization for more than a thousand years. Two groups in particular had built civilizations there that strongly influenced the Aztecs.

From about 100 to 650 C.E., the Valley of Mexico was dominated by the Teotihuacans. These people built an enormous capital city, Teotihuacan. One of the city's buildings, the Pyramid of the Sun, was more than 200 feet high. After Teotihuacan's collapse around the 700s a group from the north, the Toltecs, migrated into the valley. Toltec civilization reached its height in the 10^{th} and 11^{th} centuries. The Toltecs built a number of cities. Their capital, Tollan, boasted large pyramids topped with temples.

During the 1100 C.E, new groups invaded the valley. They took over Toltec cities and established new city-states but the influence of the Toltecs and the Teotihuacans continued to be

felt in the culture that was developing in the valley. Sometime around 1250 C.E., a new group arrived in the Valley of Mexico. A nomadic band of hunter gatherers, they called themselves the Mexica. We know them today as the Aztecs.

The name Aztec comes from Aztlan, the Mexicas' legendary homeland. According to Aztec tradition, Aztlan was an island in a lake to the northwest of the Valley of Mexico. The Aztecs had left the island around 1100 C.E. They wandered through the deserts of northern Mexico for many years before coming to the Valley of Mexico. When the Aztecs came to the heart of the valley, they found lakes dotted with marshy islands. Thriving city-states controlled the land around the lakes.

The Aztecs had a difficult time establishing themselves in the valley. The people living in the city-states thought the Aztecs were crude barbarians. But the Aztecs were fierce warriors, and the city states were willing to employ them as mercenaries.

After settling in the valley the Aztecs began to be influenced by the legacy of the Teotihuacanas and the Toltecs. They made pilgrimages to the ancient ruins of Teotihuacan. They adopted Quetzalcoatl, the Teotihuacan‘s feather serpent god as one of their own gods. The Aztecs viewed the Toltecs even more highly, as rulers of a Golden Age. Aztec rulers married

Kings of nearby *altepetl,* both competed and cooperated with one another. They continually built larger and better temples and cities to show off their power and magnificence and in many cases kings fought with one another. These wars were true antagonistic events, not ceremonial raids, but the goal was not to conquer territory. Instead, the goal of warfare among *altepetl* was to conquer other kings and force them to pay tribute to the victor. At the same time nearby *altepetl* engaged in more friendly forms of interaction. Merchants traded among otherwise antagonistic *altepetl*, and nobles married across political lines for diplomatic purposes. The joint result of these simultaneously friendly and antagonistic interactions among numerous petty kings was a volatile and dynamic political situation which generated the formation and expansion of several successive empires. In many respects, Aztec city-states and their dynamic interactions were similar to other city-state systems of the ancient world.

into the surviving Toltec royal line. The Aztecs even began to claim the Toltecs as their own ancestors.

In 1319, stronger groups forced the Aztecs to move away from Chapultepec a rocky hill where they had made their home. The Aztecs fled to the south where they became mercenaries for the city state of Colhuacan. But trouble came again when the Aztecs sacrificed the daughter of the Colhua chief. This led to a war with the Colhuas, who drove the Aztecs onto an island in the shallow waters of Lake Texcoco.

It was here, the Aztecs said, that they spotted an eagle perched atop a cactus with a long snake in its beak. Grateful for the sign they had been waiting for, the Aztecs set to work building the city they called Tenochtitlan. The island turned out to be a good site for the Aztecs' city. The lake provided fish and water birds for food and the island was easy to defend. Over time, the Aztecs' new home would grow into one of the great cities of the world.

The Aztecs started building Tenochtitlan in 1325. C.E for the next 100 years they served as mercenaries for a powerful group called the Tepanecs. Through this alliance the Aztecs gained land, trading connections and wealth. Eventually however the Aztecs labelled against the heavy-handed rule of the Tepanecs. Under the Aztec leader Itzcoatl, Tenochtitlan joined with two other city-states in the Triple Alliance. In 1428 the alliance fought and defeated the Tepanecs. Together the allies began a series of conquests that laid the foundation of the Aztec Empire. As Tenochtitlan became a great power, Itzcoatl set out to reshape Aztec history. He burned records that referred to his people's humble origins. Instead he connected the Aztecs to the distinguished Toltecs. With their growing power and a glorious (though legendary) past, the Aztecs were ready for their new role as empire builders.

Background to Empire: Aztec city-states (Altepetl)

As discussed above the ancestors of the Aztec peoples migrated to central Mexico from a semi-mythical northern homeland they called Aztlan. When groups of immigrants settled in the valleys of highland central Mexico-most likely during the twelfth and thirteenth centuries A.D.-they established dozens of small, independent kingdoms, the *altepetl*. Each king (tlatoani) claimed his right to rule on the basis of descent from the ancient and holy Toltec kings of Tula. Kings were aided by various councils of nobles, warriors, and priests, and a small but growing bureaucracy of judges, tax collectors, and other officials. The *altepetl* consisted of this government apparatus, the commoners who were subject to the king, and the land they farmed. These were small polities defined not by territories with boundaries, but rather by the relationships of the constituent commoners and nobles with their king. In some areas, villages and farms subject to different kings were interspersed across the landscape.

Each *altepetl* had a small central urban settlement where the political, economic, religious, and social institutions were concentrated. The royal palace housed the king and his

family as well as the institutions of rule. It was typically located adjacent to a spacious public plaza where large gatherings-from markets to religious ceremonies-took place. Temple-pyramids dedicated to the patron gods of the *altepetl* loomed over the plaza; the central pyramid of Ixtapaluca has been cleared off but not restored. The main plazas of *altepetl* capitals were also flanked by a series of smaller and more specialized temples and shrines. Outside of the central plaza area lived neighborhoods of commoners, including many farmers who walked out to their fields each day. These capital towns were not large-most had only 5,000 to 10,000 inhabitants-but they were the only urban settlements within their *altepetl*.

Kings of nearby *altepetl,* both competed and cooperated with one another. They continually built larger and better temples and cities to show off their power and magnificence and in many cases kings fought with one another. These wars were true antagonistic events, not ceremonial raids, but the goal was not to conquer territory. Instead, the goal of warfare among *altepetl* was to conquer other kings and force them to pay tribute to the victor. At the same time nearby *altepetl* engaged in more friendly forms of interaction. Merchants traded among otherwise antagonistic *altepetl*, and nobles married across political lines for diplomatic purposes. The joint result of these simultaneously friendly and antagonistic interactions among numerous petty kings was a volatile and dynamic political situation which generated the formation and expansion of several successive empires. In many respects, Aztec city-states and their dynamic interactions were similar to other city-state systems of the ancient world.

Imperial expansion and control

The interval from ca. 1100 to 1300 A.D.-known to archaeologists as the Early Aztec period was a time of urban expansion and cultural development among the Aztec *altepetl*. By the end of this period, several cities were starting to expand at the expense of their neighbors. The kings of cities such as Texcoco and Azcapotzalco in the Basin of Mexico, and Cuauhnahuac and Calixtlahuaca in surrounding valleys, conquered numerous *altepetl* to forge small tributary empires.

These empires employed strategies of expansion and control that had been developed by earlier *altepetl*. Conquered kings and governments were left in power so long as they acknowledged the supremacy of the conquering king and paid an annual tribute in goods and services. Unfortunately little is known about these earliest Aztec empires. The largest and most powerful of these-the Azcapotzalco Empire ruled by king Tezozomoc from 1374 to 1427-was defeated by the Tenochtitlan and its Triple Alliance in 1428. The rulers of Tenochtitlan then engaged in a systematic program of burning the history books to erase references to the glory and might of Azcapotzalco.

The Empire of the Triple Alliance was formed in the aftermath of the war that defeated Azcapotzalco in 1428. Texcoco, head city of the Acolhua confederacy; Tenochtitlan, the central

city of the Mexica peoples and Tlacopan, a former rival of Azcapotzalco within the Tepanec domain agreed to jointly conquer other *altepetl* and split the tribute, with two-fifths going to Texcoco, two-fifths to Tenochtitlan, and one-fifth to Tlacopan. Their program of imperial expansion began right away and proved to be quite successful; within ninety years the Triple Alliance had conquered most of northern Mesoamerica to become the largest and wealthiest empire north of Peru. By the time Hernan Cortes arrived in 1519, Tenochtitlan had emerged as the dominant power in the empire, with the other capitals clearly subservient to the Mexica kings.

The primary goal of imperial expansion was to subjugate distant city-states and force them to pay tribute to the empire. The tribute goods demanded of each province were recorded in pictorial codices. These goods were paid four times a year. When the totals are added up, it became an enormous amount of material-food, textiles, luxury items, warriors' costumes-that entered and enriched Tenochtitlan each year.

Aztec imperial expansion was carried out by military action. Armies were led into battle by the most experienced warriors, spurred on by drums and trumpets. Three primary weapons were used: swords whose edges were composed of rows of razor-sharp obsidian blades; thrusting spears; and bows and arrows. Aztec warfare was considered a sacred duty in several respects. First, all men were subject to military service, a basic duty to one's king and *altepetl*. Second, warfare was considered a cosmic struggle that paralleled battles between light and darkness and between gods such as Quetzalcoatl and Tezcatlipoca.

The twin elements of warfare as political expansion and warfare as cosmic duty had a strong effect on battlefield actions. On the one hand, armies sought to kill opposing soldiers and gain battlefield victory. On the other hand, soldiers tried to injure or cripple enemy fighters in order to capture them alive. Battlefield captives were the primary source of victims for human sacrifice, and taking such captives was one part of the sacred mission of war. Soldiers gained prestige and moved up the military hierarchy based upon the number of enemies they captured. The various warrior ranks were signaled publicly by dress and jewelry, and the most successful warriors joined elite military orders such as the Eagle Warriors and the Jaguar Warriors. The advancement of a young man up the military hierarchy was a source of pride for his family and neighborhood.

Warriors were a major theme of Aztec art; they are depicted in the codices, in murals, and in stone sculpture. The privileges of accomplished warriors, as described by the chroniclers, went beyond their special clothing and jewelry. Warriors participated in special ritual lances and other ceremonies, and they often gathered together in special halls, such as the House of the Eagles. Military activities were celebrated in the gladiator sacrifice, in which the victim was given false weapons, tied to a sacrificial stone, and fought Mexica warriors armed with real weapons.

A Major reason for the rapid success of the Triple Alliance Empire was the size and skill of its armies. The Empire could field more soldiers than most of the *altepetl* it faced, and soon there were few armies that could withstand sustained battle with imperial forces. By 1519 it had conquered much of northern Mesoamerica. Most areas were tributary provinces; they paid regular tribute. More distant conquered areas called strategic provinces were exempt from regular tribute requirements of the sort paid by the tributary provinces. The strategic provinces provided soldiers for imperial armies, they helped guard imperial borders, and they gave gifts to the Mexica emperor.

One reason for the existence of the strategic provinces was the presence of two major unconquered states. To the west of central Mexico, the Tarascan Empire based in Tzintzuntzan engaged in a parallel process of imperial expansion. When Tarascan conquests reached the Toluca Valley of central Mexico in the 1470s, Tenochtitlan sent a large force to do battle. The Tarascans won the battle, but not definitively, and in the aftermath the two empires established a fortified border zone that remained until the arrival of the Spaniards.

Whereas the Tarascans were ethnically and linguistically distinct from the Aztec peoples of central Mexico, the second unconquered enemy area Tlaxcala was inhabited by Nahuatl-speaking Aztec peoples. The Triple Alliance surrounded Tlaxcala with conquered provinces and warfare was constant in the final decades of the Aztec period, but the Triple Alliance could not succeed in conquering Tlaxcala. Embarrassed by this failure which contradicted official Mexica‘s propaganda of an all powerful empire Aztec nobles after 1519 invented stories to explain it away. They told the Spaniards that the Mexica could have conquered Tlaxcala any time they wanted, but they preferred to engage in limited practice battles rather than a war of all-out conquest. They made up the concept of the "flowery war" to describe ritualized practice battles. But it is easy to see through such rationalizations today; the Triple Alliance badly wanted to conquer Tlaxcala and they probably would have succeeded if Hernan Cortes had not arrived in 1519.

The failure of Tlaxcala to succumb to Aztec imperials armies suggests that many or most provincial city-states were not anxious to participate in the Triple Alliance Empire. Imperial control was indirect- the empire relied on provincial kings to collect and forward tribute rather than sending governors and armies or building cities in the provinces. On many occasions subject kings rebelled against the empire; such "rebellions" were not armed insurrections, however. Rather, they usually meant that a subject king merely elected to top sending tribute to Tenochtltlan. To keep such events to minimum provincial elites were bought off with privileges so that they would have greater allegiance to the Triple Alliance than to their own subjects.

- **People and their lives under the Empire**

The Aztec Empire had a profound effect on the several million peoples on its orbit. But the nature of its effects varied greatly with location, social class, and other social categories. For the nobles of Tenochtitlan, for example, the expansion of the empire generated wealth, power, prosperity and the good life. For provincial peasants, on the other hand, the empire brought increased taxes and lowered standards of living. For many people's lives, the empire had effects both positive and negative. The numerous material objects produced throughout the empire provide a window on these varied social effects.

- **Wealth, power and ideology in Tenochtitlan**

The island capital Tenochtitlan was one of the last Aztec cities to be founded, but once the Triple Alliance was formed in 1428 the city rapidly outgrew its contemporaries in size and magnificence. By 1519 Tenochtitlan was the largest city ever seen in the pre-Hisaanic New World. The major reason for the city's phenomenal growth was the successful military expansion of the Aztec empire. Increasing amounts of booty and tribute flowed from the provinces into the city, enriching not only the nobility but most of the urban commoners as well. All kinds of economic activity-from the production of everyday tools and objects to the fashioning of elite art to commerce was stimulated by the new imperial wealth, and people from all over moved to the capital.

The most spectacular imperial effects in the capital were in religious art and architecture. As in all ancient states and empires, religion was closely entwined with politics. The gods sanctioned and encouraged imperial expansion, and the rulers, nobles and priests of Tenochtitlan invested considerable resources in thanking the gods for their help. The Templo Mayor was continually rebuilt and expanded to become one of the largest pyramids in Aztec central Mexico. The sacrificial rites carried out at the Templo Mayor were increasingly elaborate ceremonies involving numerous participants and theatrical spectacles. Fine stone sculptures and elaborate ceramic offering vessels were crafted for use at ceremonies in this and other temples. These imperial objects had significance in two related realms: religion (direct worship of the gods) and ideology (political legitimacy for the ruler).

Much of the wealth generated by the empire went to the king and other nobles of Tenochtitlan. Noble lifestyles grew increasingly luxurious and elaborate, much more so than in other Aztec city-state capitals. But the economic activity of the capital must also have benefited the lives of artisans, merchants, and other commoner residents of the city. Unfortunately there is little direct information on such changes; written sources have little to say about changes in commoner lifestyles of Tenochtitlan, and archaeologists have excavated few commoner houses in the capital.

- **Economic transformation in the basin of Mexico**

Outside of Tenochtitlan, the expansion of the Aztec Empire had varied effects on the peoples of the Basin of Mexico. Many *altepetl* capitals continued to flourish, as evidenced by continued architectural rebuilding and increased economic activity. Many subject kings and nobles cooperated with the Triple Alliance rulers and secured favors and imperial support for their local rule. But for most commoners, imperial expansion entailed a double economic burden that must have made life difficult. First, imperial taxes were added to the local *altepetl* tax burden of goods and services. Second, the explosive growth of Tenochtitlan led to problems in urban food supply, and farmers had to step up their efforts to grow food for the use of urbanites. Previously, many peasant families had engaged in the production of pottery and other goods as supplementary economic activities. Although we are not sure of the role of coercion in the turn to intensive grain production, its effects on domestic life were significant. Although clear evidence is scarce, it is likely that many imperial subjects in the Basin of Mexico resented the impositions and burdens posed by the empire.

Archaeological fieldwork at two towns shows the varied effects of the empire on commoners in the Basin of Mexico. The only other economic activity that people engaged in was textile production. All Aztec women spun and wove, and ceramic spindle whorls used for spinning thread of cotton and maguey were abundant. Under imperial control, however, the numbers of whorls declined, suggesting that people may have been devoting so much effort to growing grain that they had to reduce their cloth production activities. Economic activities at Otumba, a more distant *altepetl* capital, were quite different. Fieldwork revealed a large number of craft workshops that produced tools and other objects for exchange in the markets.

- **Daily life in the provinces**

As in the Basin of Mexico, the effects of the Aztec Empire on people varied greatly in the outer imperial provinces. In some areas, commoner life continued with little change. People had to pay higher taxes like the Basin of Mexico, imperial tribute or taxes were merely added to preexisting *altepetl* taxes, but the indirect nature of imperial control left many aspects of provincial life alone. Both before and after imperial conquest of this area, people lived in small houses built of adobe bricks laid on stone foundation walls. Their basic nonperishable domestic goods-pottery, obsidian, stone grinds tools, and rare luxuries such as stone jewelry and bronze tools-remained the same after their conquest by the Triple Alliance in the 1430s. One subtle change, however, was a reduction in the numbers of local decorated ceramic serving vessels and imported serving vessels, suggesting a somewhat lowered standard of living under the empire.

Throughout central Mexico, most commoner households had access to decorated serving ware. Potters in each region produced distinctive styles of vessels. This kind of aesthetically pleasing and well-made serving ware was not limited to nobles or to ceremonies, as is sometimes

claimed. Archaeologists have excavated numerous broken fragments of such vessels at both commoner and elite houses. Provincial peoples also had access to a number of imported goods, including obsidian tools and ceramic vessels. The most widely traded ceramic ware was the type called Aztec Black-on-Orange. These vessels were the everyday serving ware in the Basin of Mexico, where they were produced in several centers, but they are also found as rare additions to most household inventories of provincial peoples (again, both commoners and elites).

Domestic life in the provinces also included a sacred dimension. Two types of ritual objects made of pottery are commonly found in archaeological collections from provincial houses-figurines and incense burners. Figurines in the distinctive Aztec style are abundant in domestic contexts throughout central Mexico. Archaeological excavations in Morelos, unearthed figurines, some of which were made of clay from the Basin of Mexico (and thus clearly imported), while others in the same style were made of local clays. The presence of figurines of the first category can be accounted for by commerce, whereas the second category shows that styles and religious concepts had a broad distribution throughout central Mexico. Although there is much that we do not know about Aztec figurines, it seems clear that they were used in some kind of domestic rites, most likely involving curing, fertility, and divination. Incense burners are another common find in excavations of domestic contexts throughout central Mexico. Each region had its distinctive type of censer to burn copal incense in domestic rites.

The presence at provincial sites of Aztec-style figurines made of local clays points to the existence of a network of shared styles and concepts throughout central Mexico, including Tenochtitlan, the Basin of Mexico, and the exterior imperial provinces. This is but one example among many cases of widespread similarities in material culture within this area. Several reasons for these stylistic similarities can be identified. First, the Aztec peoples of central Mexico shared a common history and heritage. According to local historical accounts, their ancestors had all come from the semi-mythical homeland of Aztlan, presumably located somewhere to the north of central Mexico. The Aztlan migrants shared the Nahuatl language and many cultural traits, and it is only logical that their descendants throughout central Mexico would have numerous similarities in styles and practices.

A second reason for widespread similarities in material culture was the importance of commercial networks that tied different regions together. In their local weekly market, people could not only purchase imported goods, but they also had the chance to see foreign styles and goods and to get news from different areas. A third explanation for the distribution of Aztec styles is found in the practices and concepts that made up Aztec elite culture.

- **Aztec elite culture**

The Aztec nobility constituted a single integrated social class that extended throughout the entire empire and beyond. Just as nobles from nearby *altepetl* visited one another and formed

marriage alliances and other diplomatic ties (see above), so too did nobles in a much larger arena interact intensively. One result was the forging of a distinctive boundary. This elite culture was responsible for much of the art shown in the Aztec World. Monumental public architecture was the most dramatic material expression of Aztec elite culture. The Templo Mayor of Tenochtitlan is both the best-documented Aztec building and the building with the most extravagant offerings. The Mexica kings who built and enlarged this structure did not invent its form or style overnight. Rather, they drew on an ancient tradition of double-stairway pyramids begun by the earliest Aztec kings in the Early Aztec period. The temple of Teopanzolco, located in downtown Cuernavaca, was one of the earliest double-stairway pyramids**;** the first was probably that of Tenayuca. The kings of Tenochtitlan, Tlatelolco and Texcoco built and rebuilt huge pyramids to demonstrate their power and glory. For the forms of their pyramids they avoided the standard Aztec single-stairway pyramid and copied the ancient double-stairway temples of Tenayuca and Teopanzolco .

This historical tradition of temple architecture was but one component of Aztec elite culture. Although each Aztec city had its own layout and its own public monuments, the forms of buildings were remarkably uniform throughout central Mexico. For example, circular temples, dedicated to the wind god Ehecatl (who did not like corners) were similar but not identical at many Aztec cities.

Elaborately carved stone sculpture was another material manifestation of Aztec elite culture. The imperial sculptural style shown on many objects in the Aztec World was developed in the workshops of Tenochtitlan, but examples have been recovered at other Aztec cities in central Mexico. These provincial examples could have been transported from the imperial capital, or perhaps Mexica artists traveled to distant cities, or provincial sculptures could have received training in the capital. Regardless of the mechanisms, however, the presence of such fine, imperial style sculptures at other cities shows that distant rulers shared both aesthetic tastes and religious- political concepts with the nobles of Tenochtitlan. Many other fine objects present similar patterns of distribution with similar implications of shared elite culture: elaborate ceramic censers and effigy vessels; feather art; jewelry of precious stones and gold; and clothing.

- **Art and Empire in the Aztec world**

The Triple Alliance Empire influenced many aspects of life and society in Aztec-period Mesoamerica. For rulers and nobles in the imperial capitals, imperial expansion was a source of wealth and power. Imperial tribute fed much of the elite conspicuous consumption that involved the, sculptures and other luxury items shown in the Aztec World. Regular injections of tribute wealth stimulated economic activity that also benefited the commoners in the capitals. In the provinces, the benefits of empire accrued mainly to the ruling elites, who were rewarded for participation in ' the imperial system. The burden of tribute, on the other hand, fell squarely on

the backs of provincial commoners. The fact that many art styles and objects were very widely distributed throughout the empire (and beyond) was due largely to the fact that art was used as a tool of imperial policy. Gifts and exchanges of goods among nobles cemented the bonds of Aztec elite culture, and the use of imperial styles in provincial areas also signaled the participation of distant elites in these networks. In this way, Aztec art was an important part of the glue that held the empire together.

A main function of Aztec Art was to express religious and mythical concepts to legitimize the power of the State. This artistic language spoke predominantly through the form of iconographic symbols and metaphors. For example, the image of the eagle symbolized the warrior and the sun at its zenith. Images of serpents were linked to the gods Tlaloc and Huitzilopochtli, and thus were represented as water or fire serpents, respectively. Representations of frogs as aquatic beings were also reminiscent of Tlaloc. The conch shell was related to fertility, life, and creation. Aztec sculpture served as communication through visual metaphors, which were realized with a purity of techniques that allowed for refinement of detail.

- **Settlements and Organization of Polity**

The Aztecs supplanted the Toltecs around 1100 AD and established settlements which grew into a sophisticated polity in the Americas. It is said that the ultimate dominance of the Aztecs over the Toltecs lay not only in their intrepid, highly skilled society, but also in the Aztec‘s systematic, sacrificial method of dealing with the enemy. They were a conquering tribe who gradually extended their influence over the neighbouring tribes/settlements and people such as the Totonacs, Tabascans, Tlaxcalans and the Cholulans. These tribes used to pay _taxes‘ to the Aztecs and follow their own forms of governance and worship their own deity. Still the Aztec tax-collectors with crooked staffs wearing richly coloured and embroidered cloaks would appear and ask them to provide victims for sacrifice at the temple of Huitzlopochtli (the Aztecs‘ deity). The taxes‘ or the tributes they paid to the Aztecs were in kind such as maize, fish, gold, jade and turquoises, birds and animals. Often they used to contribute by feeding the Aztec garrisons and providing land to Aztec nobles/officers.

The Aztecs established the twin towns of Tenochtitlan and Tlatelolco on the western shore of Lake Texoco in the early 14th century (in 1325 or 1345). (Tlatelolco was absorbed to Tenochtitlan around 1500.) And their ultimate domination of the region was signified by the rule of Moctezuma II (1502-20). This was the period of pinnacle of glory of the Aztec capital, Tenochtitlan. Significant achievements of the Aztec civilizations included the establishment of a canal system, public buildings, and wide roads and causeways. The wealthy and vast capital of Tenochtitlan (on which today Mexico City stands) exemplified the accomplishments of the Aztecs. Drawing on the surpluses of the conquered tribes the Aztecs built their capital Tenochtitlan into a wonderful city. The gigantic monuments and their grandeur, even in

dilapidated conditions, attest this. This city grew on an island and extended into the lake Texoco by means of floating gardens and by pushing piles into the shallow water of the lake. It was connected to the mainland by three causeways, which were as wide as 30feet. It appears that many of the settlements were connected with their neighboring settlements with causeways as Ixtapalapan and Coyoacan. Tenochtitlan was protected from flooding or any rise in the level of water in the lake by a concrete dyke across the lake Texoco. This dyke apparently divided the lake into two. There was an embankment also built to protect the city on the port end or the southern end.

This was kept lit in the night by flaming braziers. The peasants from Anahuac used to visit this port in their canoes laden with various agricultural products as tributes. The city was getting drinking water from Chapultepec by two aqueducts, which reflects planning and sense of hygiene and health of the Aztecs. Besides the temples, which were huge structures, the elite used to live in stone houses, which were either red or whitewashed. And the plebeians, quarters were away from the centre of the city (which was the temple and market complex), and their houses were of mud and thatch.

At the meeting place of the main three causeways was the temple enclosure, surrounded by an eight-foot wall, which was surmounted by snakes of carved stones. There were more than thirty temples in the enclosure and included ones dedicated to Huitzilopochtli the chief deity of the Aztecs and also to the chief deity of the Toltecs and other deities of the conquered tribes. Not only the deities of the conquered people were admitted into the Aztec pantheon but also the conquered people were allowed to retain their political system and social practices without any interference or imposition.

12.4 Economic Activities

The Aztecs used cocoa beans, cotton cloaks, copper blades, small folded mantles, and quills filled with gold dust as standard units of value or money/ currency in their commercial dealings. But the chief means of exchange was either barter or units of hours of works. Tenochtitlan had a market complex, which was divided into many sections; each section was with its specialized merchandise. In the first section gold, silver and precious stones like jade from the country of the Zapotecs, and feathers & mosaics made from the feathers of birds by the Tarascans were sold. In the second chocolate and all kinds of spices; in the third cloth and all kinds of clothing material as well as slaves and animals; in the fourth foods such as corn, bean, tomatoes, chiles, seeds, salt, turkeys, deer meat, rabbits, hares, ducks, honey, vanilla, rubber, cochineal, beehives, pottery etc; so on and so forth. The market place actually was not only a place of exchanging material goods. It was also a place for social communication.

- **The Aztec Number System**

When Christopher Columbus landed in the Americas in 1492 the Aztecs of Mexico were a dominant native culture who had developed from a wandering band of people who called themselves Mexica. In 1325, they established a base in Tenochtitlan, now known as Mexico City. As their culture gained dominance in the region, they ventured onto foreign territory and took over other societies. For the most part, they left rulers in place as long as they paid tribute. The Aztecs allowed subjugated cultures to retain their own customs, religions, and social institutions, but borrowed from the religious and cultural practices of these cultures and made them its own, thus producing a highly diverse culture made up of many different sub-cultures. In terms of expressing numbers, the Aztecs used a vigesimal (base 20) number system. A single dot (•) represented the number 1. Occasionally, a finger was also used to indicate the number. Following in this sequence, the numbers 2, 3, and 4 were represented by two, three, and four dots, respectively. 5, though, introduced a new symbol; it was represented by five dots (•••••) or a full bar, as seen in the accompanying figure. From 6 through 9, dots alone or a combination of dots and a bar represented numbers. The numeral 10 was represented by a rhombus, two bars, or ten dots. The numbers between 10 and 20 were expressed as a combination of a rhombus, bars, and dots. 20 required a new symbol and resembled a flag, a shell, or a vase with grass growing out of it. After 20, higher numbers were expressed as combinations of the symbols already mentioned. The numbers for 100, 200, and 300 were expressed not only with the mentioned symbols but also by a feather with barbs, each representing twenty units. 100 had five barbs on the feather, 200 had ten, and 300 had fifteen. The next change in symbol occurred at the number 400, which was sometimes represented by twenty barbs on the feather by a bundle of stems tied together. The number 8000 was written as a symbol that represented a bag. The idea that the Aztec system was vigesimal stems from the fact that new symbols were produced for every power of 20; this reasoning, though, is not completely satisfactory because the symbols for higher powers (204, 205, etc.) are unknown.

In terms of writing these numbers, the Aztec system mirrored that of the Egyptians. The positioning of symbols had no bearing; they could be written in any order, but were grouped together and written adjacent to each other. The Aztec number system was additive-the symbols were added together to produce the desired number. The number 0 was not prevalent in this number system. The Aztecs had a conceptual idea of what zero was, but there is no proof that they had a symbol representing it. A symbol for the number 0 played an interesting role in the Aztec culture. As stated earlier, when the Aztecs took over another civilization, they took pieces of its culture as well. In the Olmec civilization, which preceded the Aztecs, the shell represented 0. In the Aztec civilization, the shell represents the number 20. It seems that when the Aztecs took over the Olmec culture, they took the shell to represent the number 20 rather than 0.

Following from that example, it would make sense to assume that other symbols were taken from conquered civilizations; however, there is not enough evidence to support it.

- **Religion and Society**

Aztecs were polytheists. That is they worshipped many gods. The Aztecs believed that the gods needed to be 'fed' with human hearts and blood. So prisoners were sacrificed by having their hearts cut out. Among the most important gods were Huitzilopochtli, god of war and the sun, Tlaloc the god of rain (if there was a drought the Aztecs sacrificed babies to the rain god, believing their babies tears would bring rain) and Quetzalcoatl (whose name means feathered snake), the god of learning and wind.

The Aztecs believed that warriors who died in battle, people who were sacrificed and women who died in childbirth went to join the sun god in paradise. For everyone else there were 13 Heavens and 9 Hells. After your death you went to the one most suitable for you. War was very important to the Aztecs - partly because they needed prisoners to sacrifice. Aztecs fought with bows and arrows. They also used wooden spears. The wooden head of the spear was lined with sharp stones. Aztec warriors also used wooden clubs lined with sharp blades of obsidian (a form of hard volcanic glass). Warriors wore costumes made of quilted cotton soaked in salt water to make it stiff. They carried wicker shields for protection. All Aztec boys were expected to serve in the army when they were old enough. However the aim of war was not to kill the enemy but to take as many captives as possible. Elite warriors were the jaguar warriors who wore fur costumes and eagle warriors who wore costumes and helmets with feathers.

Maize was the staple crop of the Aztecs. Aztec women ground the maize into flour on a stone slab with a stone roller. It was then made into flour and baked into a kind of pancake called a tortilla. Aztec women cooked on a clay disc called a comal, which stood on stones above. Maize was made into a kind of porridge called atole. The Aztecs ate 'envelopes' of steamed maize called tamales stuffed with vegetables, meat or eggs. The Aztecs also ate tomatoes, avocados, beans and peppers, as well as pumpkins, squashes, peanuts and amaranth seeds. They also ate fruit such as limes and cactus fruits. The Aztecs diet also included rabbits, turkeys and armadillos. They also ate dogs. However meat was a luxury for the Aztecs and ordinary people only ate it infrequently. The Aztec nobles drank an alcoholic drink called octli, from fermented maguey juice. Upper class Aztecs drank chocolate made from cocoa beans. It was flavored with vanilla and honey. Poor people drank water or sometimes an alcoholic drink called pulque. To grow food Aztec farmers did not have ploughs. However they did use tools like a digging stick, clod breaker and hoe. The Aztecs created small islands on marshy lakes. These were called chinampas. First plots of land were staked out with canals between them so they could be reached by canoe. The chinampa was built up in layers made of plants from the lake and mud

from its bottom. The Aztecs planted willows around the edges of chinampas to make them more secure.

Ordinary Aztecs lived in simple huts, often of just one room. The huts were made of adobe and any furniture was very simple such as reed mats to sleep on or sit on and low tables. Wooden chests were used to store clothes. Aztec nobles lived in much grander houses with many rooms. They were usually shaped like a hollow square with a central courtyard. It often contained gardens and fountains. By law only upper class Aztecs could build a house with a second storey. If ordinary Aztecs did they could be executed. Aztecs were clean people. Many homes had steam baths next to them. They were small rooms with a furnace outside. The furnace heated the walls of the steam bath. When an Aztec inside the steam bath threw water on the wall it turned to steam.

Different classes of Aztecs wore different clothes. Upper class Aztecs wore cotton clothes and feather headdresses. Ordinary people wore clothes made from maguey plant fiber. Men wore loin cloths and cloaks tied with a knot at one shoulder. Women wore wrap around skirts and tunics with short sleeves. Married women coiled their hair on top of their heads. By law only upper class Aztecs could wear cotton. If commoners wore cotton clothes they could be put to death. Aztec women wove clothes in their own homes. The Aztecs like bright dyes. A red dye was made from the cochineal beetle. It took about 70,000 beetles to make half a kilo of dye. Aztec nobles played a ball game called Tlachtli. It was played with a solid rubber ball. Players were not allowed to use their hands or feet. They could only touch the ball with their hips, knees and elbows. Players tried to knock the ball through a stone hoop.

Aztec children were treated very harshly. If they misbehaved they could have cactus spines pushed into their skin or they were held over a fire containing chilies and were forced to inhale the smoke. However the Aztecs believed education was important. Boys learned jobs like farming and fishing from their fathers and girls learned skills like cooking and weaving from their mothers. However both boys and girls attended schools. (Although they were taught separately). The ordinary Aztec children went to a school called a telpochalli. They learned about history and religion but also about music and dance. When they were older boys learned to fight. Noble children went to a school called a calmecac. They learned to read and write. (The Aztecs made paper from the bark of fig trees. Their writing consisted of pictograms or pictures that represented sounds). Upper class children also studied religion, mathematics and astrology.

- **Spanish Conquest and Decline of the Aztec**

When Moctezuma II, the sixth and last Aztec ruler, became emperor in 1502, the empire was already beginning to weaken. Moctezuma II spent much of his time attempting to re-conquer city-states that had revolted against demands from the capital. The Mexica nobility increasingly

denied any decision-making powers to Aztec commoners. This caused the commoners, who supported the nobility with payments of tribute and military service, to lose faith in their rulers.

The Aztecs had accomplished a great deal in a relatively short time. In less than a century, they built a city, extended existing trade routes, and devised an elaborate market system. They fed, clothed, housed, and educated millions of citizens. But finally, the empire simply began to bleed to death. Aztec wars and sacrifices to the gods had reduced the numbers of farmers, craftsmen, and other producers necessary to keep the empire thriving.

When Spaniard Hernando Cortes reached Tenochtitlan in 1519, he was amazed to find an island-city of 200,000 people with stone temples, royal palaces, and great houses all dwarfed by the sacred pyramid. The capital of the Aztec Empire was five times the size of London at that time. Advised by Malinche, his Native American mistress, Cortés formed an alliance with one of the rivals of the Aztec, the Tlaxcalans, and set out for Tenochtitlán. After wavering about how to respond to the Spanish force, Aztec ruler Moctezuma II allowed Cortés to enter the city in order to learn more about him and his intentions.

Finding large amounts of gold and other treasure, and fearful that the Aztec would attack his vastly outnumbered Spanish force, Cortés seized Montezuma as a hostage. The Spaniards melted down the intricate gold ornaments of the Aztec for shipment to Spain and forced Montezuma to swear allegiance to the king of Spain. The Spaniards remained in the city without opposition until about six months later, when, in Cortés's absence, Spanish officer Pedro de Alvarado massacred 200 Aztec nobles who had gathered for a religious ceremony. After Cortés returned, the Aztec rebelled, fighting to drive the Spaniards out of Tenochtitlán. The Aztec warriors tore up the city's bridges and chased the Spaniards into the canals, where three-fourths of them, weighted down with stolen gold, quickly drowned. Montezuma was killed during the revolt. Montezuma's successor, Cuitlahuac, ruled only a few months before dying of disease. Montezuma's nephew Cuauhtémoc became the next Aztec ruler. Cortás retreated to Tlaxcala and gathered more Native American allies for a siege of Tenochtitlán. The Aztecs's crude weapons were no match for the iron, steel, and gunpowder of the Spaniards, who also had the advantage of a large number of indigenous allies. After three months of desperate and bloody fighting, Cuauhtémoc surrendered in August 1521. Cortés tortured and hanged him while on an expedition to Honduras in 1525. The Spaniards conquered the remaining Aztec peoples and took over their lands, forcing them to work in gold mines and on Spanish estates. The fall of Tenochtitlan marked the end of the Native American civilizations that had existed in Mesoamerica since the first human settlement of the region. On the ruins of Tenochtitlan, the Spaniards built Mexico City. The city's present-day cathedral rises over the ruins of an Aztec temple, and the palace of the Mexican president stands on the site of the palace of Montezuma.

12.5 The Aztec Legacy

There are still many signs of the Aztecs in Mexico today. The country‘s name comes from the word Mexica. This word is another name for Aztecs. Mexicans take great pride in Aztec history. Their flag commemorates, or marks, the founding of the old Aztec capital. It shows the eagle the Aztecs saw in the lake. Cortés built a new city where the Aztec capital once was. Today, this city is Mexico City. It is Mexico‘s capital. Scientists have uncovered ruins of the great Aztec city there. Tourists can now see part of the Aztec temple when they visit. Mexico‘s leaders meet in a building that stands where Montezuma‘s palace used to be. The city also has floating gardens like the Aztecs once had. Life in modern Mexico reflects Aztec culture as it was long ago. Many people who are related to the Aztecs still live in Mexico. Some still speak the oldAztec language. Aztec culture lives on in Mexico today.

12.6 Summary

- The ancestors of the Aztecs settled on a marshy island in Lake Texcoco in either 1325 or 1345. According to legend the Aztecs settled at a place where they saw an eagle perched on a cactus with a snake in its mouth. They took this as a sign from their god that they should settle there. The Aztecs called the place Tenochtitlan, which means place of the cactus. At first they were an unimportant people but in the 15th century the Aztecs gradually built up a large empire.
- The Aztecs conquered the surrounding peoples. The Aztec 'empire', was more like a collection of states dominated by the Aztecs. The conquered people had to send soldiers to serve the Aztec emperor when they were needed.
- Meanwhile the Aztecs built up the island in the lake by driving wooden stakes into the bed of the lake then laying earth and rocks. They turned Tenochtitlan into a great city, with a population of over 100,000.
- Aztec society was divided into classes. At the very top was the emperor. Below him were the nobles and priests. Below them were merchants, craftsmen, peasants and then slaves.
- There were also many craftsmen in Aztec society. Although the Aztecs did not use iron and bronze some craftsmen made jewellery from gold, silver and copper.
- Most of the slaves were people who had committed a crime and been sentenced to slavery or very poor people who sold themselves into slavery. However Aztec slaves did have some rights. They could own property and marry.
- Aztecs were polytheists. That is they worshipped many gods. The Aztecs believed that the gods needed to be 'fed' with human hearts and blood. So prisoners were sacrificed by having their hearts cut out.

- War was very important to the Aztecs. The Aztecs believed that warriors who died in battle, people who were sacrificed and women who died in childbirth went to join the sun god in paradise. For everyone else there were 13 Heavens and 9 Hells. After your death you went to the one most suitable for you.
- Maize was the staple crop of the Aztecs. Aztec women ground the maize into flour on a stone slab with a stone roller. The Aztecs diet also included rabbits, turkeys and armadillos. The Aztec nobles drank an alcoholic drink called octli, from fermented maguey juice.
- Ordinary Aztecs lived in simple huts, often of just one room. Aztec nobles lived in much grander houses with many rooms. They were usually shaped like a hollow square with a central courtyard. It often contained gardens and fountains

12.7 Key Term

Altepetl: Small and independent city state in the Aztec period.

Atole: In Aztec time a kind of Maize disc.

Aztlan: The legendary homeland of the Aztecs.

Calmecac: A school for Noble children during Aztec time.

Chinampas: Small islands on marshy lakes in Aztec time.

Comal: A clay disc which is used by Aztec women to cook.

Octli: An alcoholic drink drank by nobles during Aztec time.

Pulque: An alcoholic drink drank by poor people during Aztec time

Telpochalli: A school for ordinary children during Aztec time.

Tepanecs: A powerful mercenary group during the Aztecs.

Tlachtli: A ball game played by Aztec nobles.

Tlatoani: The title of kings of Aztec city state.

Vigesimal: B*ase 20* numeral system is based on twenty (in the same way in which the ordinary decimal numeral system is based on ten).

Templo Mayor: One of the main temples of the Aztecs in their capital city of Tenochtitlan, which is now Mexico City.

12.8 Self Assesment Questions

1. How did the Aztecs go from being a nomadic tribe to the most powerful empire in Mexico? Explain.
2. What was the ―cycle of power‖ discussed in the movie, and how did it affect the Aztecs in their rise to power?
3. The city of Tenochtitlan was enormous in size and efficient in its development of canals, causeways and aqueducts. In a city of its size, how did the canals, causeways and aqueducts initially benefit and eventually weaken the Aztec population in Tenochtitlan?
4. The Aztecs sacrificed many people. What was their purpose and belief in this? Also, Who were the people who were sacrificed?
5. What is the Aztec calendar made of? What do the pictures on the calendar represent? How many days per month and how many months per year does the calendar have.
6. List five Aztec gods and Goddesses. What did each of these gods represent?
7. How was Aztec society divided?
8. What language did the Aztecs speak?
9. Who was educated in the Aztec society? What did boys learn primarily? What did girls learn?
10. Write a note on the Aztec civilization

12.9 Further Reading

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BLOCK 04: ANCIENT GRECO-ROMAN & PERSIAN CIVILISATION

Unit 13: Polity, Philosophy & history of Greek civilization

Unit 14: Athenian Democracy, & Sparta

Unit 15: Society, Culture & Republic in Roman

Unit 16: Socio-political and Economic History of Persian Civilisation

UNIT 13 POLITIES, PHILOSOPHY & HISTORY OF GREEK CIVILIZATION

STRUCTURE

13.1 Learning Objective

In this chapter we intend providing you an insight into the early Greek civilisations. The various phases of cultures flourished in Greek speaking landmass in or around the Mediterranean and their contribution to the human history will be dealt here. This civilisation is also known as the classical civilisation. By the end of this chapter you would be able to:

- Assess the role of geography for shaping the early Greek civilisation.
- To know about the major phases of Greek civilisations, such as those of Minoan, the Mycenaean, the Dark Age and the Classical period of Greek history.
- Have an idea on the social, political, economic and cultural system of all the phases of Greek civilisations.
- Regarding development of Athenian democracy and subsequent political history of Greece.
- Learn the philosophical development in Greece and to assess the contribution of Greek to themankind.

13.2 Introduction

In ancient times, Greece was not a united country. It was a collection of separate lands where Greek-speaking people lived. By 3000 B.C., the Minoans lived on the large Greek island of Crete. The Minoans created an elegant civilization that had great power in the Mediterranean world. At the same time, people from the plains along the Black Sea and Anatolia migrated and settled in mainland Greece. Greece was unique in that it was the centre of a great civilization but did not develop into an empire or even a territorially large political state. The historical experience of Greece therefore needs to be examined from the point of view of its distinctiveness.

Circa 500 BC marks the beginning of the classical age of Greece, the most glorious phase of ancient Greek civilization. The classical age lasted from c. 500 BC to the Macedonian conquest of the Greek states in 338 BC. The classical age represented the culmination of a long historical process during which the foundations of Greek civilization were laid. By about 2000 BC the large island of Crete in Greece had emerged as the centre of the first Bronze Age civilization in Europe. This was the Minoan civilization which flourished between 2000 and 1400 BC.

In this chapter first we will discuss the geographical spread of the Greek Civilization. This would be followed by a chronological development of Greek civilization in two major sections i.e. i) Early Greek Civilization and ii) Archaic and Classical Period. The former has three main ages the Minoan Civilization, the Mycenaean Civilization and the Dark Age. The latter has been discussed together in one section. In this section we have discuss specific developments and features of whole period. The most important feature of the period is conflict of landed aristocracy with peasants, and transition to democracy. As a whole the chapter will

When we speak of the Mycenaean we are not referring to a single political entity but several distinct settlements which formed separate states. These states were ruled by warrior chiefs. The chiefs usually bore the royal title wanax (or anax) and ruled over their territories from fortified palace complexes which dominated the Mycenaean urban centres. A powerful warrior aristocracy and an elaborate bureaucracy constituted the ruling elite. The fortified palace complexes exercised extensive control over the respective economies of the Mycenaean states through centralized bureaucratic structures. This bureaucracy regulated virtually every aspect of the economy. The Mycenaean‘s had an extensive foreign trade. Oil, pottery and textiles were their main exports. They imported gold, copper and tin. Society was highly stratified with the ruling elite having access to a large surplus. The Mycenaean chiefs were buried in large beehive shaped tombs (*tholoi*) or in large chamber tombs. The resources that would have to be mobilized for constructing these tombs, as well as the fine craftsmanship of the objects found in them, leave us in no doubt as to the wealth possessed by many of the Mycenaean chiefs/kings.

The Mycenaean have left behind abundant written records which provide us with details about the role played by the palaces in the economy. The Mycenaean‘s evolved a script which is referred to as the Linear B script. The Linear B script was deciphered in 1952 by Michael Ventris. Ventris found that the language of the script was an early version of the Greek language. The Mycenaean‘s were among the earliest Greek-speaking people to settle in the peninsula. The Greeks were a branch of the Indo-European people and their migrations must be viewed in the context of the tribal movements of the third millennium BC. The language of the Mycenaean‘s was somewhat different from that spoken by later Greek settlers and is labelled by scholars as _proto-Greek‘. This is the language of the Linear B script.

The Linear B records that have survived are mainly in the form of clay tablets. They are invariably inventories or accounts and contain no references to political history or religious practices. They were obviously compiled by palace officials to keep track of the surprisingly large number of transactions that the palace had to undertake in order to regulate a wide range of economic activities. The fact that the script exhibits a great deal of uniformity throughout the Mycenaean area shows that the bureaucracy, or at least the professional scribes, were drawn from a close-knit group with links extending over several parts of the peninsula.

During the 1200s B.C., the Mycenaean fought a ten-year war against Troy, an independent trading city located in Anatolia. According to legend, a Greek army besieged and destroyed Troy because a Trojan prince had kidnapped Helen, the beautiful wife of a Greek king. For many years, historians thought that the legendary stories told of the Trojan War were totally deals with the famous Athenian democracy, the glorious Greek culture and society. In end a brief account of the development of philosophical thought in Greece would be provided.

- **Geographical Features**

Before we proceed to inspect the evolution of Greek civilization it would be useful to outline the geographical features of Greece. It should be noted that when we speak of ancient Greece we are referring to an area that was much larger than the present-day state of Greece. The Greek world in antiquity encompassed western Anatolia, Thrace, the islands of the Aegean Sea, Crete, Cyprus, mainland Greece, southern Italy and Sicily.

Ancient Greece consisted mainly of a mountainous peninsula jutting out into the Mediterranean Sea. It also included about 2,000 islands in the Aegean and Ionian seas. Lands on the eastern edge of the Aegean were also part of ancient Greece. The region‘s physical geography directly shaped Greek traditions and customs.

The sea shaped Greek civilization just as rivers shaped the ancient civilizations of Egypt, the Fertile Crescent, India, and China. In one sense, the Greeks did not live *on* a land but *around* a sea. Greeks rarely had to travel more than 85 miles to reach the coastline. The Aegean Sea, the Ionian Sea, and the neighboring Black Sea were important transportation routes for the Greek people. These seaways linked most parts of Greece. As the Greeks became skilled sailors, sea

travel connected Greece with other societies. Sea travel and trade were also important because Greece lacked natural resources, such as timber, precious metals, and usable farmland. The Aegean Sea was the geographical nucleus of the ancient Greek world. In the Aegean Sea itself there are a large number of islands of varying sizes. Off the west coast of Anatolia are some large islands such as Lemnos, Lesbos, Chios, Samos and Rhodes. Then there is a group of islands concentrated in the southern Aegean. The islands of this group are collectively called the Cyclades. The large rectangular island of Crete is situated south of the Peloponnese and the Cyclades. It may be mentioned here that Greek settlers had also colonized some areas of southern Italy and Sicily. These settlers are collectively referred to as Western Greeks.

Rugged mountains covered about three-fourths of ancient Greece. The mountain chains ran mainly from northwest to southeast along the Balkan Peninsula. Mountains divided the land into a number of different regions. This significantly influenced Greek political life. Instead of a single government, the Greeks developed small, independent communities within each little valley and its surrounding mountains. Most Greeks gave their loyalty to these local communities. In ancient times, the uneven terrain also made land transportation difficult. Of the few roads that existed, most were little more than dirt paths. It often took travelers several days to complete a journey that might take a few hours today. Much of the land itself was stony, and only a small part of it was arable, or suitable for farming. Tiny but fertile valleys covered about one-fourth of Greece. The small streams that watered these valleys were not suitable for large-scale irrigation projects. With so little fertile farmland or fresh water for irrigation, Greece was never able to support a large population. Historians estimate that no more than a few million people lived in ancient Greece at any given time. Even this small population could not expect the land to support a life of luxury. A desire for more living space, grassland for raising livestock, and adequate farmland may have been factors that motivated the Greeks to seek new sites for colonies.

Climate of Greece was the third important environmental influence on Greek civilization. Greece has a varied climate, with temperatures averaging 48 degrees Fahrenheit in the winter and 80 degrees Fahrenheit in the summer. In ancient times, these moderate temperatures supported an outdoor life for many Greek citizens. Men spent much of their leisure time at outdoor public events. They met often to discuss public issues, exchange news, and take an active part in civic life.

- **The early Greek Civilizations**

  As mentioned above the Bronze Age Greek Civilizations would be discussed in three parts the Minoan Civilization, Mycenaean Civilization and the Dark Age.

- **The Minoan Civilization**

- In the chronology of ancient Greece the Minoan Civilization can be considered as thefirst Bronze Age civilization of the region. The civilization emerged towards the end

of third millennium BC and flourished till around 1400 BC. The civilization came to light in the early

- **The Dark Age**

The Dark Age lasted for nearly four centuries, coming to an end in c. 800 BC. The significance of this date is that around this time two great Greek epics, *Iliad* and *Odyssey* were written. Their composition is attributed to a poet by the name of Homer. These epics mark a turning point in Greek history. With *Iliad* and *Odyssey* written records are once again available for ancient Greece after a long gap. Apart from their great literary merit, these epics are a very rich historical source. The two works are part of the tradition of epic poetry. The main theme of *Iliad* is the war of a coalition of Greek states against the state of Troy (the ruins of ancient Troy are located in the north-western corner of Anatolia). According to the story narrated in the epic this war, known as the Trojan war, lasted for ten years. *Odyssey* recounts the adventures encountered by Odysseus, one of the heroes of the war, on his homeward journey after the conclusion of the campaign. The epics give us some idea about various aspects of contemporary religion, mythology, beliefs, food habits and dress.

Scholars earlier held the view that *Iliad* and *Odyssey* were inspired by events which had taken place in the Mycenaean age and spoke about that period. There can be no doubt that some of the stories in these epics are derived from the Mycenaean era. They show an awareness of an earlier civilization in which great heroes, kings and warriors lived. It was therefore thought that the Homeric epics were essentially a portrayal of Mycenaean society. The reinterpretation of these poems, particularly in the light of the more exhaustive archaeological evidence, has allowed scholars to view *Iliad* and *Odyssey* as compositions of the Dark Age. The actual details of everyday life contained in them relate to the closing phase of the Dark Age and these indicate a break with the Mycenaean social formation.

However, two things changed life in Greece. First, Dorians and Mycenaeans alike began to identify less with the culture of their ancestors and more with the local area where they lived. Second, by the end of this period, the method of governing areas had changed from tribal or clan control to more formal governments-the city-states. In these circumstances in the latter half of the Dark Age the Greeks were divided into a large number of petty-states. These states were ruled by kings or chiefs with limited authority. They had to share political power with other members of the elite. In many states, such as Athens, monarchical rule had come to an end by the beginning of the Archaic Period and was replaced by oligarchical political structures.

- **The Archaic and Classical Period**

The Dark Age is followed by a period known as the archaic period (C.800 – 500 BC). In this period the foundations of classical Greek Civilization were laid. The period from 500 BC to 338 BC is generally referred as the classical age of Greece. A number of important changes take place in archaic and classical period. However, the division into these two periods is not always very sharp and there is lot of overlapping and continuity in various aspects of society, economy and culture. This is one broad period of ancient Greece. In the subsequent paragraphs the developments and institutions of the whole period would be analysed.

- **Conflict of Landed Aristocracy and Peasantry: Reforms Start**

The Archaic Period (c. 800-5000 BC) witnessed an intense conflict between the landed aristocracy and the peasantry throughout Greece. The origins of this struggle may be traced to the latter half of the Dark Age when landowning aristocrats occupied a strong position in the society. Between c. 800 and 600 BC the landed aristocracy consolidated its hold over land and the political structures of the Greek states. This led to the impoverishment of the small landholders. In their desperation the small landholders put up a tough fight against the aristocracy. The constant upheavals caused by this struggle reached a point of crisis by c. 600 BC. Sections of the aristocracy realized that unless some way was found out of the crisis their own prosperity would be threatened. Consequently they were forced to initiate reforms which incorporated concessions to the peasants.

In this juncture many reforms were undertaken at Athens. The evidence from Athens is supplemented by references to other states and shows that similar historical developments were taking place in large parts of Greece. In 594 BC the Athenians resorted to the solution of nominating an arbitrator, named Solon, to carry out reforms. On the basis of a consensus Solon was vested with wide ranging powers for a specified duration. The most radical reform of Solon was the abolition of debt bondage. This had emerged as one of the most serious problems faced by the peasantry. Impoverished peasants, who often small holdings had located in difficult terrain such as hillsides, had to take loans from wealthy landowners.

The *polis* was territorially a small political entity. The size of the population was also relatively small. Given the constraints of ancient society, democracy would not have been functional had the *polis* been large either territorially or in terms of its inhabitants. This point needs to be emphasized because Greek democracy was a direct democracy. In modern democracy the people choose their representatives who then legislate and govern on their behalf. In ancient Greece, democracy implied participation by all the citizens in the basic organ of the democratic system, namely the assembly.

- **Conflict with Persia: Formation of Delian League**

Greek history in the latter half of the sixth century BC has to be viewed against the backdrop of the westward expansion of the Persian empire. Persian expansion into western Anatolia, the Aegean and mainland Greece coincided with the phase of tyranny and the beginning of the Classical period at Athens. Between c. 500 and 480 BC the states of the Greek peninsula were locked in a fierce contest with the Achaemenids. Sparta was at this time the foremost military power on land. Athens was the main naval power, though it also had a fairly strong army. The Athenians had built a strong navy which played a leading role in the conflict with Persia. Themistocles was the architect of Athenian naval strength. The Greeks pooled together their resources under the leadership of Athens and Sparta in order to resist the Persian onslaught.

Whereas the decisive battles of Salamis (480 BC) and Plataea (479 BC) had halted the Persian advance into the Aegean Sea, the threat of further Persian campaigns still remained. The Greek states were aware of the need to pool together resources on a long-term basis to thwart further invasions. No state had the capacity to fight the Persians entirely on its own. On the Peloponnese there was a strong military alliance under the leadership of Sparta. With this arrangement the Peloponnesians were better placed to defend themselves. The problem was much more serious for the Aegean islands and the coastal states since they had no such mechanism. It was as a solution to this problem that Athens, after Salamis and Plataea, took the initiative to form a confederation of states under its own leadership (487 BC). This confederacy has come to be known as the Delian League. The Delian League derived its name from the island of Delos where the common treasury of the confederacy was located. The primary objective of forming this confederacy was to maintain a strong navy in the Aegean Sea. The members of the Delian League made regular contributions for this purpose.

Once the Persian threat receded, the Athenians transformed the character of the League. They used their dominant position within the League to utilize its resources for promoting its own interests. From a voluntary confederation the Delian League gradually became an empire ruled by the Athenians. The contributions to the League now became enforced tribute payable to Athens. The wealth that the empire, and control over the Aegean Sea, brought to Athens was

crucial for sustaining its democratic institutions in the Classical Period and keeping discontent in check.

Having established its hegemony over the Aegean, Athens tried to expand its empire by including the Peloponnese in it. This brought it into conflict with Sparta. A prolonged military contest between the two states ensued. This is known as the Peloponnesian War which lasted from 431 to 404 BC. By 404 BC Athens had been defeated by Sparta and its navy was destroyed. For several decades after that Sparta remained the major Greek power, though it was subsequently challenged by Thebes. The conflicts among the Greek states after the Peloponnesian War gave the Persian an opportunity to interfere in their affairs, and thus to become politically dominant in Greece.

- **Democratic Political Structure: Emergence of Deme**

The hundred years between the overthrow of Hippias and the defeat of Athens in the Peloponnesian war witnessed the growth of a highly evolved democratic political structure at Athens. This structure owed a lot to the initiatives of Cleisthenes (c. 507 BC). Athenian citizens had been traditionally divided into four Ionian tribes. These traced their descent from the tribes or clans which had originally settled in Attica. Following the political reforms of Solon, each tribe sent one hundred members to the *boule*. Cleisthenes did away with the kinship principle for grouping the citizens, and replaced it with ten residential tribes or *phylai*. These new *phylai* were based on a radically new concept. The *phyle* to which a citizen belonged was determined by the place where he resided and not by his kinship ties.

The primary unit of the democratic structure established by Cleisthenes was the _deme‘. Every citizen was first and foremost a member of a particular deme. The deme was the smallest geographical unit into which the *polis* of Athens was divided for political purposes. There were 139 demes in all. The demes were responsible for maintaining registers of citizens. They had their own local elected governments, including an assembly and officials. The local governments were headed by the *demarchos*. Cleisthenes reformed the *boule* as well. The strength of the council was raised from four hundred to five hundred members. Fifty members were selected from each of the ten *phylai*. Membership of the *boule* was thrown open to all citizens, including *thetes*. Any citizen over the age of thirty was eligible for membership of the *boule*. The main executive and military officials of the *polis* were the *archons*. Ever since monarchy had come to an end in Athens the *archons* had been the chief executive and military officers. Throughout the Archaic Period the aristocracy had monopolized these posts. During the Classical Period the archonship was gradually made an elective post and it became possible for ordinary citizens to hold these positions. Despite its limitations, Athenian democracy was an outstanding achievement.

- **Slave Labour**

A distinctive feature of ancient Greek civilization was the widespread use of slave labour in various sectors of the economy. There is evidence of the presence of large numbers of slaves in other ancient civilizations, such as those of Egypt, Mesopotamia, Persia and the Hittites. The Mesopotamian and Hittite law codes indicate that institutionalized slavery existed in these civilizations. However the scale of slavery was qualitatively different in ancient Greece. Here for the first time in history slave labour was used extensively for production. The initial pool of slaves was formed of prisoners of war. This source was supplemented from within the community by those who were enslaved due to their inability to pay loans (debt bondage). Nevertheless wars brought captive slaves in much larger numbers. The earliest slaves in Greece, as in other societies, were women. Women slaves formed a significant portion of the workforce in Mycenaean palaces. For example, the palace at Pylos had at least 550 women engaged in textile production. In the Linear B tablets the term used for slaves is *doeri*. The Homeric epics also contain numerous references to women being enslaved during wars.

By the Archaic and Classical Periods slaves were to be found in every sector of production, especially in mining, handicrafts and agriculture. Some historians are of the view that the role of slavery in Greek agriculture has been exaggerated and that the agrarian economy depended mainly on the peasantry and free labour.

At the end of the Dark Age Sparta was already using slave labour on a scale that was unprecedented. Sparta had annexed the territory of Messenia located in the southern Peloponnese and had converted the entire population of this area into slaves. The Spartans introduced a peculiar form of slavery called _helotry‘. Helots were slaves who were owned collectively by the entire Spartan community. Agricultural land in Messenia was divided into holdings called *kleroi* and allotted to Spartan citizens. These holdings, alongwith the land already possessed by the Spartans, were cultivated with the labour of helots. Since there was considerable social differentiation in Sparta, the *kleroi* were not distributed equitably. The aristocracy got a much bigger share.

The distribution of helots was regulated by the state. The state assigned a certain number of slaves to each family depending upon its requirements for labour. Moreover, they were allowed to maintain family ties. The children born to the helots had the same status as their parents.

This meant that Sparta was able to meet its requirements of slave labour from among the Messenians for several generations. It should not be assumed that helotry was a more humane form of slavery as some scholars have suggested. Helotry was a more primitive form of slavery which in turn reflected the relative backwardness of Spartan economy. Private property was not fully developed in Sparta and there were many tribal survivals in its social organization. Helotry

was prevalent in other Greek states as well, as for instance in Thessaly, Crete and Argos. In other parts of Greece privately owned slaves increasingly became a typical feature of Greek society and economy. Several terms were used to describe such slaves, the most common being *doulos*.

In Athens slaves were mostly privately owned. These slaves were regarded as property and bought and sold in the market as commodities. The prosperity of Athens during the Classical Period rested on the expansion of slave labour. Historians have offered figures for Athenian slaves during the fifth century BC ranging from 60,000 to 110,000. It has been estimated that of these, nearly 20,000 to 30,000 worked in the Athenian silver mines. Besides agriculture and mining, slaves dominated handicraft production and were engaged in various kinds of domestic and menial work. It is necessary to emphasize that while there was slave labour in every sector of the economy, free labour was also to be found in all types of production.

- **Development of Philosophical Thought**

The ancient Greece may be credited with a very rich intellectual contribution. Due to constraints of space it would not be possible for us to go into detailed analysis of the Greek philosophical tradition. We intend to familiarise you with some basic factual information on the philosophical thought that developed in Greece. Their intellectual tradition touched many aspects of human society and knowledge. History, Philosophy, Mathematics and Medicine were some of the main areas influenced by the ideas of the Greek thinkers. The development of democratic traditions in Greece helped in creating an environment conducive to intellectual discourse and growth.

The Ionian School of thought (c. 600 BC) was one of the earliest philosophic tradition. Thales, Anaximandes and Anazemenes were the main proponents of this school. They were mainly concerned with the basic elements of nature (air, water earth) and their driving force. Pythagoras, an outstanding thinker believed in the transmigration of the soul and laid emphasis on achieving harmony for the soul. He was involved with the study of nature, musical scale and mathematics. However, he is most famous for his geometrical theorem which states that, in a right angled triangle, the square of the length of the hypotenuse is equal to the sum of the squares of the other two sides. Hippocrates was one of the outstanding thinker of the classical period in the area of medicine. He gave medicine a scientific foundation replacing magical cures. He believed in treating diseases by diagnosing on the basis of examining the symptoms scientifically.

Herodotus (c.484-425) is called ‗the father of history' for giving it a distinct identity as a branch of knowledge. History which was treated as a mix of facts, fiction, myths, legends, fables and anecdotes was given a new meaning based on authentic facts and their verification. He wrote detailed accounts of Persian wars. He widely travelled and gathered information about various countries. He always verified and evaluated his information before writing his accounts.

Socrates, Plato and Aristotle are considered as the most towering thinkers of the classical Greek Philosophy. Socrates (469 - 399 BC) is credited with a shift from thinking about nature to thinking about the nature of human existence. The refinement of various categories of philosophy was his major contribution. His student Plato (427-347 B.C.) established an academy at Athens and taught philosophy. He is regarded as an _idealist‘. He argued that things have no independent existence outside our minds and believed that experience is unreal, only ideas are real. He influenced later Arab and Western thought in a big way. Plato‘s disciple Aristotle (384-322 B.C) held ideas which were different from those of his teacher. He disagreed with Plato‘s view that experience was unnecessary to understand reality. He was a keen student of Science and studied plants and animals. Both Plato and Aristotle were opposed to the idea of involving masses in all decision making processes. They held the view that people have a limited role to play in the government. This was, to some extent, a reflection of the thinking of the elite in Athens who believed in curtailing democratic rights.

- **Contribution of Greek Culture**

Ancient Greeks made many influential contributions to western civilization such as in the areas of philosophy, art and architecture, and math and science.

In philosophy, Greek philosophers were great thinkers who were determined to seek truth to a certain subject or question no matter where it led them. Three famous philosophers includes Socrates, Aristotle, and Plato. Socrates, who lived from around 470 to 399 B.C. believed that life was not worth living unless it was examined and the truth about life was sought out. He also believed that there had to be certain standards for justice and punishment. In order to solve problems in life, Socrates invented a method for solving these problems called the Socratic Method. In the world today this method is commonly known as the Scientific method and is used widely in the area of science.

Pluto, a student of Socrates, believed that society is like one big family and that if one person in a society needed help in some sort of way, the whole society should be there to help. Pluto also had many democratic ideas which he expressed through the book, The Republic. Lastly, Aristotle, who lived in Greece from around 384 to 322 B.C., was a philosopher who believed strongly that human reason was very important. He says that a life guided by human reason is superior to any other and that someone's ability to reason distinguishes them from anyone else. Many other ideas came from philosophers and two of these includes the thought that divine power ruled the universe and that human desire is dangerous and should be controlled. These ideas along with the ideas of human reasoning, standards for justice, and a democracy are still used in modern world, therefore showing Greece's influence and contribution.

Another area of Greek achievement is theatre. Plays began to become important in ancient Greece and two types of plays which were written and performed were comedies and tragedies. A comedy in ancient Greece was usually a play that marked or made fun of a certain topic, person, or group of people. One famous comedy writer was Aristophanes. He wrote the plays The Birds and Lysistrata. Tragedy in ancient Greece usually dealt with a moral or social issue, human suffering, and almost always ended in disaster. Three famous Greek tragedy writers are Aeschylus, Euripides, and Sophocles. Aeschylus wrote the play The Oresteia, Euripides wrote the play Medea, and Sophocles wrote the plays Oedipus the King and Antigone. The ideas of comedies and tragedies are used in western civilization except expanded and twisted around a little. A lot of famous play writers today are also inspired by the works of play writers from ancient Greece.

The most important areas of Greek achievement were math and science. They achieved all kinds of things in the areas of psychology, astronomy, geometry, biology, physics, and medicine. In astronomy they formulated the ideas that the sun was 300 times larger than the earth, the universe was composed of atoms, and they calculated the true size of the earth. Someone greatly involved in astronomy was Aristotle.

13.7 Summary

- The Archaic and classical periods witnessed some significant social and political developments. Conflict of peasantry and landed aristocracy and subsequent transition to Greek democracy were important changes.
- The period between 500 BC and 480 BC witnessed regular conflict with Persian empire. As a result attempts were made in Greek states to pool together their resources to face the external aggressions. Confederacy so formed came to be known as Delian League.
- During classical period democratic political structures got strengthened with the formation of Deme.
- Extensive use of slave labour in various sectors of production was one of the unique features of Greek history during the classical period.
- The unit also provided a brief account of the development of philosophical thought in particular contributions of Herodotus, Socrates, Plato and Aristotle.
- The last section of the chapter discusses the end of the classical period of Greek history with the death of Alexander.
- Finally, the chapter describe in brief various contributions of Greek Civilisation to the subsequent human history.

13.7 Self Assesment Questions

1. Give a brief account of the early Greek Civilizations.
2. Discuss in brief the nature of conflict of aristocracy with peasantry and how it culminated in the establishment of democracy.
3. How does an aristocracy differ from an oligarchy?
4. What contributions did Solon and Cleisthenes make to the development of Athenian democracy?
5. What were the main features of the institution of slavery in ancient Greece?
6. Write in brief about the ideas of ancient Greek philosophers.
7. Assess the importance of colonisation to the development of the Greek world.
8. Assess the significance of Solon's reforms for Athenian democracy.

13.8 Key Terms

Archons: Executive and military officials of the polis in Greek civilisation.

Boule: An Athenian assembly consisting four hundred members.

Demarchos: Local government head during Greek civilisation.

Kleroi: A lot of land distributed to each citizen in Ancient Greece.

Metoikoi: A resident alien, one who did not have citizen during ancient Greece.

Oligarchical: A Government by a few, especially by a small fraction of persons or families.

Patrilineal: A system whereby one belong to his/her father's lineage in terms of inheritance.

Pentacosiomedimni: Top class of citizens set out by the Politician Solon in ancient Greece.

Phylai: A citizen in ancient Greece.

Polis: literally means city in Greek.

13.9 Further Reading

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Unit 14 ATHENIAN DEMOCRACY & SPARTA MILITARY

Structure

14.1 Learning Objectives

i. Explore the historical and cultural context that led to the development of democracy in ancient Athens.
ii. Investigate the mechanisms of decision-making in the Athenian democracy, including the direct participation of citizens in the Assembly.
iii. Understand the concept of civic duty and the active participation of citizens in political life.
iv. Explore the influence of Athenian democracy on subsequent political thought and development, especially in Western political philosophy.
v. Reflect on the enduring legacy of Athenian democracy in shaping political thought, governance, and citizenship in contemporary societies.

14.2 Introduction about Athens

The history of Athens is rich and spans several millennia. Here is a brief overview of key periods in the history of this ancient Greek city:

- **The perceived fragility of Athenian democracy**

The year in which Socrates was prosecuted, 399, was one in which several other prominent figures were brought to trial in Athens on the charge of impiety. That is unlikely to have been a coincidence; rather, it suggests that there was, at the time, a sense of anxiety about the dangers of religious unorthodoxy and about the political consequences that religious deviation could bring. Two attempts to put an end to Athenian democracy had occurred in recent years, and the religious scandals of 415 were not so far in the past that they would have been forgotten. Because a general amnesty had been negotiated, no one, except the 30 and a few others, could be tried for offenses committed prior to 403, when the 30 were defeated. But this would not have prevented an accusation from being brought against someone who committed a crime after 403. If Socrates had continued, during the years after 403, to engage in the same practices that were so characteristic of him throughout his adult life, then not even the most ardent supporters of the amnesty would have objected to bringing him to trial. And once a

trial had begun, it was common practice for prosecutors to mention anything that might be judged prejudicial to the accused. There was no legal custom or court-appointed judge that would have prevented Socrates' accusers from referring to those of his admirers—Alcibiades, Critias, Charmides, and the like—who at one time had been enemies of democratic Athens or had been associated with religious scandal. The law that Socrates was alleged to have violated was a law against impiety, but in support of that accusation he also was accused of having corrupted the young. His jury might have taken his association with opponents of the democracy, or with persons convicted or suspected of religious crimes, to be grounds for considering him a dangerous man.

The fact that one of those who assisted in the prosecution of Socrates and spoke against him—Anytus—was a prominent democratic leader makes it all the more likely that worries about the future of Athenian democracy lay behind Socrates' trial. And even if neither Anytus nor the other prosecutors (Meletus and Lycon) harboured such fears, it is hard to believe that they were entirely absent from the minds of those who heard his case. In any event, because Socrates openly displayed his antidemocratic ideas in his defense speech, it would have been difficult for jurors to set aside his association with opponents of the democracy, even if they had been inclined to do so. Athenian democracy must have seemed extremely fragile in 399. It is only with the benefit of hindsight that we can see that its institutions were strong enough to last most of the rest of the 4th century.

- **The Athenian ideal of free speech of Socrates**

That Socrates was prosecuted because of his religious ideas and political associations indicates how easily an ideal held dear by his fellow Athenians—the ideal of open and frank speech among citizens—could be set aside when they felt insecure. This ideal and its importance in Athens are well illustrated by the remark of the orator Demosthenes, that in Athens one is free to praise the Spartan constitution, whereas in Sparta it is only the Spartan constitution that one is allowed to praise. Were there other instances, besides the trial of Socrates, in which an Athenian was prosecuted in court because of the dangerous ideas he was alleged to have circulated? Centuries after Socrates' death, several writers alleged that many other intellectual figures of his time—including Protagoras, Anaxagoras, Damon, Aspasia, and Diagoras—were exiled or prosecuted. Several scholars have concluded that Athens's allegiance to the ideal of freedom of speech was deeply compromised during the last decades of the 5th century. Others have argued that much or all of the evidence for a period of persecution and harassment was invented by writers who wanted to claim, as a badge of honour for their favourite philosophers, that they, too, like the universally admired Socrates, had been persecuted by the Athenians. What can safely be said is this: the trial of Socrates is the only case in which we can be certain that an Athenian was legally prosecuted not for an overt act that directly harmed the public or some individual—such as treason, corruption, or slander—but for alleged harm indirectly caused by the expression and teaching of ideas.

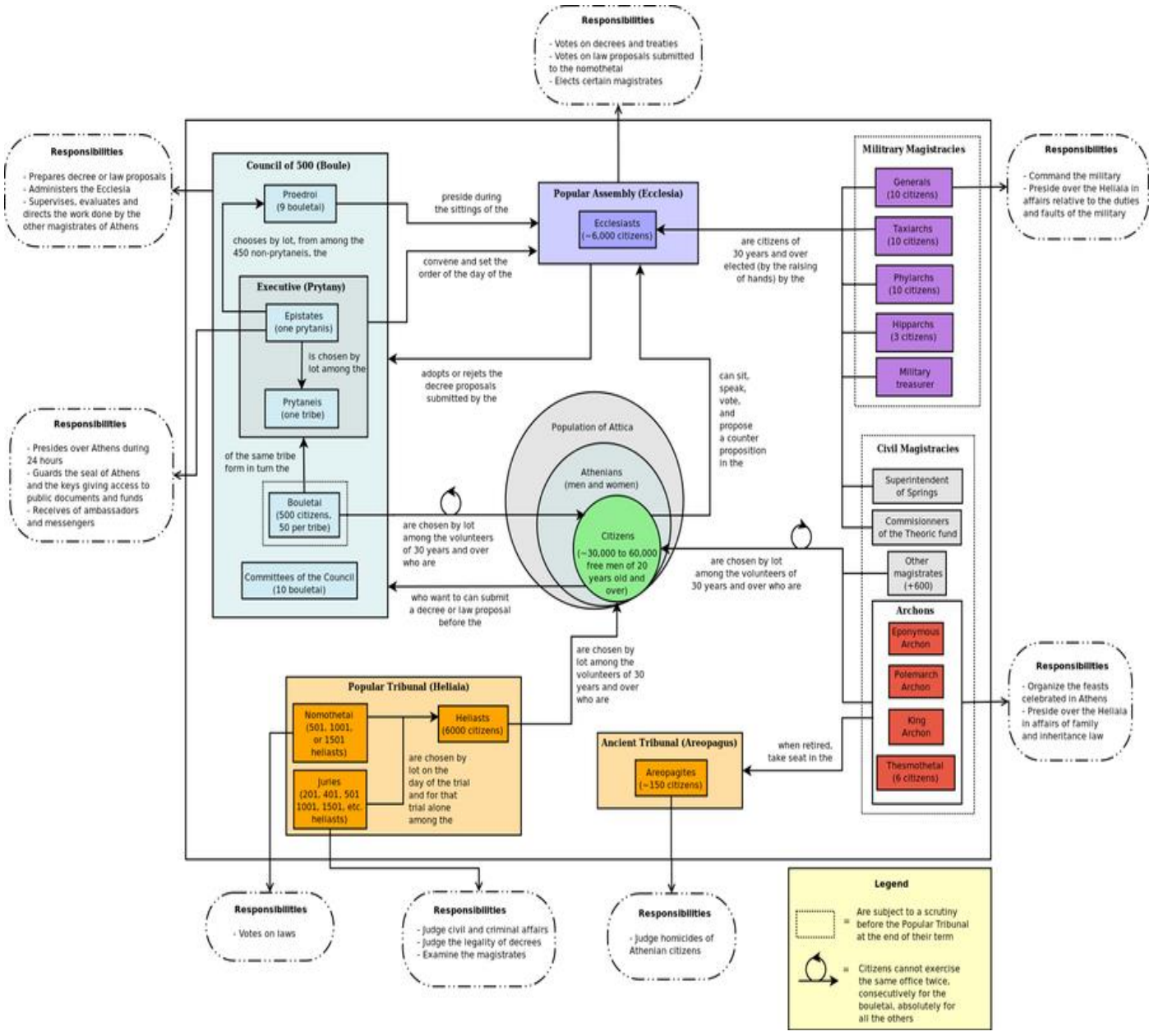
- **Plato's *Apology***

Although in none of Plato's dialogues is Plato himself a conversational partner or even a witness to a conversation, in the *Apology* Socrates says that Plato is one of several friends in the audience. In this way Plato lets us know that he was an eyewitness of the trial and therefore in the best possible position to write about it. The other account we have of the trial, that of Xenophon, a contemporary of Socrates, is of a very different character. We know that

Xenophon was not present as a live witness. He tells his readers that he is reporting only a portion of Socrates' speech and that he learned about the trial from Hermogenes, a member of the Socratic circle.

- **Main bodies of governmen**

Constitution of the Athenians, 4th century BC



- **Ecclesia**

The central events of the Athenian democracy were the meetings of the assembly. Unlike a parliament, the assembly's members were not elected, but attended by right when they chose. Greek democracy created at Athens was direct, rather than representative: any adult male citizen over the age of 20 could take part, and it was a duty to do so. The officials of the democracy were in part elected by the Assembly and in large part chosen by lottery in a process called sortition.

The assembly had four main functions: it made executive pronouncements (decrees, such as deciding to go to war or granting citizenship to a foreigner), elected some officials, legislated, and tried political crimes. As the system evolved, the last function was shifted to the law courts. The standard format was that of speakers making speeches for and against a position, followed by a general vote (usually by show of hands) of yes or no.

Sparta was a warrior society in ancient Greece that reached the height of its power after defeating rival city-state Athens in the Peloponnesian War (431-404 B.C.). Spartan culture was centered on loyalty to the state and military service. Spartan boys entered a rigorous state-sponsored education, military training and socialization program. Known as the Agoge, the system emphasized duty, discipline and endurance. Although Spartan women were not active in the military, they were educated and enjoyed more status and freedom than other Greek women.

The way in which Council members, jurors, and office holders were chosen is called allotment (lot) or sortition. In the fifth century B.C. this was often done by placing a number of white and black beans in a box equal to the number of candidates who volunteered. The white beans would match the number of officesto be filled and the black beans would match the extra candidates. Each candidate would reach in to the receptacle and pull a bean out, white indicating that he was chosen and black that he was not. This system guaranteed absolute fairness in the selection of council members, jurors or office holders. In the fourth century B.C. much more elaborate voting machines were developed, but they followed the same random principle.

The Council of 500 prepared the official agenda for the meetings of the Assembly. The Council was made up of 50 men selected from each of the 10 Attic tribes. These tribes corresponded to local villages or territories and were of different sizes. Council members were chosen by lot from a list of volunteers, all of them being male citizens over 30 years of age. A Council member could serve only two years in his lifetime, and only one year at a time. They were paid for their services, which helped to compensate for lost wages on their jobs.

The supreme political body was the Athenian Assembly. It was open to all free males over 20 whose father was Athenian. In 451 B.C., citizenship was restricted to males over 18 whose father and mother were Athenian. All males falling into these groups were citizens, regardless of income or class, and every male citizen was subject to universal political service as well as universal military training. The Assembly met about 40 times per year at the Pnyx, a natural amphitheater on one of the hills west of the Acropolis. Their main task was to enact legislation. Attendance was normally about 2,000 or 3,000 men, for it was difficult to take four days per month off from work. Mostly craftsmen and artisans attended the assemblies, farmers being too busy and aristocrats seeing it as beneath their station in life. Usually a summons and an agenda had to be posted at least five days before a meeting.

14.5 Sparta Life

Sparta, also known as Lacedaemon, was an ancient Greek city-state located primarily in a region of southern Greece called Laconia. The population of Sparta consisted of three main groups: the Spartans, or Spartiates, who were full citizens; the Helots, or serfs/slaves; and the Perioeci, who were neither slaves nor citizens. The Perioeci, whose name means "dwellers-around," worked as craftsmen and traders, and made weapons for the Spartans.

- **Mycenaean age**

The first reference to the Spartans at war is in the *Iliad*, in which they featured among the other Greek contingents. Like the rest of the Mycenaean-era armies, it was depicted as composed mainly of infantry, equipped with short swords, spears, and Dipylon-type shields ("8"-shaped simple round bronze shields). This period was the Golden Age of Warfare. In a battle, each opposing army would try to fight through the other line on the right (strong or deep) side and then turn left; wherefore they would be able to attack the vulnerable flank. When this happened, as a rule, it would cause the army to be routed. The fleeing enemy was put to the sword only as far as the field of the battle extended. The outcome of this one battle would determine the outcome of a particular issue. In the Golden Age of War, defeated armies were not massacred; they fled back to their city and conceded the victors' superiority. It wasn't until after the Peloponnesian War those battles countenanced indiscriminate slaughter, enslavement and depredations among the Greeks

- **The Spartan Military**

Unlike such Greek city-states as Athens — a center for the arts, learning and philosophy — Sparta was centered on a warrior culture. Male Spartan citizens were allowed only one occupation: soldier. Indoctrination into this lifestyle began early. Spartan boys started their military training at age 7, when they left home and entered the Agoge. The boys lived communally under austere conditions. They were subjected to continual physical, competitions (which could involve violence), given meager rations and expected to become skilled at stealing food, among other survival skills. The teenage boys who demonstrated the most leadership potential were selected for participation in the Crypteia, which acted as a secret police force whose primary goal was to terrorize the general Helot population and murder those who were troublemakers. At age 20, Spartan males became full-time soldiers, and remained on active duty until age 60.

- **Spartan Armor, Shield and Helmet**

No one soldier was considered superior to another. Going into battle, a Spartan soldier, or hoplite, wore a large bronze helmet, breastplate and ankle guards, and carried a round shield made of bronze and wood, a long spear and sword. Spartan warriors were also known for their long hair and red cloaks. The Spartans' constant military drilling and discipline made them skilled at the ancient Greek style of fighting in a phalanx formation. In the phalanx, the army worked as a unit in a close, deep formation, and made coordinated mass maneuvers.

- **Spartan Women**

Spartan women had a reputation for being independent-minded, and enjoyed more freedoms and power than their counterparts throughout ancient Greece. While they played no role in the military, female Spartans often received a formal education, although separate from boys and not at boarding schools. In part to attract mates, females engaged in athletic competitions, including javelin-throwing and wrestling, and also sang and danced

competitively. As adults, Spartan women were allowed to own and manage property. Additionally, they were typically unencumbered by domestic responsibilities such as cooking, cleaning and making clothing, tasks which were handled by the Helots.

- **Spartan Culture And Government**

Sparta functioned under an oligarchy. The state was ruled by two hereditary kings of the Agiad and Eurypontid families, both supposedly descendants of Heracles, and equal in authority so that one could not act against the power and political enactments of his colleague. Unique in ancient Greece for its social system and constitution, Spartan society was completely focused on military training and excellence. Its inhabitants were classified as Spartiates (Spartan citizens who enjoyed full rights), Mothakes (non-Spartan, free men raised as Spartans), Perioikoi (freed men), and Helots (state-owned serfs, part of the enslaved, non-Spartan, local population). Male Spartans began military training at age seven. The training was designed to encourage discipline and physical toughness, as well as emphasize the importance of the Spartan state. Boys lived in communal messes and, according to Xenophon, whose sons attended the *agoge*, the boys were fed "just the right amount for them never to become sluggish through being too full, while also giving them a taste of what it is not to have enough." Besides physical and weapons training, boys studied reading, writing, music, and dancing. Special punishments were imposed if boys failed to answer questions sufficiently laconically (i.e., briefly and wittily).

- **The Rise Of Classical Sparta**

The Spartans were already considered a land-fighting force to be reckoned with when, in 480 BCE, a small force of Spartans, Thespians, and Thebans made a legendary final stand at the Battle of Thermopylae against the massive Persian army during the Greco-Persian Wars. The Greek forces suffered very high casualties before finally being encircled and defeated. One year later, Sparta led a Greek alliance against the Persians at the Battle of Plataea where their superior weaponry, strategy, and bronze armor proved a huge asset in achieving a resounding victory. This decisive victory put an end to the Greco-Persian War, as well as Persian ambitions of spreading into Europe. Despite being fought as part of a alliance, the victory was credited to Sparta, which had been the de facto leader of the entire Greek expedition.

14.6 Summary

- Athenian democracy was a system of government where all male citizens could attend and participate in the assembly which governed the city-state. This was a democratic form of government where the people or 'demos' had real political power
- Any citizen could speak to the assembly and vote on decisions by simply holding up their hands. The majority won the day and the decision was final.
- Cleisthenes changed Athenian democracy becuase he redefined what it was to be a citizen and so removed the influence of traditional clan groups.
- Sparta was a prominent city-state in ancient Greece, situated on the banks of the Eurotas River in Laconia in southeastern Peloponnese.

- Given its military preeminence, Sparta was recognized as the overall leader of the combined Greek forces during the Greco-Persian Wars, and defeated Athens during the Peloponnesian War.
- Sparta's defeat by Thebes in the Battle of Leuctra in 371 BCE ended Sparta's prominent role in Greece, but it maintained its political independence until the Roman conquest of Greece in 146 BCE.
- Sparta functioned under an oligarchy of two hereditary kings.
- Unique in ancient Greece for its social system and constitution, Spartan society focused heavily on military training and excellence.
- Spartan women enjoyed status, power, and respect that were unequaled in the rest of the classical world.

14.7 Key Terms

- **Acropolis**- A highly rocky mound in Athens that is home to many temples including the Parthenon.
- **City State**-Greece was split into separate groups called city states. They made their own rules, had their own laws and often clashed with each other.
- **Theatre-**. A venue that was home to performances of plays the Ancient Greeks wrote.
- **Parthenon-** The temple that sits atop the Acropolis in Athens
- **Sparta-** A famous city state that focussed on a strong military and total discipline.
- **Athens-** The centre of the Ancient Greek world which went on to become the capital of modern Greece.
- **Democracy**- The idea that every free person gets a vote and their opinion will be heard.
- **Pottery**- The Ancient Greeks created beautiful pieces of pottery that often showed scenes from their plays, myths, and everyday life.
- **Marathon**- Marathon is the scene of a famous Greek battle victory over the Persians in 490 BC; the modern race is based on the tradition that a messenger ran from Marathon to Athens with the news.
- **Zeus-** The King of the Ancient Greek Gods he is often shown in a white toga with long white hair and a white beard.
- **Demi-Gods**- The ancient Greeks believed that their Gods came to Earth in human form and had relationships with mortal humans. Their children were known as demigods meaning half god and half mortal often with super human strength

14.8 Self Assessement Questions

1. Analyze the educational philosophy in Athens, with a focus on the Sophists, the influence of philosophers like Socrates, Plato, and Aristotle, and the significance of the pursuit of knowledge in Athenian society.
2. How did the concept of citizenship evolve in Athens, and what were the rights and responsibilities associated with it? Explore the impact of democratic principles on

social equality and the role of individuals in shaping the city-state's social fabric.

3. How did the democratic political system of Athens, characterized by the Assembly, Council of 500, and popular participation, contribute to the city-state's political stability and decision-making processes?
4. Contrast the social structure of Sparta with Athens, particularly focusing on the roles of citizens, helots, and perioikoi. How did the rigid social hierarchy contribute to the stability or challenges faced by Sparta?
5. Examine the Spartan education system, considering the emphasis on physical fitness, discipline, and military training, and explore how these values were instilled in the Spartan youth to create a society centered around military prowess.
6. Explore the distinctive aspects of the Spartan military system, including the Agoge training program, the importance of the hoplite phalanx, and how these elements contributed to Sparta's reputation as a military powerhouse.
7. Examine the foreign policy of Sparta, including its role in the Peloponnesian League. How did Sparta's military focus influence its alliances, and what were the consequences of its conflicts with rival city-states?

14.9 Further Readings

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UNIT 15 **SOCIETIES, CULTURE & REPUBLIC IN ROMAN**

Structure

15.1 Learning Objectives

This chapter deals with the Roman Civilisation from its origin to decline. Here Roman Empire is discussed in two part that is Early Roman Empire and Late Roman Empire. After reading this chapter, you will be able to know about:

- The origin and growth of early Roman empire cantering at Rome.
- The development of political institution in Roman Empire of early time and administrative apparatus helps the early Roman ruler to rule over the people.
- The soci- economic of the Roman Empire.
- The expansion of Roman Empire and subsequently rise of Constantinople as the head quarter of late Roman empire there by shifting of Roman polity from west to east.
- The religious sects prevailed during Roman empire and the Christianisation of the Roman World, andt the decline of the Roman World.

15.2 Introduction

The vast, but Short lived Empire created by Alexander the Great was partitioned soon after his death. In this situation in the Mediterranean region a new political entity rose

to prominence that is the Roman Empire which became the largest and longest existing empire in antiquity. The centre of the empire lay in Italy in the city of Rome and subsequently it encompassed the entire Mediterranean world.

Rome, a settlement of Latin-speaking people located on the banks of the Tiber River in the central part of Italy, was traditionally supposed to have been founded in 753 BC. Tradition says that Rome had become a republic by 510 BC and ruled by an oligarchy consisting of the wealthy Latin aristocracy of Rome. The government was headed by magistrates, called Consuls, who were elected annually. The oligarchical council or Senate representing assemblies of citizens was the supreme body of the Roman Republic. Subsequently The last hundred years of the republic witnessed the rise of professional army. The segments of this army were controlled by war commanders and were loyal to them rather than the State. These commanders or war lords had regular conflicts with each other and also as a group with Roman State. Large scale use of slave labour was also one of the important features of Roman republic. This unit will deals with the Roman civilisation in two section i.e. Early Roman Empire with its headquarters at Rome and the later Roman Empire centred at Constantinople .

- **The Early Roman Empire: Expansion**

The Roman Republic lasted around 500 years from c. 510 to 27 BC. It was during this period that the city state grew into a huge and powerful empire. The growth came through series of wars and conflicts. The expansion was achieved over a long period of time in two distinct phases. In the first phase of its expansion, from c. 500 to 280 BC Rome was engaged in bringing the entire Italian peninsula under its control. Rome formed alliances with the Latin-speaking people of the area to subjugated the non-Latin states. The conquests of Veii an Etruscan city in 396 BC was a crucial event in the Rome‘s struggle against non-Latin states of central Italy.

But the success was for short period because a little later the Celts invaded Rome and destroyed and plundered the city state. The Romans recovered soon and established their supremacy in warfare and very soon Rome brought large parts of central Italy under her suzerainty. Having consolidating her position in central Italy, Rome turned its attention to Greek states of southern Italy and after some fiercely fought battles these states were subjugated by the Romans. At the end of this phase the entire peninsula was directly or indirectly subject to Rome.

The Second Phase of Roman expansion aimed at extension of Roman hegemony over the Mediterranean. This immediately resulted in a conflict with the Carthaginians who at this time dominated the western Mediterranean. Carthage(in modern Tunisia), strategically located on the north African coastline, was originally a Phoenician trading

settlement which had been founded sometime in the ninth century BC. This had grown into a vast empire which included large parts of the western Mediterranean including Sicily, Spain etc. When Rome tried to annex Sicily after having consolidated its position in southern Italy, it got involved in a prolonged military contest with the Carthaginian empire. For over a century Rome fought a series of wars known as the Punic Wars against the Carthaginians. There were three Punic Wars First Punic War, 264-241 BC; Second Punic War, 218-201 BC; and Third Punic War, 149-146 BC. By the end of the Third Punic War the Carthaginian empire had been completely destroyed and the city of Carthage itself was occupied. The Carthaginian territories which were annexed by Rome were reorganized into Roman provinces.

During this phase the Romans had brought Macedonia and the Greek states under their control. Macedonia became another Roman province and the Greek states were placed under indirect Roman rule, supervised from Macedonia. Soon Roman influence extended to Egypt as well. Egypt was then, ruled by the Ptolemid dynasty, became a Roman protectorate. Western Anatolia too had passed under Roman rule and was constituted as a province. By the middle of the second century BC the entire Mediterranean was under the Romans. The Roman empire continued to expand for more than two centuries after this, but the Mediterranean Sea remained the nucleus of the empire.

- **Political Structure and Society of the Early Roman**

  Political structure of the early Romans Empire was characterised with kingship with the existence of senate and assembly. The senate wielded many powers and there were regular conflicts with the kings. By 510 BC monarchy came to an end at Rome and a republican state was established which lasted till 27 BC. At the beginning of the Republic political power was monopolized by the Roman aristocracy. Now, almost complete power was vested in the Senate an oligarchical council represented by Roman aristocracy.

  The Roman Republic began, according to tradition, in 509 B.C.E., when Lucius Junius Brutus and his allies expelled the last king of Rome, Tarquin the Proud. It is generally said to have ended in 27 B.C.E., when Gaius Julius Caesar Octavianus was granted the title Imperator, or emperor, and became Caesar Augustus.

The Roman government consisted of a series of elected magistrates with authority over specific aspects of Roman life, a Senate council, which was made up of all present and former magistrates, and a number of popular Assemblies who elected magistrates, voted on legislation, and served as a supreme law court. The most important of these assemblies were the Centuriate Assembly and the Tribal Assembly.

- **Social Orders and the Senate**

Roman society during early time was marked by a permanent division of the inhabitants into two orders: the patrician order and the plebeian order. The *patricians* constituted a small close-knit hereditary elite while the *plebeians* were the common people. However both the orderswere included in the category of citizens. A citizen was born a patrician or a plebeian. A plebeian could not become a patrician just by acquiring wealth or political power. For a long time intermarriage between the two orders was prohibited by law. The patricians were the economically, politically and socially dominant group in Roman society. Being born a patrician meant automatic access to wealth, political power and a high social and ritual status. Patricians had extensive control over Roman religion. Many of the important priesthoods remained closedto the plebeians almost till the end of the Republic.

Right since the beginning of the Republic the Senate, which was the main organ of the state, was monopolized by the patricians. Only patrician males could be members of the Senate. The plebeian citizens (and all women) were excluded from it. In the early Republic the Senate had 300 members. In the later Republic the number went up to 600. Membership of the Senate was for life. The Senate had wide-ranging powers, most of which were not formally defined. Theoverwhelming majority of senators were big landowners, it means the Roman Republic was ruled by a landed patrician aristocratic oligarchy.

- **Officials of the Republic**

The highest officials of the Republic were two annually elected magistrates known as Consuls. They presided over the Senate and performed executive, judicial and military functions.The Consuls were elected by an assembly of all the citizens including the plebeians. Till 367 BC only patricians could become Consuls. It was only in 367 BC, that following a prolonged struggle, one of the consulships was thrown open to the plebeians. This provision remained a mere formality for a long time because the patricians controlled the electoral process and could manipulate the choice of candidates. It was only in the late Republic that plebeians actually started getting elected to the consulship. This was the only way in which a plebeian could enter the Senate since a Consul was automatically made a senator. Towards the end of the Republic some privileged plebeians were thus able to become members of the Senate.

Besides the counsels, the Roman Republic had several other elected officials like the magistrates called Censors, who looked after various aspects of governance. They were elected once in every five years and held office for eighteen months at a time.

The Censors also controlled public morality and had the right to take action against any citizen who violated norms of public morality. The Censors had a few additional functions such as leasing out public lands and granting state contracts. In the early Republic only patricians could be elected as Censors. Later, just as in the case of the consulship, plebeians too became eligible for the censorship. Besides the Consuls and the Censors, there were elected numerous junior magistrates, as for example Aediles and Quaestors. Magistrates did not receive any remuneration from the state rather they served on honorary.

Struggle between Patricians and Plebeians

Constant struggle between the landed aristocracy and the common people was the dominant incidents in the history of the early Republic. The root cause of those struggle was concentration of all political power in the hands of patricians and the demand of plebeians for their participation in the political process. Subsequently after a long struggle the plebeians gained some political power because Roman military organization was heavily dependent on the peasants who constituted the main fighting force and the Roman aristocracy had to seek the support of the peasantry for defending the city and subsequently for expansion in Italy. As Rome began to expand, the need to have the support of the peasant soldiers increased. Initially the peasantry derived some minor benefits from this expansion, but it was the patrician aristocracy that was the main beneficiary of the empire. The growth of the empire made the aristocracy wealthy and widened the gap between the rich and the poor. Given the role which the plebeians played in the Roman military structure, they were able to successfully organize themselves to struggle for their demands . In this circumstances the peasantry the aristocrats awarded them some political power. Through these concessions a small section of the plebeians got some share in political power.

- **The Assembly**

The political system of the city of Rome included a tribal assembly which had been in existence since the time of monarchy. The members of this assembly were all male adults of the tribes which originally inhabited Rome. The Roman assembly, i.e. the assembly of all citizens, was called *comitia curiata*. With the set up an oligarchical state by the patricians the tribal assembly ceased to function properly . It continued to exist formally but had no real power.

The *comitia curiata* was organized on the basis of kinship-based social units called *curiae* into which the original inhabitants of Rome were divided. The *curiae* were extended clans which included both patricians and plebeians. During the early Republic the total number of *curiae* was thirty and they were grouped into three tribes. Each tribe contained ten *curiae*. The patricians were able to control the proceedings of the *comitia curiata* by choosing appropriate

presiding officers. Each *curia* voted collectively so that only the opinion of the *curia* as a whole was expressed. Using their kinship ties patricians were able to influence the opinions of the respective *curiae*. They would speak on behalf of the entire *curia*. Most of the citizens were thus reduced to the status of observers. The participation of the bulk of the members graduallybecame so irrelevant that eventually one official representative from each *curia* was sent to attend its sessions and vote on matters placed before it. In view of the in-egalitarian nature of the *comitia curiata* it could hardly be expected that this assembly would reflect the interests of the plebeians.

- ***Comitia Centuriata***

The new assembly formed after the plebeians struggles was called *comitia centuriata*. The *comitia centuriata*, like the *comitia curiata* was an assembly of all Roman citizens. In the *comitia centuriata* the citizens were grouped into centuries'. A century was the smallest unit of the Roman army and was technically supposed to consist of one hundred men though in practice the number might have varied. In the initial stages the *comitia centuriata* resembled a military formation. There were 193 centuries in all and were grouped into five classes. These classeswere constituted on the basis of property qualifications. The largest number of centuries were placed in the first three classes, which were the classes of the aristocracy and the big landowners.In the *comitia centuriata* the century was a theoretical unit. Each century did not have the same number of citizens. The centuries of the first two classes had very few citizens in them. At the other end were the property less citizens, who were labelled as *proletarii*. This class, though numerically very large, was assigned just one century so the participation of the poorer citizensin the assembly had no meaning at all. Since voting in the *comitia centuriata* was by centuries and not on the principle of one man, one vote, the aristocracy and big landowners had more votes even though they were numerically in a minority. The *comitia centuriata* was probably formed around 450 BC. For most of the republican period this was the main assembly of citizens. Consuls and Censors were elected by the *comitia centuriata*, and all legislation had to be approved by it. War and peace were the prerogative of this assembly. The *comitia curiata* now only looked after a few matters of a social and religious nature.

- ***Concilium Plebis***

Besides the *comitia curiata* and the *comitia centuriata*, there was also an assembly consisting only of plebeians known as the *concilium plebis*. The *concilium plebis* discussed issues which concerned the plebeians. Soon this plebeian assembly got institutionalized and evolved its own structure. It had regular procedures and elected its own officials. In 494 BC the plebeians forced the Roman state to formally accept two officers elected by the *concilium plebis*,

known as Tribunes, as spokesmen of the plebeians. The responsibilities of the Tribunes gradually multiplied leading to an increase in the number of officials with this title. By 448 BC there were ten Tribunes. The Tribunes were elected annually by the *concilium plebis*. For the wealthier plebeians this became a much sought after office. Being elected Tribune gave to a plebeian some access to political power, something that was otherwise not possible at the beginning of the Republic.

- **Conflict of the Orders**

In the history of ancient Rome, from 510 to 287 BC was known as the period of conflict of the orders. The recognition accorded to the Tribunes in 494 BC was one important phase in this conflict. After this development there were four other major landmarks in the struggle of the plebeians.

Firstly, one of the foremost demands of the plebeians was that there should be a written code of law so that there was no arbitrary exercise of judicial authority. In the absence of written laws the patricians had consistently abused their judicial powers. The plebeians threatened the Senate that they would not perform military service if it not initiate steps to create a proper legal framework for the Roman state. The Senate set up a ten member commission presided over by Appius Claudius. The commission prepared a set of laws for the Romans. This set of laws is known as the Code of the Twelve Tables. It was introduced in c. 450 BC, around the same time as the establishment of the *comitia centuriata*. The Twelve Tables were the basis of Roman law. Unfortunately, the full text of the Twelve Tables has not survived. This code reduced the scope for arbitrary exercise of judicial authority by the patricians.

The second important development was the provision whereby one of the consulships was opened to the plebeians in 367 BC. Since the Consuls were elected by the *comitia centuriata* and the names of candidates had to be proposed by senators, it was not easy for a plebeian to be elected to the highest magistracy of the Roman state. It was only in the last hundred years of the Republic that plebeians began to regularly hold consulships. These plebeian Consuls became members of the Senate via the consulship. By utilizing this route a handful of senatorial plebeian families rose to prominence in the late Republic .

Thirdly, abolition of *nexum* in 326 BC was a crucial landmark in the struggle of plebians. Roman law had a very harsh provision which related to the strict enforcement of formal contracts or *nexum*. If a Roman entered into a formal agreement or *nexum* while contracting a loan in which the debtor‘s person was pledged as security, failure to honour the agreement resulted in debt bondage. Debts incurred due to frequent participation in wars, as well as to meet diverse economic needs, had made indebtedness a chronic peasant problem. When the peasants and other poor people were unable to repay their loans they were enslaved. *Nexum*

The fourth, and politically the most significant, landmark in the conflict of the orders during the early Republic was a step taken in 287 BC which gave the plebeian Tribunes full-fledged magisterial powers. There seems to have been a serious crisis at this stage which culminated in another threat by the plebeians to withdraw from military service. The political crisis at home coincided with the plan to subjugate the Greek states of southern Italy. By a law of 287 BC the decisions of the *concilium plebis* were made binding on the Roman state. Henceforth the Tribunes were authorized to enforce the decisions of the *concilium plebis* with the full sanction of the Roman state, with appropriate punishments for violation. This legislation greatly increased the clout of the *concilium plebis*. Its decisions had full legal authority. Correspondingly, the tribuneship became a powerful magistracy. The events of 287 BC are supposed to have brought to an end the conflict of the orders. It needs to be emphasized that the Senate—the membership of which remained predominantly patrician—never gave up its preeminent position within the Roman state. It made a few concessions by allowing the assemblies of Roman citizens and the *concilium plebis* to have some say in the affairs of the Roman state. But the Senate retained its overall control over the decision-making process. This gave rise to new contradictions which eventually brought about the end of the Republic.

- **Social Differentiation in Plebeians**

At the beginning of the Republic most of the plebeians had been peasants. By the late Republic the plebeian order had become socially differentiated. A small section of plebeian elite assume power and wealth by using political concessions. They enjoyed almost the same status as the patrician aristocracy. This small section of the plebeians had fully become a part of the ruling oligarchy of Rome by the late Republic and had little in common with the rest of the plebeians and was no longer interested in struggling for the rights of the peasantry.

In the *comitia centuriata* the property less citizens were placed in the single century allotted to the *proletarii*. In between the plebeian elite and the landless class stood the peasantry. The Roman small peasants were called *assidui*. The *assidui* constituted the bulk of the Roman infantry. The abolition of debt bondage in 326 BC had placed restrictions on the enslavement of peasants for non-repayment of loans. However, the peasants continued to lose their landholdings. This situation was further aggravated due to their participation in wars of expansion that went on for many centuries. After 146 BC the struggle of the peasants centred around the question of land reforms. The question of land reform had assumed urgency not only due to the desperate condition of the *assidui* but also because without land peasants were unable to mobilize resources to render military service. Land reforms were unacceptable to the aristocracy. Due to their violent opposition, it was just not possible to carry out any redistribution of holdings.

- **Conflicts and Expansion**

During last hundred years of its existence some unique changes were noticed in the Republic. Creation of a professional army under individual commanders was the most important of those changes. These armies were loyal to their commanders, who in turn taking advantage of loyalty of armies led campaigns and gradually enhanced their powers and wealth. The commanders with increase in their powers entered into conflicts with each other as well as the senate to control the republic. Small land holding poor peasants were the main strength of those professional armies. These soldiers had to arrange their own armaments.

With the passage of time the poor soldiers who constitute bulk of professional armies rebelled against the aristocrats demanding privileges in the Roman society. This resulted in shortage of soldiers because landless citizens could not be made to render military service out of their own resources. In this situation, a partial solution had been found by raising auxiliary contingents from subjugated territories. Later, a portion of the cavalry was also maintained at state expense. In 100 BC changes in the military organization of Rome was brought by inducting paid troops. Roman soldiers now began to receive a salary from the state, this resulted in the creation of a professional standing army which was commanded by military leaders drawn from the aristocracy gave a new dimension to the political conflicts in Rome. Paid soldiers were permanently engaged in campaigns and were stationed for long periods outside Italy in distant parts of the empire.

There were several such commanders in the period between 100 BC and 27 BC: Marius himself, Sulla, Crassus, Pompey, Julius Caesar, Mark Antony and Augustus. The army was increasingly deployed to suppress discontent and to promote the interests of the aristocracy. It was also used in the personal factional conflicts of the aristocracy. Considering that most of the *proletarii* could not afford even subsidized grain the Roman state began to distribute free grain to the most destitute citizens. These impoverished *proletarii* could be easily manipulatedby the aristocracy in their political conflicts.

- **Wars for Expansion**

The above discussed social and political developments at Rome in the late Republic coincided with major military campaigns in West Asia. In order to bring the Hellenistic kingdoms in this region under its control, Rome had been constantly intervening in the affairs of the western Mediterranean region and West Asia. Macedonia had been annexed, the Greek states had been forced to accept Roman supremacy, western Anatolia had been organized as the province of Asia, the Seleucids (who now ruled only over Syria) had been defeated in war, and Egypt was made a protectorate.

- **Struggle of War Lords with the Senate**

The Roman Senate failed to curb the power of Pompey, Julius Caesar and Crassus, because the Senate was unable to exercise complete control over the armies which these warlords commanded. This tussle between the Senate and the warlords created a serious political crisis. During this situation Pompey, Julius Caesar and Crassus formed a coalition in 60 BC to take over the Roman state. This coalition is referred to as the First Triumvirate.. Pompey, Crassus and Julius Caesar tried out a new experiment by concentrating all power in their hands. The entire authority of the Roman state was vested in the Triumvirate. The other institutions of the Republicwere not abolished but they were made ineffective.

Augustus was the supreme ruler of the Roman Empire for four decades till his death in AD 14. He successfully transformed the character of the Republic-a process which had begun as early as 81 BC under Sulla's dictatorship. Augustus was careful not to hurt the sentiments that the people had for Roman republican traditions, hence most of the political institutions of the Republic were retained and the designations of most of the public officials remained the same as before. Augustus himself did not assume any royal title. *Princeps* merely implied first citizen.

The Roman monarchy under the Principate had some very unusual features which were in fact products of the long republican past of Rome. Although Augustus fundamentally alter the nature of the Republic but the final transition to a monarchical form of government was actually completed in a period spread over several generations. For a very long time Augustus and his successors maintained the fiction that the Republic had not come to an end. In theory the authority of the emperor (i.e. *Princeps*) was not derived from any divine right to rule but was based on the consent of the citizens. The ruler was supposed to be the embodiment of the Republic. In practice this meant that a ruler had to have the sanction of the Senate and the army. Unlike most of the other republican institutions which existed only in name, the Senate did retain some authority after 27 BC. Though there were no formal rules about how the emperor was to be chosen, recognition by both the Senate and the army gave the stamp of legitimacy to an emperor and made his rule relatively stable. The three main components of the new political structure were the Emperor, the Senate and the Army. The success of Augustus lay in ensuring that a proper balance of power was maintained between these three components. The stability that he imparted to the new arrangement allowed the Principate to survive for nearly 250 years.

- **Slavery**

Slavery was an important feature of the Greek social formation, however it was in Rome that slavery reached its most extensive development in the ancient world. The Roman aristocracy had acquired vast landed estates in the western portion of the empire i.e in Spain, France and

Italy which opened up new possibilities for the expansion of slavery. The agrarian economy of Western Europe was dominated by the huge landed estates known as *latifundia,* normally several thousand acres in size. The big latifundists possessed holdings amounting to several hundred of thousands of acres. For the farming activities they required huge numbers of labourer, which was filled up by the slaves. War and piracy sustained slave supplies for these estates. It has been estimated that in the Italian peninsula itself the slave population rose from 600,000 to 3 million between 225 and 43 BC. The consolidation of Roman rule in the western provinces under Augustus and his immediate successors led to the extension of agriculture and of slavery in Spain and Gaul. The era of peace and stability ushered in by the Augustan age allowed the Roman ruling class to amass huge fortunes.

Roman law recognized slaves as a form of property and the commonly used term for a slave was *servus*. Slaves were commodities, bought and sold in the market in the same way as cattle. Slave labour was to be found in every sector of the Roman economy. Agriculture, mining, and handicraft production were the sectors in which they were the most numerous. Slaves were also employed as clerks in government offices. The majority of the slaves worked on *latifundia*. Agricultural slaves, as well as slaves engaged in mining, were often bound by chains. The Roman State used force to keep a strict control over the slaves. Special care was taken to disperse them and prevent formation of any solidarity among slaves. They spoke different languages and had no kinship ties. Inspite of the strict control of the state we come across many uprisings and revolts of these slaves. We have evidence for three major slave revolts. The first (136-132 BC) took place in Sicily. One of the most serious of slave revolt took place in around 73-71 BC called Spartacus revolt which started in Capua near modern Naples. All these were ruthlessly suppressed. In no society throughout human history did the use of slaves attain the same magnitude as in ancient Rome.

- **The Late Roman Empire**

After the death of Julius Caesar in 44 B.C. it took Octavian around 13 years of struggle and war to defeat his rivals. In 31 BC he managed to emerge as ruler of Rome. It was difficult for him to crown himself as monarch in view of traditions of the republic. Instead of assuming the control through exalted titles he called himself *Princeps* or the first citizen. Not to annoy the senators he continued to maintain most of the institutions of the republic but appointed his chosen men to important positions. He assumed the control of provinces and got delegates appointed by senate to govern them. The senate honoured him with the title of *Augustus* ‗the revered'. He ruled over Rome for four decades till his death in 14 A.D. During his rule Augustus concentrated all powers in his hands and took approval of the senate only as a formality. Augustus inaugurated a long and glorious era of peace and stability lasting around 200 years which was defined by the term of *Pax Romana* i.e. the Roman peace.

The existing Roman institutions and structures were not completely removed. Most of the civil and judicial institutions continued to co-exist with the new structures for a long time. However the army was completely under the control of the new rulers. In the subsequent paragraphs, we will look into the state, society and economy of the late Roman Empire.

- **Roman State**

As discussed earlier till 180 A.D. the practice of naming the successor started by Nerva continued. During this period the expansion of the Roman territories was witnessed along with the strengthening of the monarchy as an institution. From the end of the 2nd century the army began to play a crucial role in the selection of emperor and was playing an assertive role. The situation continued for almost next hundred years. The relationship between the senate and army gradually weakened and ultimately broke down. Till the middle of the third century AD the Roman state remained *theoretically* a republic. The people were supposed to have delegated their authority to the emperor who ruled on their behalf. In actual practice the emperor was selected from among the oligarchy. The hereditary principle remained very weak and there were very few dynastic successions. The monarchy was essentially *elective* in nature, where the Emperor was elected by the authority of the senate, and the consent of the soldiers. Although the institution of monarchy survived and was strengthened in the centuries following the death of Augustus, it was marked by considerable instability. The proportion of emperors who were assassinated was very high. Several rulers had very short reigns and there were frequent wars of succession.

- **Kingship in the Late Roman Empire**

With the division of Roman Empire into two territorial parts-one was known as Western part and the second as Eastern. The monarchy of late Roman Empire was firmly rooted in the eastern provinces. In this region the emperor could exercise unrestricted authority without caring about the western aristocracy. Diocletian spent most of his time in eastern part of the empire and he made his capital the city of Nicomedia near the Black Sea in northern Anatolia. Maximian was the ruler of Italy and he stayed at Milan rather than at Rome to avoid the interference of the senate and the army in his administration. Now the Emperors were decided by factional struggles between military commanders. The senate had become a defunct institution. In the late Roman Empire most of the emperors came from Danubian - Balkan region of Europe because, the Danubian and Balkan provinces supply soldiers for Roman army and become traditional reservoir of professional soldiers and officers for the army.

In the later Roman Empire Diocletian was the first emperor who organised the state on monarchical pattern and Diocletian‘s traditions of monarchical system continued for next hundred years. In the beginning the emperors of the Roman Empire did not adopt any royal title nor did they wear any crown and splendid dress to show their imperial status. Diocletian finally

abolished the traditions of republic and started the traditions of Hellenistic emperors. He presented himself as a divine monarch. He began to wear splendid beautiful royal dresses. He also started to place a crown on his head. He adopted the royal title as *dominus et deus* (divine lord and master). He introduced new ceremonies in the court to maintain the dignity and authority of the monarch and built a magnificent palace at Salonae (modern Yugoslavia) where he lived after his retirement. In this manner he started the era of pomp and splendour of monarchical tradition. The glorification of the emperor and his military abilities became permanent characteristics of a Roman emperor. The ordinary citizens were reminded of their victorious campaigns in various ways on a regular basis. Senate at Constantinople

Senate was a very powerful body to run the administration of Roman republic and in the era of Roman emperor also. But after the emergence of absolute monarchy in the reign of Diocletian and Constantine I, it had become a defunct political body. Although Constantine established parallel senate in Constantinople this senate was constituted from the members of provincial elites of the east. It had no legislative powers and it was totally submissive to the emperor. It had mainly municipal role in Constantinople.

- **Army**

Army was an important component of the Roman state since beginning. Roman army was the key factor in the expansion and protection of the Roman Empire and it was headed by the emperor. In the era of emperors the Roman state had become the strongest military power of its time. The army was regularly deputed by various emperors in the border provinces to protect its territory against the non-Roman World especially against the Parthians in the east and the Germanic tribes on the Rhine and Danube. The soldiers of Roman republic used to stay away from their homes when they were in the battlefields and often they lost their property at home too. After the downfall of Republic, the soldiers were being used for political advancement by the army generals. From the first century A.D. It was Augustus whoallotted the land to thousands of soldiers. Such measures created discipline and loyalty in the army and helped to convert the army into a permanent and professional force.

The command of the military was in the hands of *magister equitum* and below them were the *duces* of the *limitanci* and the *comites* of the *comitatness*, all possessing commands which were exclusively military. In the reign of Valitine I forts and camps were constructed with a rational lay out. In the reign of Constantine the army was again expanded. He created new cavalry and infantry units. He also built up its strategic reserves. By the end of the 4th century A.D. the army‘s strength of Roman state went up to nearly 650,000. In this way the later Roman Empire was a powerful state with vast military political and ideological superstructures.

- **Civil Administration**

In the later empire the career in the civil services was built up around a pyramidal

hierarchy of bureaucrats. The rulers were the head of officials. The officials were being called magistrates and they were also heads of various departments. The officials were supposed to remain standing in the presence of their sovereign. Many changes were introduced in the administration after the partition of the empire. The creation of a second capital at Constantinople caused two senates to come into being, and a double set of certain posts, such as the prefecture of the city and the presidency of the senate. Most of the officials were nominated separately by both the emperors from the year A.D 396 onwards. Every metropolis was to have its own police, corn supply, and judicial system, and each had its practors (annually elected magistrates) and quaestors (magistrate working as paymaster or state treasurer).

- **Judicial System**

The Roman civil law was the basis of the Roman imperial state. The principate raised Roman jurists to official positions within the state when Augustus selected prominent jurist as advisers and conferred imperial authority on their interpretations of the law. The emperors, on the other hand, made the legislations by edicts and introduced new rules bringing some modifications in the traditional law. Under Diocletian all justice was exercised in the emperor's name and administered by his officials in the provinces by the *praesides* and in the capital cities by the *praefectus Urbi*.

The civil law protected the interests of the rich classes and had provided the guarantee of property right to these classes from the very beginning. The criminal law was essentially designed for the lower classes and remained as arbitrary and repressive. Under Constantine criminal law became exceptionally severe. Severe criminal laws were formed by the Roman ruling class to take action against various Christian sects which had been declared heretical sects. Despite all these shortcomings, the Roman Empire produced the great systematization of civil jurisprudence in the 3rd century. However, it was only in the 6th century that a codification was carried under the emperor Justinian. His *Corpus Juris Civilis* (Body of civil laws) became the foundation for the legal system which were subsequently devised throughout Europe.

- **Economy of Late Roman State**

Reorganisation of Roman state in the 4th Century A.D. produced a temporary growth in the urban development and restored monetary stability with the issue of gold coins. The urban growth was largely concentrated in new military and administrative centres. This growth was patronized by the emperors. Milan, Sardica and Constantinople became important urban centres in the late Roman Empire.

Roman Empire, there was a gradual ruralisation of the Empire. But in rural areas far-reaching changes were taking place and new mode of production began to come into existence. In the early Roman empire the slave mode of production was connected to a system of political and military expansion. Now the imperial frontier had ceased to advance in the late Roman Empire. The slaves therefore were converted by landowners into dependent tenants to the soil. The

villages of smallholders and free tenants lost their independent character to the landlords in the search for protection against fiscal extortions and conscription by the state and their economic position had become like ex-slaves.`Social Structure

- **Upper Classes**

The wealthy classes of the late Roman Empire were known as *equestrian*. Members of this class were settled for business reasons in imperial headquarters and provincial towns and occupying magistracies and priesthoods in their cities and providing commanders of the army. In the late Roman Empire the equestrians were faithful adherents of the emperors and they were being appointed on the prominent positions of civil administration and military by the emperors. The wealthy plebeians and freedmen made attempts to attain equestrian status, or they tried to acquire the right to display the outward signs of equestrian rank, such as the use of _gold ring‘. There were other social groups who had higher social status, but they had not attained the membership of equestrians. They were owners of lands, shopkeepers, entrepreneurs, traders and high-grade employees. They lived in Rome, other towns of Italy and provincial cities.

- **Lower Classes and Slavery**

The lower classes in the late Roman empire consisted of such men who provided the services to the higher classes. The peasants were the biggest such group. Potters, teachers, entertainers and prostitutes may be included among them. There were also the free labourers, whose numbers were also quite high. They were hired for the construction of buildings and manual work. While the upper classes expanded the enhanced taxation and burden of providing them fell on the peasantry. The peasantry tried to escape to army, church, and as workmen into cities. This created an unprecedented shortage of farm labour.

There were also skilled workers, such as bakers, silversmiths, wool workers. These workers belonged to trade associations or *collegia*, which possessed social, religious and sometimes quasi - political functions, as well as providing organisation for the business with which they were concerned. The trade guilds were also active in their cities.

The condition of the lower classes was transformed when the economic position of the empire worsened in the late Roman Empire and the government became more autocratic. Hereditary system was introduced in many profession by the late Roman emperors. This system became a general feature of the ordering of society. To keep various professions going they were gradually transformed into caste membership from father to son.

- **Religion in the Late Roman Empire**

The Roman Empire since the beginning had a tradition which was tolerant towards various cults and sects. In the late Roman Empire new religions like Judaism and Christianity got introduced to the Romans. Of these Christianity after initial hostility got wider acceptance in the whole Roman World. In this section we will look into various Religious traditions in the Roman Empire and the spread of Christianity.

- **The Early Religious Sects**

In the early Roman phase there were various deities, goddesses and gods which were being worshipped by the Roman elites and common people. The supreme deity of the city of Rome was Jupiter who was regarded as the king of gods. Mars was also another important deity

- **Judaism**

Judaism and Christianity originated in the region which at present constitutes Palestine and Israel in West Asia. Before the emergence of Christianity the Judaism was the major religion of this region and Judaism provided the fertile ground for the birth of Christianity. Judaism is a very old religion of the World. The story of its origin is contained in the *Book of Genesis*. This book is a part of the Old Testament of the Bible.

The Judaism had begun with the movements of Western Semitic tribes in West Asia. The Judaism was founded during the course of a migration of tribes led by Abraham. These people travelled from Mesopotamia to Syria-Palestine and they were known as Israelites. They believed in the existence of one true god Yahweh. It is understood that Abraham made an agreement with Yahweh to give up the worship of idols andof all deities. The period is dated around 1800 B.C. Till eighth century B.C. the Judaism had become a monotheistic religion of West Asia with substantial number of followers.

- **Decline of the Roman Empire.**

The Western Roman Empire entered into a cycle of decline. Factors like frequent military seizures of power and the barbarian invasions accelerated the process of decline. In AD 330 the centre of the empire moved from Italy to the Greek-speaking city of Byzantium, from where the rulers found it difficult to control the west, and soon rival emperors ruled each half. Meanwhile, the fringes of the empire, like Britain, passed out of Roman control. Emperors sought to hang on to the rest by bribing barbarian Germanic tribes who settled inside the frontiers. But as the barbarian leaders became Romanised they aspired to the power of the Roman rulers and resorted to the traditional Roman means of achieving it thorough conquest. In 476 AD, the last Western Roman Emperor was deposed and the Western Roman Empire was no more. Its lands in Italy were conquered by the Ostrogoths, Spain was conquered by the Visigoths, North Africa was conquered by the Vandals, and Gaul was conquere.

The continued impoverishment of the peasants and discontent among the less wealthy inhabitants of the provincial cities led to _savage clashes between rival factions in all the cities of the empire‘. In the early 7th century eastern Roman empire was under attack by Persian and then Arab-Islamic armies in Syria and Egypt, and by Slav peoples in the Balkans. It was reduced to a rump consisting of Constantinople itself and partof Asia Minor, with a few towns, a much reduced population in the capital, and a general decayin the level of literacy and learning. The fundamental weakness of Byzantine civilisation was shown early in the 13th century when Constantinople fell to a band of thugs and adventurers from Europe. The participants in the Fourth Crusade found the city a better prize than their intended destination of Jerusalem. They pillaged it and then ruled it as a feudal kingdom. They were driven out in 1261, but the renewed Byzantine state was a pale reflection of its former self and finally fell to the Ottoman Turks in 1453.

15.6 Summary

- The major expansion of the Early Roman time took place over a long period of time with first phase upto 280 BC and the second till the middle of the 2nd century BC. Fresh campaigns for expansion in West Asia and Africa took place in the later part.
- We come across the political structure and social organisation in the Early Romanempire. The social orders, the Senate and the Assembly was analysed. The conflict of social orders led to the empowerment of the plebeians in Roman society.
- We noticed that the rise of a professional army influenced the course of history of the lastcentury.
- Large scale use of slaves in all sectors of the economy was another significant feature of the Roman republic. Roman civilization was so critically dependent upon slave labour that when the supply of slaves declined by the end of the second century AD, the economy began to face serious problems. These economic problems coincided with a political crisis which eventually resulted in the decline of the early Roman empire itself.
- In subsequent period of early Christian era the mighty Roman Empire was divided into Eastern and Western parts. The political base of the empire was shifted to eastern part centred at Constantinople.
- The late Roman state was an absolute monarchical state. The Roman emperor was a sovereign authority and was considered as divine representative of the god. The

Roman emperors were also the symbol of deities. The components of state like senate, army, civil bureaucracy and judicial apparatus was controlled by the patrician elite.

- The decentralization of the administration was experimented toward the end of 3rd century A.D. under the joint rule of Diocletian and Maximian. The Roman Empire still largely depended on slave mode of production and it extracted the surplus production of slave labour with the help of slave masters.

15.7 Key Terms

Aediles: An elected official of ancient Rome who was responsible for public works and games and who supervised markets, the grain supply, and the water supply

Aristocracy: Government by a relatively small privileged class or by a minority consisting ofthose felt to be best qualified to rule.

Assidui: The Roman small peasants

Celts: A group of peoples that occupied lands stretching from the British Isles to Gallatia

Collegia: Hereditary state guilds.

Coloni: These were small farming settlements.

Comitatness: The *comitatenses* and later the palatini were the units of the field armies of the lateRoman Empire.

comitia centuriata: Ancient Roman military assembly, instituted c. 450 BC.

comitia curiata: The earliest Roman assembly that was based on kinship units known as curiae.

concilium plebis: The principal popular assembly of the ancient Roman Republic.

Consuls: The highest elected office of the Roman Republic and an appointive office under the Empire.

Curiales: In Ancient Rome, the curiales were initially the leading members of a town councils in Roman Republic..

Decuriones: Magistrates in the provincial municipia of the Roman state corresponding to the senate at Rome.

Latifundia: A great landed estate, especially of the ancient Romans.

Pax Romana: The era of Roman peace and prosperity during Emperor Augustus.

Peculium: Roman law property that a father or master allowed his child or slave to hold as his own.

15.7 Self Assesment Questions

1. Write a brief note on the expansion of Roman empire in the early phases.
2. Who were patricians? How they managed to dominate plebeians in Roman Society?
3. How was *Comitia Centuriata* different from *Comitia Curiata*?
4. Discuss the four major achievements of the conflict of the orders.
5. Discuss the process of the rise of a professional army. How it affected the Roman republic.
6. Write a short note on the institution of slavery in the Roman republic.
7. Discuss in brief the extent of the Roman Empire till the 3rd century A.D.
8. Give a brief account of the State and administration in the late Roman Empire.
9. What was the position of lower classes and slaves in the Roman Society?
10. Discuss the process of establishment and spread of the Christianity in the Roman Empire.
11. Write short notes on:
    a) Army of the Romans
    b) The religious sects before the establishment of Christianity in Roman Empire.

15.8 Further Readings

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UNIT-16

SOCIO-POLITICAL AND ECONOMIC HISTORY OF PERSIAN CIVILISATION

STRUCTURE

16.1 Learning Objectives

The chapter deals with the ancient Persian or Achaemenid Empire. The Achaemenids created the first Iranian world Empire extended over a vast mass of land in Europe and Asia. Theobjectives of this unit are to

- Make you aware about the history of ancient Persia or Iran.
- Discuss the role of emperor of Persia for the expansion of the Empire and the political establishment of the Empire.
- Give a sketch of economy, trade and commerce, society and Zorastian religion prevailed during Persian Empire, and
- Assess the achievements of Achaemenids in the sphere of art and architecture and theirlegacy for the mankind.

16.2 Introduction

In Persia the Medes build the first empire. But the Achaemenids, created the first Iranian world empire. Within a short span of replacement of Median rule by Achaemenid rule, the region of Parsa in Iran become the nucleus of a vast empire which included most of West Asia, Anatolia

and Egypt. Parsa, which more or less corresponds to the province of Fars in modern Iran, was called Persis by the ancient Greeks. Since Parsa or Persis was the homeland of the Achaemenids, their empire came to be known as the Persian empire. Thus in antiquity the place of origin of the Achaemenids was adopted as the name for the entire Iranian plateau by the Greeks and subsequently by other peoples as well.

In this chapter we will study some of the important aspects of this civilisation such as rise of Median Empire in Iran and subsequent establishment of the Achaemenid Empire, the expansion and consolidation of this extensive empire under the prowess of its great rulers. The mechanism of decentralized governance adopted in the administrative machinery and the system of control on the extensive territories was one of the major achievements. We will study the growth of language and means of communication and development of a common language in such a heterogeneous region. The chapter also throw light on the economic and social aspect such as agriculture, monetization, industrialisation, moral and manner as well as science and art of the empire covering vast territories. We will also discuss growth of a new religion and tradition of religious tolerance a unique achievement during this age. Finally, the lesson will analyse the factors led the downfall of this mighty empire.

- **The Origin of Persian Empire: The Medes and Achaemenid**

In the latter half of the second millennium BC, large number of new tribes, especially those belonging to the Indo-Iranian or Indo-Aryan branch of the Indo-European people, moved into Iran. By about the eighth century BC these tribes were dispersed throughout Iran including parts of present-day Afghanistan completely altering the linguistic character of the lands lying between the Zagros mountains in the west and the Hindukush mountains in the east, and between the Caspian Sea in the north and the Persian Gulf in the south. By the seventh century BC Iran had acquired a high degree of linguistic and cultural uniformityMany of the Iranian tribes had given up their nomadic lifestyle and adopted a settled life. Different parts of Iran came to be associated with specific tribal groups. The Medes were settled in the area lying south-west of the Caspian Sea; the Persians in the region of Fars, i.e. south- western Iran; the Parthians east of the Caspian Sea; and the Bactrians north of the Hindukush. Apart from their linguistic affinity, these tribal groups also shared many cultural and religious traditions. In sixth century BC the rise of Zoroastrianism further strengthened the link between the Iranian tribes.

The Iranians exploited natural resources of the region more efficiently and developed a new pattern of subsistence based on animal husbandry and better utilization of water resources. The Media specialized in horse-rearing. Rearing of the double humped camel became an important feature of the Bactrian economy. Goats and sheep were reared in arid and semi-arid zones. This specialized animal husbandry was combined with traditional cattle-rearing. The important fact is that horses and camels played a significant role in the growth of the Iranian economy at this stage. They helped to expand trade and exchange both by facilitating travel and

bringing commodities for exchange. Horses and camels increased the overall mobility of the tribes. In the case of the Medes, horses ensured their initial economic and military superiority, without which they could not have created an empire. In agriculture the Iranians initiated new irrigation techniques such as underground canal to optimize the use of water. An extensive network of such canals was created in the entire region. The construction of such a network required greater cooperation within and among the agrarian communities, which in turn led to the growth of a more complex social and economic organization.

For a brief period the Medes suffered a setback, when their kingdom was conquered by a nomadic people called the Scythians, which was lasted from c. 652-625 BC. In c. 625 BC Cyaraxes eliminated the Scythian chiefs and re-established the Median state.

- **Expansion and Consolidation of the empire**

In a successive line the Achaemenid dynasty produced few greatest rulers of that time. The territorial expansion and consolidation of the Persian empire was accomplished with in a period of more than fifty years under the mighty arms of three great rulers. However, Cyrus the great and Darius I stand out as the key figures in the process of expansion and consolidation.

- **Cyrus**

With the establishment of Achaemenid rule over Persia, Cyrus, the great continued with many of the features of the Median state. In the initial years Cyrus united the Median and Persian tribal confederacies, owing to the active support which Cyrus had received from a section of the Median aristocracy in the struggle against Astyages, he allowed the Median elite to have a share in political power. The Median aristocracy was continued to perform various functions in the new Achaemenid state. Gradually, the Persian element became more pronounced in the administrative apparatus of the empire, the state became more centralized and monarchy as an institution became more powerful.

- **Cambyses**

Cyrus died in 529 BC while on a military expedition. He was succeeded by his son Cambyses (Kambujiya), 529-522 BC. Not much is known about the brief reign of Cambyses, except that he was mainly preoccupied with campaigns in Egypt. Under Cambyses Egypt was added to the Achaemenid empire. He invaded Egypt c. 525 and quickly defeated the Egyptian ruler Psamtek III, who belonged to the XXVIth Dynasty of Egypt, also called the Saite dynasty after Sais which was the place of origin of the dynasty. The Saite dynasty was already on the verge of collapse due to internal problems. This might account for the ease with which Cambyses conquered Egypt.

Cambyses is supposed to have undertaken a series of military expeditions into some of the areas surrounding Egypt proper. Most of these expeditions seem to have ended disastrously. These setbacks undermined his position in Iran itself. The last days of Cambyses are shrouded in

mystery but the available evidence indicates that he was faced with revolts in his homeland. The long absence of the king from Iran and reports of his military failures must have encouraged these revolts. On his way back to Persia he learned that a usurper had seized the throne and was being supported by widespread revolution. From that moment he disappears from history; tradition has it that he killed himself. Cambyses died in 522 BC while still in the midst of dealing with the upheaval. It is clear that there was a conspiracy by some of the prominent Achaemenid officials; leader of this conspiracy was Darius I (Darayavaus). The coup was successful and Darius I became the ruler of the Achaemenid empire in 522 BC.

- **Darius I**

Darius I (522-486 BC) was the son of Hystaspes (Vishtaspa), who was a leading Persian official, probably a provincial governor. Hystaspes was descended from a collateral branch of the Achaemenids. It was this branch which ruled from 522 BC onwards. Darius I was the most outstanding of the Achaemenid rulers. Under him the extensive territories acquired by Cyrus and Cambyses were systematically organized to create a stable empire. Till about 519 BC Darius was engaged in restoring order and reasserting Achaemenid authority in regions which were in rebellion.

- **The empire**

At its greatest extent, under Darius, the Persian Empire included twenty provinces or "satrapies," embracing Egypt, Palestine, Syria, Phoenicia, Lydia, Phrygia, Ionia, Cappadocia, Cilicia, Armenia, Assyria, the Caucasus, Babylonia, Media, Persia, the modern Afghanistan and Baluchistan, India west of the Indus, Sogdiana, Bactria, and the regions of the Massagetae and other central Asiatic tribes. Never before had history recorded so extensive an area brought under one government.

- **The king**

The life of Persia was political and military rather than economic; its wealth was based not on industry but on power; it existed precariously as a little governing isle in an immense and unnaturally subject sea. The imperial organization that maintained this artefact was one of the most unique and competent in history. At its head was the king, or Khshathra i.e., warrior; the title indicates the military origin and character of the Persian monarchy. Since lesser kings were vassal to him, the Persian ruler entitled himself "King of Kings," and the ancient world made no protest against his claim; the Greeks called him simply *Basileus-The King*. His power was theoretically absolute; he could kill with a word, without trial or reason given, after the manner of some very modern dictator; and occasionally he delegated to his mother or his chief wife this privilege of capricious slaughter. Few even of the greatest nobles dared offer any criticism or rebuke, and public opinion was cautiously impotent. The court was overrun with eunuchs who, from their coins of vantage as guards of the harem and pedagogues to the princes, stewed a

poisonous brew of intrigue in every reign. The king had the right to choose his successor from among his sons, but ordinarily the succession was determined by assassination and revolution.

- **The nobles**

The royal power was limited in practice by the strength of the aristocracy that mediated between the people and the throne. Many of the nobles attended court, and served as a council for whose advice the monarch usually showed the highest regard. Most members of the aristocracy were attached to the throne by receiving their estates from the king; in return they provided him with men and materials when he took the field. Within their fiefs they had almost complete authority levying taxes, enacting laws, executing judgment, and maintaining their own armed forces.

- **The army**

The real basis of the royal power and imperial government was the army. The obligation to enlist on any declaration of war fell upon every able-bodied male from fifteen to fifty years of age. When the father of three sons petitioned Darius to exempt one of them from service, all three were put to death; and when another father, having sent four sons to the battlefield, begged Xerxes to permit the fifth son to stay behind and manage the family estate, the body of this fifth son was cut in two by royal order and placed on both sides of the road by which the army was to pass. The troops marched off to war amid the blare of martial music and the applause of citizens above the military age. It conquered by mere force of numbers, by an elastic capacity for absorbing casualties; it was destined to be overthrown as soon as it should encounter a well-organized army speaking one speech and accepting one discipline.

- **Persian Law**

In such a state the only law was the will of the king and the power of the army; no rights were sacred against these, and no precedents could avail except an earlier decree of the king. For it was a proud boast of Persia that its laws never changed, and that a royal promise or decree was irrevocable. In his edicts and judgments the king was supposed to be inspired by the god Ahura-Mazda himself; therefore the law of the realm was the Divine Will, and any infraction of it was an offense against the deity.

- **The capitals**

With these laws and this army the king sought to govern his twenty satrapies from his many capitals originally Pasargadae, occasionally Persepolis, in summer Ecbatana, usually Susa; here, in the ancient capital of Elam, the history of the ancient Near East came full circle, binding the beginning and the end. Susa had the advantage of inaccessibility, and the disadvantages of distance; Alexander had to come two thousand miles to take it, but it had to send its troops fifteen hundred miles to suppress revolts in Lydia or Egypt. Ultimately the great roads merely paved the way for the physical conquest of western Asia by Greece and Rome, and the theological conquest of Greece and Rome by western Asia.

- **The Satrapies**

The empire was divided into provinces or satrapies for convenience of administration and taxation. Each province was governed in the name of the King of Kings, sometimes by a vassal prince, ordinarily by a satrap (ruler) royally appointed for as long a time as he could retain favour at the court. To keep the satraps in hand Darius sent to each province a general to control its armed forces independently of the governor; and to make matters trebly sure he appointed in each province a secretary, independent of both satrap and general, to report their behaviour to the king. As a further precaution an intelligence service known as The King's Eyes and Ears might appear at any moment to examine the affairs, records and finances of the province

- **Persian life and industry**
- **The people**

Persia itself, which was to rule these forty million souls for two hundred years, was not at that time the country now known to us as Persia and to its inhabitants as Iran; it was that smaller tract, immediately east of the Persian Gulf, known to the ancient Persians as Pars, and to the modern Persians as Pars or Farsistan. Composed almost entirely of mountains and deserts, poor in rivers, subject to severe winters and hot, arid summers, it could support its two million inhabitants only through such external contributions as trade or conquest might bring. Its race of hardy mountaineers came, like the Medes, of Indo-European stock perhaps from South Russia; and its language and early religion reveal its close kinship with those Aryans who crossed Afghanistan to become the ruling caste of northern India. Darius I, in an inscription at Naksh-i-Rustam, described himself as "a Persian, the son of a Persian, an Aryan of Aryan descent." The Zoroastrians spoke of their primitive land as Airyana-vaejo "the Aryan home." Strabo applied the name Ariana to what is now called by essentially the same word Iran.

The Persians were apparently the handsomest people of the ancient Near East. The monuments picture them as erect and vigorous, made hardy by their mountains and yet refined by their wealth, with a pleasing symmetry of features, an almost Greek straightness of nose, and a certain nobility of countenance and carriage. They adopted for the most part the Median dress, and later the Median ornaments. They considered it indecent to reveal more than the face; clothing covered them from turban, fillet sandals or leather shoes. Triple drawers, a white under-garment of linen, a double tunic, with sleeves hiding the hands, and a girdle at the waist, kept the population warm in winter and hot in summer. The king distinguished himself with embroidered trousers of a crimson hue, and saffron-buttoned shoes.

- **The peasants**

The common man was illiterate, and gave himself completely to the culture of the soil. The Zend-Avesta exalted agriculture as the basic and noblest occupation of mankind, pleasing above all other labours to Ahura-Mazda, the supreme god. Some of the land was tilled by peasant

proprietors, who occasionally joined several families in agricultural cooperatives to work extensive areas together. Part of the land was owned by feudal barons, and cultivated by tenants in return for a share of the crop; part of it was tilled by foreign slaves. Oxen pulled a plough of wood armed with a metal point. Artificial irrigation drew water from the mountains to the fields. Barley and wheat were the staple crops and foods, but much meat was eaten and much wine drunk. One intoxicating drink, the haoma, was offered as a pleasant sacrifice to the gods, and was believed to engender in its addicts not excitement and anger, but righteousness and piety.

- **The Imperial Highways**

Industry was poorly developed in Persia; she was content to let the nations of the Near East practice the handicrafts while she bought their products with their imperial tribute. She showed more originality in the improvement of communications and transport. Engineers under the instructions of Darius I built great roads uniting the various capitals; one of these highways, from Susa to Sardis, was fifteen hundred miles long. The roads were accurately measured by *parasangs* (3.4 miles); and at every fourth parasang, there are royal stations and excellent inns, and the whole road is through an inhabited and safe country. At each station a fresh relay of horses stood ready to carry on the mail, so that, though the ordinary traveller required ninety days to go from Susa to Sardis, the royal mail moved over the distance as quickly as an automobile party does now that is, in a little less than a week.

The larger rivers were crossed by ferries, but the engineers could, when they wished, throw across the Euphrates, even across the Hellespont, substantial bridges over which hundreds of sceptical elephants could pass in safety. Other roads led through the Afghanistan passes to India, and made Susa a half-way house to the already fabulous riches of the East. These roads were built primarily for military and governmental purposes, to facilitate central control and administration; but they served also to stimulate commerce and the exchange of customs, ideas, and the indispensable superstitions of mankind.

- **Trade and finance and System of Coinage**

Commerce was for the most part abandoned to foreigners such as the Babylonians, Phoenicians and Jews; the Persians despised trade, and looked upon a market place as a breeding-ground of lies. The wealthy classes took pride in supplying most of their wants directly from their own fields and shops, not contaminating their fingers with either buying or selling.

Payments, loans and interest were at first in the form of goods, especially cattle and grain; coinage came later from Lydia. Darius issued gold and silver "darics" stamped with his features, and valued at a gold-to-silver ratio. This was the origin of the bimetallic ratio in modern currencies.

- **Religion**

The fast expansion of the Persian Empire brought a large number of territories inhabited by people of different faiths and beliefs. The attitude of the Achaemenid state was open towards them. The Achaemenid state had a well deserved reputation for religious tolerance. Although by the time of Darius I, Zoroastrianism had become the dominant creed of the Persian elite, the religious traditions of the several communities which inhabited the empire continued to thrive. This was a key element of Achaemenid policy towards the conquered people‘s right since the time of Cyrus the Great. Cyrus definitely seems to have protected local cults as is apparent from his support to the Jews. He also helped to rebuild some of the sacred shrines of the Babylonians, for example the temple of the moon-god at Ur.

- **Zarathustra: The Prophet**

Persian legend tells how, many hundreds of years before the birth of Christ, a great prophet appeared in Airyana-vaejo, the ancient "home of the Aryans." His people called him Zarathustra; but the Greeks, who could never bear the orthography of the "barbarians" patiently, called him Zoroastres.

- **Persian Religion Before Zarathustra**

The Greeks accepted Zarathustra as historical, and honoured him with an antiquity of 5500 years before their time. Modern historians, when they believe in his existence, assign him to any century between the tenth and the sixth before Christ. When he appeared, among the ancestors of the Medes and the Persians, he found his people worshiping animals, ancestors, the earth and the sun, in a religion having many elements and deities in common with the Hindus of the Vedic age. The chief divinities of this pre-Zoroastrian faith were Mithra, god of the sun, Anaita, goddess of fertility and the earth, and Haoma the bull-god who, dying, rose again, and gave mankind his blood as a drink that would confer immortality; him the early Iranians worshiped by drinking the intoxicating juice of the haama herb found on their mountain slopes.

- **Avesta and Ahura-Mazda**

The sacred text of the new faith was the collection of books in which the disciples of the Master had gathered his sayings and his prayers. Later followers called these books Avesta; known to modern world as the Zend-Avesta. The present book that survive, is a small fraction of the revelation vouch to Zarathustra by his god and contain a confused mass of prayers, songs, legends, prescriptions, ritual and morals, brightened now and then by noble language, fervent devotion, ethical elevation, or lyric piety

- **Marriage**

Matches were arranged by the parents on the arrival of their children at puberty. The range of choice was wide, for we hear of the marriage of brother and sister, father and daughter, mother and son. Concubines were for the most part a luxury of the rich; the aristocracy never went to war without them. In the later days of the empire the king's harem contained from 329 to 360 concubines, for it had become a custom that no woman might share the royal couch twice unless she was overwhelmingly beautiful.

- **Women**

The position of woman in Persia was high, as ancient manners went: she moved in public freely and unveiled; she owned and managed property, and could, like most modern women, direct the affairs of her husband in his name, or through his pen. After Darius her status declined, especially among the rich. The poorer women retained their freedom of movement, because they had to work; but in other cases the seclusion always enforced in the menstrual periods was extended to the whole social life of woman. Upper-class women could not venture out except in curtained litters, and were not permitted to mingle publicly with men; married women were forbidden to see even their nearest male relatives, such as their fathers or brothers. Women are never mentioned or represented in the public inscriptions and monuments of ancient Persia. Concubines had greater freedom, since they were employed to entertain their masters' guests. Even in the later reigns women were powerful at the court, rivalling the eunuchs in the persistence of their plotting and the kings in the refinements of their cruelty.

- **Children**

Children as well as marriage were indispensable to respectability. Sons were highly valued as economic assets to their parents and military assets to the king; girls were regretted, for they had to be brought up for some other man's home and profit. The king annually sent gifts to every father of many sons, as if in advance payment for their blood. Abortion was a worse crime than the others, and was to be punished with death. One of the ancient commentaries, the Bundahish, specifies means for avoiding conception, but warns the people against them.

- **Persian ideas of education**

The child remained under the care of the women till five, and under the care of his father from five to seven; at seven he went to school. Education was mostly confined to the sons of the well-to-do, and was usually administered by priests.

- **Science and Art**
- **Medicine**

Medicine was at first a function of the priests, who practised it on the principle that the Devil had created 99,999 diseases, which should be treated by a combination of magic and hygiene. They resorted more frequently to spells than to drugs, on the ground that the spells,

though they might not cure the illness, would not kill the patient which was more than could be said for the drugs. Nevertheless, lay medicine developed along with the growing wealth of Persia, and in the time of Artaxerxes II there was a well-organized guild of physicians and surgeons, whose fees were fixed by law according to the social rank of the patient. Priests were to be treated free. And just as, among ourselves, the medical learner practises for a year or two, as interne, upon the bodies of the immigrant and the poor, so among the Persians a young physician was expected to begin his career by treating infidels and foreigners.

- **Minor arts**

Having dedicated themselves to empire, the Persians found their time and energies taken up with war, and depended largely upon imports for their art. They had a taste for pretty things, but they relied upon foreign or foreign-born artists to produce them, and upon provincial revenues to pay for them. They had beautiful homes and luxuriant gardens, which sometimes became hunting-parks or zoological collections; they had costly furniture tables plated or inlaid with silver or gold, couches spread with exotic coverlets, floors carpeted with rugs resilient in

- **Architecture**
- **The Tombs**

Only in architecture did the Persians achieve a style of their own. Under Cyrus, Darius I and Xerxes I they erected tombs and palaces. At Pasargadae Alexander spared for us, with characteristic graciousness, the tomb of Cyrus I. The caravan road now crosses the bare platform that once bore the palaces of Cyrus and his mad son; of these nothing survives except a few broken columns here and there, or a door-jamb bearing the features of Cyrus in bas-relief. Nearby, on the plain, is the tomb, showing the wear of twenty-four centuries: a simple stone chapel, quite Greek in restraint and form, rising to some thirty-five feet in height upon a terraced base. Once, surely, it was a loftier monument, with some fitting pedestal; today it seems a little bare and forlorn, having the shape but hardly the substance of beauty; the cracked and ruined stones merely chasten us with the quiet permanence of the inanimate.

- **Decline of the empire**

The Achaemenid Empire flourished for more than 200 years with minor ups and downs. Every time a ruler died there was some sort of upheaval in different satrapies. The revolts in different regions occurred intermittently and were suppressed. Skirmishes on the borders were also taking place and making small dents but by and large the empire remained intact. The biggest blow came in the form of the attack of Alexander. Many factors are responsible for the decline of Achaemenid empire such are as follows.

- **Invasion of Alexander**

Alexander crossed the Hellespont without opposition, having what seemed to Asia a negligible force of 30,000 footmen and 5,000 cavalry. A Persian army of 40,000 troops tried to

stop him at the Granicus; the Greeks lost 115 men, the Persians 20,000. Alexander marched south and east, taking cities and receiving surrenders for a year. Meanwhile Darius III gathered a horde of 600,000 soldiers and adventurers; five days were required to march them over a bridge of boats across the Euphrates; six hundred mules and three hundred camels were needed to carry the royal purse. When the two armies met at Issus Alexander had no more than 30,000 followers; but Darius, with all the stupidity that destiny could require, had chosen a field in which only a small part of his multitude could fight at one time. When the slaughter was over the Macedonians had lost some 450, the Persians 1,10,000 men, most of these being slain in wild retreat; Alexander, in reckless pursuit, crossed a stream on a bridge of Persian corps.

16.5 SUMMARY

In this Unit we have discussed the process of the expansion and consolidation of the largest Persian empire of the period and come across many aspects of this vast but short lived empire in the history of world civilisation.

- That Cyrus and Darius I played a key role in its formation and expansion of the Achemenid Empire.
- The division of the empire into administrative units called satrapies provided it certain stability. Satraps worked as an organised bureaucracy to sustain it.
- Standardization of the coinage and safe transportation of merchandise gave a fillip to economic activity.
- Darius and his successors promoted Aramaic as a link language for the empire.
- Zoroastrianism which incorporated some of the older Iranian traditions became the most dominant religion. However, it was not forced on all regions of the empire and state followed a policy of high degree of religious tolerance.
- The empire after flourishing for more than 200 years declined as a result of the invasion of the Alexander the Great around 334 BC. The empire gradually disintegrated. In the 3rd Century A.D.

16.6 Key Terms

Ahriman: In Zoroastrianism , Angro-Mainyus or Ahriman, prince of darkness and ruler of the nether world

Ahura-Mazda: In Zoroastrianism , Ahura-Mazdah is worshipped as the divine creator and lord of wisdom.

Airyana-vaejo: The ancient "home of the Aryans”

Astivihad: The god of death in Zoroastrian philosophy.

Basileus: The King, occasionally adopted by Persian rulers, originally a Greek terminology.

Darics: A Persian Gold Coin.

Etiquette: Manners

Haoma: One intoxicating drink, the haoma, was offered as a pleasant sacrifice to the gods in ancient Persia.

Khshathra: Literally means warrior; the title indicates the military origin and character of the Persian monarchy

Kosmctai: A special class of "adorners," called kosmctai by the Greeks, arose as beauty experts to the aristocracy in ancient Persia.

Magi: A hereditary priestly class which began to monopolize Zoroastrian rituals especially at the official level an ancient Persia.

Zend-Avesta: Sacred religious text of the Zoroastrians, written old Persian language.

16.8 Self Assesment Questions

1. Give a brief account of the expansion of the Persian Empire under the rule of Cyrus and Darius I.
2. Analyse the system of satrapies in the Achaemenid Empire.
3. Write a brief note on the standardization of coinage in the Persian Empire.
4. Assess the significance of Darius I as a Persian king.
5. Account for the fall of the Persian Empire.
6. Write a short notes on:
   (i) Aramaic
   (ii) Zoroastrianism

16.9 Further Readings

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