PREFACE

In a bid to standardise higher education in the country, the University Grants Commission (UGC) has introduced Choice Based Credit System (CBCS) based on five types of courses: core, generic discipline specific elective, and ability/ skill enhancement for graduate students of all programmes at Elective/ Honours level. This brings in the semester pattern, which finds efficacy in tandem with credit system, credit transfer, comprehensive and continuous assessments and a graded pattern of evaluation. The objective is to offer learners ample flexibility to choose from a wide gamut of courses, as also to provide them lateral mobility between various educational institutions in the country where they can carry acquired credits. I am happy to note that the University has been recently accredited by National Assessment and Accreditation Council of India (NAAC) with grade “A”.

UGC (Open and Distance Learning programmes and Online Programmes) Regulations, 2020 have mandated compliance with CBCS for all the HEIs in this mode. Welcoming this paradigm shift in higher education, Netaji Subhas Open University (NSOU) has resolved to adopt CBCS from the academic session 2021-22 at the Under Graduate Degree Programme level. The present syllabus, framed in the spirit of syllabi recommended by UGC, lays due stress on all aspects envisaged in the curricular framework of the apex body on higher education. It will be imparted to learners over the six semesters of the Programme.

Self Learning Materials (SLMs) are the mainstay of Student Support Services (SSS) of an Open University. From a logistic point of view, NSOU has embarked upon CBCS presently with SLMs in English. Eventually, these will be translated into Bengali too, for the benefit of learners. As always, we have requisitioned the services of the best academics in each domain for the preparation of new SLMs, and I am sure they will be of commendable academic support. We look forward to proactive feedback from all stake-holders who will participate in the teaching-learning of these study materials. It has been a very challenging task well executed, and 1 congratulate all concerned in the preparation of these SLMs.

I wish the venture a grand success.

Professor (Dr.) Subha Sankar Sarkar

Vice-Chancellor

Netaji Subhas Open University

Under Graduate Degree Programme
Choice Based Credit System (CBCS)
Subject : Honours in History (HHI)

Social Formations and Cultural Patterns of the Ancient World
Course Code : CC-HI-02

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Social Formations and Cultural Patterns of the Ancient World

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Module I : Evolution of Humankind

Module II : Food Production

Module III : Bronze Age Civilizations

Module IV : Nomadic Groups in Central and West Asia and Europe

Module V : Slave Society in Ancient Greece

Module VI : Polis in Ancient Greece

Module I

Evolution of Humankind

Unit 1 ❑ Theories on Evolution and Growth of Civilizations

Structure

1.0 Objectives

- The objective of this unit is to study the various theories of Evolution.
- Learners will get an idea about the theories of
  - Charles Darwin
  - Thomas Henry Huxley
  - Arnold Joseph Toynbee
  - Vere Gordon Childe

1.1 Introduction

At the foundation of nearly every culture is a creation myth that explains how the wonders of the earth came to be. These myths have an immense influence on people's frame of reference. Despite being separated by numerous geographical barriers many cultures have developed creation myths with the same basic elements. Most of the creation myths begin with the theme of birth. This may be because birth represents new life and the beginning of life on earth may have been imagined as being similar

to the beginning of a child's life. This is closely related to the idea of a mother and father existing in the creation of the world. The mother and father are not always the figures which create life on earth. Sometimes the creation doesn't occur until generations after the first god came into being. A supreme being appears in almost every myth. He or she is what triggers the train of events that create the world. Sometimes there are two beings, a passive and active creator.

The myth of creation is the symbolic narrative of the beginning of the world as understood by a particular community. The later doctrines of creation are interpretations of this myth in light of the subsequent history and needs of the community.

Until the mid of the 19th century Europe generally believed the Doctrine of Creation narrated in the Biblical book of Genesis and on the new creation in Jesus Christ. The Biblical Doctrine of Creation shows a magical origin of the entire world created by the God within six days and the earliest human couple - Adam and Eve were created on the sixth day. From them the journey of entire human lineage began.

The notion of rationalism had been flourished as an outcome of the 15th-century renaissance and the 17th-century scientific revolution in Europe. This notion had its influence on the Creation myth as well as on the journey of civilizations. New explanations on these emerged during the middle of the 19th century. The most prominent scholars of this new view are Charles Darwin, Thomas H. Huxley, Arnold Toynbee and V. Gordon Childe.

1.2 Charles Darwin and his Evolutionism

Charles Robert Darwin was the pioneer among the 19th-century renascent scholars who transformed our view towards the natural world through his theory of Natural Selection and Evolutionism. Now he is celebrated as one the greatest British scientists who ever lived, but it is needless to mention that in his own time his radical theories brought him into conflict with members of the Church of England. He was born in 1809 in Shrewsbury of Shropshire. Darwin was fascinated by the natural world from a very young age. In 1825 Darwin enrolled in medical school at the University of Edinburgh but soon he left the course and entered in the University of Cambridge for studying Theology. In 1831 Darwin accepted an offer to embark on a five-year voyage aboard HMS Beagle. The journey would change both his life and the trajectory of Western scientific thinking. Darwin explored remote regions and marvelled at a world so different from the one he knew. On his travels Darwin collected plants, animals and fossils, and

took copious field notes. These collections and records provided the evidence he needed to develop his remarkable theory. Darwin returned to England in 1836. He was a highly methodical scholar with constant collecting and observing mind. He spent many years comparing and analysing specimens before finally declaring that evolution occurs by a process of natural selection. His theory was first published in 1859 in his book On the Origin of Species. In 1871 he published Descent of Man in which he explained the evolutionary process of humankind - the journey from ape to man.

Darwin's general theory presumes the development of life from non-life and stresses a purely naturalistic or undirected "descent with modification". That is, complex creatures evolve from more simplistic ancestors naturally over time. In a nutshell, as random genetic mutations occur within an organism's genetic code, the beneficial mutations are preserved because they aid survival - a process known as “natural selection.” These beneficial mutations are passed on to the next generation. Over time, beneficial mutations accumulate and the result is an entirely different organism - not just a variation of the original, but an entirely different creature. Evolution by natural selection is one of the best substantiated theories in the history of science, supported by evidence from a wide variety of scientific disciplines, including palaeontology, geology, genetics and developmental biology.

Darwin's theory has two aspects to it, namely Natural Selection and Adaptation, that work together to shape the inheritance of alleles (forms of a gene) within a given population. Darwin made the following five fundamental observations:

1. All species have such great potential fertility that their population size would increase exponentially if all individuals that are born go on to reproduce successfully.
2. Populations tend to remain stable in size, except for seasonal fluctuations.
3. Environmental resources for things such as food and shelter are limited.
4. Individuals of a population vary extensively in their characteristics (to the extent that no two individuals are exactly alike) which impacts upon their own ability to survive and reproduce.
5. Much of this variation is genetic and is therefore heritable.

Natural selection shapes adaptations and differentiates between the reproductive successes of individuals. Adaptations are anatomical structures, physiological processes, or patterns of behaviour that contribute to ancestral survival through the unique suitability of those traits or characteristics.

1.3 Thomas Henry Huxley

Charles Darwin's theory of Evolution and Natural Selection was further popularised by Thomas Henry Huxley. He was one of the first adherents to Darwin's theory and did more than anyone else to advance its acceptance among scientists and the public alike. For his extra passion for Darwin he was called Darwin's Bulldog in his time.

He was born on May 4, 1825, in Ealing, near London, in a middle class family. Huxley's only childhood education was two years at Ealing School, where his father taught mathematics; this ended in 1835 when the family moved to Coventry. Despite his lack of formal education, young Huxley read voraciously in science, history, and philosophy, and taught himself German. At the age of 15, Huxley began a medical apprenticeship; soon he won a scholarship to study at Charing Cross Hospital. At 21, Huxley signed on as assistant surgeon on the H.M.S. Rattlesnake, a Royal Navy frigate assigned to chart the seas around Australia and New Guinea.

Huxley was an outspoken defender and advocate for Darwin's theory of evolution by natural selection. He is best known for his famous debate in June 1860, at the British Association meeting at Oxford. His opponent in this debate was Archbishop Samuel Wilberforce. During the debate, Archbishop Wilberforce ridiculed evolution and asked Huxley whether he was descended from an ape on his grandmother's side or his grandfather's. Huxley rose to give a brilliant defence of Darwin's theory, concluding with the rejoinder, "I would rather be the offspring of two apes than be a man and afraid to face the truth." However, Huxley did not blindly follow Darwin's theory, and critiqued it even as he was defending it. In particular, where Darwin had seen evolution and a slow, gradual, continuous process, Huxley thought that an evolving lineage might make rapid jumps, or saltation.

Huxley's most famous writing, published in 1863, is *Evidence on Man's Place in Nature*. This book, published only five years after Darwin's *Origin of Species*, was a comprehensive review of what was known at the time about primate and human palaeontology and ethology. More than that, it was the first attempt to apply evolution explicitly to the human race. Darwin had avoided direct mention of human evolution, stating only that "light will be thrown on the origin of Man"; Huxley explicitly presented evidence for human evolution. Huxley showed that the brains of apes and humans were fundamentally similar in every anatomical detail.

The most important achievement of Huxley is that, he challenged the notion of

supernatural creation, informing his democratic artisans that humans had raised from animals-a lowly-ancestor-bright-future image that appealed to the downtrodden. He plunged headlong into the inflammatory issue of human ancestry; Darwin avoided it, but Huxley made it his specialty.

1.4 Arnold Joseph Toynbee and his Challenge-Response Theory

British historian and philosopher Arnold Joseph Toynbee is famous for his Challenge-Response theory regarding the journey of civilization. In his twelve-volume monumental work A Study of History, he explained how a civilization originates, flourish and finally declines. This book can be best express as a monumental synthesis of world history, or a meta-history based on universal rhythms of rise, flowering and decline, which examined history from a global perspective.

Arnold Joseph Toynbee was born on 14th April, 1889. He started his education at Winchester College and Balliol College, Oxford. He began his teaching career as a fellow of Balliol College in 1912, and thereafter held positions at King's College London as Professoressor of Modern Greek and Byzantine History, the London School of Economics and the Royal Institute of International Affairs (RIIA) in Chatham House. He was Director of Studies at the RIIA between 1925 and 1955.

Toynbee approached history not from the perspective that takes the nation-state or ethnic groups as the unit of history, but from civilizations as a unit, taking into account of the roles of religious traditions worldwide. He completely rejected the Natural Deterministic theory of Oswald Spengler. According to him the rise and fall of civilization depends on how people responded the challenges of time and how they encountered that.

Toynbee argues that the history of a nations can only be understood in the context of the broader civilization of the nation is a part. Of the twenty-three distinct civilizations, Toynbee identifies in his A Study of History, sixteen are dead and gone. Of the seven currently existing civilizations all but one, Western European Christendom, have broken down and are no longer growing. It is to be emphasized that a civilization is pattern of culture and a system of institutions rather than a racial or ethnic group.

A society, according to Toynbee, develops into a civilization when it is confronted with a challenge which it successfully meets in such a way as to lead it on to further

challenges. He believes that the ideas and methods for meeting the challenges for a society come from a creative minority. The ideas and methods developed by the creative minority are copied by the majority. Thus there are two essential and separate steps in meeting a challenge: the generation of ideas and the imitation or adoption of those ideas by the majority. If either of those two processes ceases to function, then the civilization breaks down.In the breakdown of a civilization the society splits into three parts: the dominant minority, the internal proletariat and the external proletariat. If the creative minority fails to command the respect of the majority through the brilliance and rightness of their solutions to the problems and challenges of the society then the minority becomes merely a dominant minority. Here the internal proletariat means the working masses which are part of the civilization and the external proletariat denotes the masses which are influenced by the civilization but are not controlled by it.

He also argued for a close relationship between religions and civilizations. According to him the universal religion and its philosophy are usually borrowed from an alien civilization. The development of the new religion reflects an attempt by the people of the internal proletariat to escape the unbearable present by looking to the past, the future (i.e. utopias) and to other cultures for solutions. The religion eventually becomes the basis for the development of a new civilization. Religion amounts to a cultural glue which holds the civilization together. There is thus a close relationship between religions and civilizations.

1.5 Vere Gordon Childe

Vere Gordon Childe was a British historian but he was born in Sydney of Australia on 14th April, 1892. He was not only a historian but also a linguist as well as an archaeologist. His extensive archaeological study of European prehistory of the 2nd and 3rd millennia BCE sought to evaluate the relationship between Europe and the Middle East and to examine the structure and character of the preliterate cultures of the Western world in antiquity. His most important achievement in the prehistoric studies is the theory of 'Neolithic' and 'Urban' Revolutions.

Childe served as Professor of prehistoric archaeology at the University of Edinburgh from 1927 to 1946 and then as director of the Institute of Archaeology of the University of London, until 1956. His most famous excavation was that of the Neolithic site of Skara Brae in Orkney. His particular skill lay in bringing together great amounts of data for examining 'archaeological cultures', which he saw as recurring groupings of artefacts

and structures - such as house types, pottery and burial rites - that defined distinct prehistoric human groups, or peoples.Upon this foundation he built theories addressing the grand questions, developing models for what he dubbed the 'Neolithic Revolution' and 'Urban Revolution', by which he tried to explain how humans in prehistory broke beyond hunting and gathering into settled farming communities, which then developed into new types of social organisation, spawning of cities and civilisations.

Vere Gordon Childe's most popular work was *Man Makes Himself*, which was greatly influenced by Marxist theory. This book was first published in 1936. Childe in this book argued that the usual distinction between pre-literate society or prehistory and literate society or history was a false dichotomy and that human society has progressed through a series of technological, economic, and social revolutions. These included the Neolithic Revolution, when hunter-gatherers began settling in permanent farming communities, through to the Urban Revolution, when society moved from small towns to the first cities and so on.

Earlier in his career, Vere Gordon Childe was a follower of Cultural-historical model of Archaeology. But later he adopted the Marxist model and became the first Western archaeologist to use Marxist theory explicitly in his work. Childe stated that he used Marxist ideas when interpreting the past "because and in so far as it works". But his Marxism often differed from the Marxism of his contemporaries. Childe's Marxism was more likely to be "an individual interpretation" that quite naturally differed from "popular or orthodox" Marxism.

Childe introduced his ideas about "revolutions" in a 1935 presidential address to the Prehistoric Society. Presenting this concept as part of his functional-economic interpretation of the three-age system, he argued that a "Neolithic Revolution" initiated the Neolithic era, and that other revolutions marked the start of the Bronze and Iron Ages. One year later, in his famous book Man Makes Himself, he combined these Bronze and Iron Age Revolutions into a singular "Urban Revolution".

According to Childe, the Neolithic Revolution was a period of radical change, in which humans-who were then hunter-gatherers-began cultivating plants and breeding animals for food, allowing for greater control of the food supply and population growth. He believed that similarly the Urban Revolution was largely caused by the development of bronze metallurgy. For him urban revolution was characterised by an unequal distribution of social surplus and the existence of full time craft specialists who had no role in the production of food. Urban revolution had a negative side also

according to him. Generally it led to increased social stratification into classes and oppression of the majority by power elite. Childe's framework of understanding human societal development as a series of transformational "revolutions" has great influence in prehistoric and socio-cultural studies. But many scholars criticised his theory also. According to critiques of Childe, the term "revolution" was misleading because the processes of agricultural and urban development were gradual transformations.

1.6 Conclusion

The analysis of the present unit reveals that a number of theories has been developed to explain the evolution and growth of civilizations. These are the theories produced by Charles Darwin, Thomas Henry Huxley, Arnold Joseph Toynbee and Vere Gordon Childe. All of them have tried to critically analyze the evolution and growth of culture and civilization in the perspectives of time and space. It needs to be pointed out that this effort to understand the origins and spread of civilization in the historical perspectives was indeed result of the scientific rationalism produced in Europe since the fifteenth century. In other words, the scholars like Darwin or Huxley or Toynbee or Childe made effort to laws or logic of the birth and expansion of the civilization from the point of view of science and rationality. While Darwin emphasized on natural selection and adaptation of species, Huxley pointed out the evolution of human species from lower echelon of species. According to Huxley, it was a gradual developmental process towards a higher level of intelligent. Toynbee contextualized the theory of evolution in the broader domain of challenge and response. All the civilizations are bound to face challenges and if they face it in a meaningful way, only then the question of survival comes. Therefore, the existence of a civilization depends on the critical power of response to a challenge. Vere Gordon Childe tried to situate the evolution and spread of civilization in perspectives of archaeological culture. It is the Childe's contribution that he was the one of the earliest archaeologists who analyzed the importance of the Neolithic Culture and Urban Revolution in the history of civilization. Nevertheless, this theory of urban revolution was also criticized by a number of scholars.

1.7 Model Questions

1. What is Evolution? Briefly discuss the theory of Natural Selections and Evolutionism propounded by Charles Darwin.

2. Write a short note on Thomas Henry Huxley.
3. Briefly discuss the theory of Challenge and Response.
4. Write briefly about Gordon Childe's framework of understanding human societal development.

1.8 Suggested Readings

Childe, V. Gordon, *What Happened in History?*, London, 1975.

Childe, V. Gordon, *Man Makes Himself,* Indian edition, Delhi, 2017.

Darwin, Charles, *On the Origin of Species,* edited by Joseph Carroll, Canada, 2003.

Patterson, Thomas C. et. al. (Eds.), *Foundations of Social Archaeology: Selected Writings of V. Gordon Childe,* California, 2004.

Unit 2 ❑ Growth of Archaeological Studies

Structure

2.0 Objectives

- The objective of this unit is to understand the definition & scope of archaeology
- The learners will also get an idea about the various archaeological methods & scientific excavations
- The theories or paradigms related to of archaeology will also be discussed

2.1 Archaeology - Meaning, Definition and Scope of Study

Archaeology means the scientific study of ruins - study of biological remains and numismatic studies are also included here. The word Archaeology derives from Greek word archaia and logos. Archaia means ancient things and logos means scientific knowledge. Human beings are always inquisitive to their own past and thus an interest towards past materials collection existed since long. This was the basis of the study of Archaeology. But it should be kept in mind that the scientific study of Archaeology as a specific discipline of epistemology developed only after the Renaissance of Italy took place. By the 18th century the proper archaeologists' activities took place.

Archaeology can be defined as the scientific study of the material remains of past human life and activities. It includes everything made by human beings as its subject of study. Human artefacts from the very earliest stone tools to the man-made objects that are buried or thrown away in the present day: everything made by human beings-from simple tools to complex machines, from the earliest houses and temples and tombs to palaces, cathedrals, and pyramids. According to Cambridge Dictionary,

Archaeology is the study of the buildings, graves, tools and other objects that belonged to people who lived in the past in order to learn about their culture and society. According to the United States' edition this is the study of ancient cultures through examination of their buildings, tools and other objects.

Archaeologists have to describe, classify, and analyse the artefacts they study. An adequate and objective taxonomy is the basis of all Archaeological studies. The main aim of the Archaeological studies is to place the material remains in historical contexts, to supplement what may be known from written sources, and, thus, to increase understanding of the past. Many scientific techniques have to use in this process. The artefacts studied in the Archaeology must often be studied in their environmental contexts, and thus, botanists, zoologists, soil scientists, and geologists may be brought in to identify and describe plants, animals, soils, and rocks. Dating of remains holds an important position in the Archaeological studies. Nowadays mostly used method of dating is radioactive carbon dating, which has revolutionized much of archaeological chronology. This is a by-product of research in atomic physics. But although archaeology uses extensively the methods, techniques, and results of the physical and biological sciences, it is not regarded as a natural science. Because at the end Archaeology concludes with assumption while in the natural science conclusions are definite. Thus Archaeology can be considered as a discipline that is half pure science and half humanity.

2.2 Archaeological Methods

Archaeology works with two main methods - exploration and excavation. Dating of remains is very important in archaeology. Classification or taxonomy holds another important part in this study.

Archaeological exploration:

Exploration is the method by which archaeologists try to detect unknown sites. In case of known sites they try to know the potentiality of the site by applying various techniques. In pursuit of such investigations they have to depend on various means and methods. The Archaeological exploration includes literary survey, map research, place names as primary explorations. Then come ground level explorations and aerial explorations.

Primary exploration:

The main objective of the primary exploration is to locate certain site. Ancient literary works contain lot of information regarding ancient townships, pilgrim places,

important routes etc. All kinds of literary works can contribute to the search for sites. But most important are the topographical and geographical works in this regard. Both ancient and modern maps help us in locating vanished sites and monuments. Ruins marked on ordinance survey maps are very useful in locating ancient monuments. Features like temples, dolmens, caves, etc. marked on the maps are very useful in the search for ancient sites. It is also necessary to study geological and other natural features as these have great influences on the settlement pattern of the ancient cultures. Place names have great significance in the archaeological exploration as they often help in locating ancient sites.

Ground level exploration:

Surveying at ground level is the most traditional and the most direct form of prospecting as it presents real picture and potentiality of the site under investigation. The advantage of survey at ground level is that a surveyor/explorer can pick up potsherds, metal artefacts, coins, stone tools, etc. which are indicators to the presence of an old site. For locating prehistoric sites like Palaeolithic and Mesolithic sites, the places in abundance are the most potential areas. The archaeologists have also to concentrate on water sources and natural rock shelters and caves as these were the most common habitation places for prehistoric man. When on the look-out for Neolithic and Proto-historic sites, the archaeologists have to concentrate mostly on fertile lands of river deposits and valley. Another important aspect of archaeological survey is awhile taking up explorations for any kind of sites is to acquire information regarding the already know type sites of the region selected. It is generally expected that an archaeologist would know what kind of antiquities and pottery are expected from which type of sites.

Methods commonly used in Ground level exploration:

1. Sound wave surveying: the most conventional method of ground level exploration. Traditionally ground level explorations carried out by banging the ground with an iron bar, which gives off a hollow or solid sound when it hits the ground and can indicate presence or absence of structures below. Likewise, seismic surveying which consists of recording on a seismograph shock waves set up in the earth, can also indicate buried structures. These methods are mainly used after detecting a site to know the nature of the mound and to estimate the extension of the walls and structures before undertaking excavations. This method is still in use and it is most useful for determining the area for excavation.

2. Electrical resistance surveying: Electrical surveying uses the same variations in humidity which are also applied to the damp-marks detected by aerial photography. For resistance surveying four electrodes are fixed in equal distance in a line. The two outer electrodes measure the voltage being applied and the two inner electrodes are used to measure the resistance. Alternate current is used to eliminate the electrical charges being formed in the soil strata. If the earth between these two electrodes is abnormally resistant or abnormally conductive, the measurements will show irregularities on the resistance graphs drawn to record them. When the selected line is completed the resistance along a parallel line is measured and so on. A comparison of the successive graphs obtained in this way may reveal a construction fairly accurately. This method was first applied to detect archaeological structures by Professoressor R. J. C. Atkinson in 1946.

3. Thermo-Residual Technique or Magnetic surveying: Magnetic surveying is based on the modification of the earth's magnetic field by the magnetism of various sources and other buried remains. It is known that if clay is heated in an oven or intense fire, it acquires a magnetic force of its own, and retains it after it cools down. In practice the clay contains varying quantities of iron oxides such as magnetite or hematite, which cause its red colour and their magnetic field align itself with that of the earth as the temperature rises, and remains aligned when the clay cools off again. The result is a localised magnetic disturbance in a given area, the intensity of which can be measured with a magnetometer. This technique is known as thermo-residual technique.

4. Probe checking: Probe checking is done by T-shaped rods driven in or screwed down by hand to the desired depth and then drawn up again. The presence of soil changes can point out to a grave or habitation site. But most of the archaeologists are against this method. Because it damages building structures often.

5. Drill method: This is similar to probe checking, but here instead of probes a hole is drilled in the suspected area of hollow structures and tombs and a miniature camera and flash gun housed in steel tube is introduced into the drill holes to take photographs of the interiors. Alternatively, a periscope also can be used to inspect the contents.

Aerial exploration:

Aerial photography or aerial surveying is a very useful method in locating ancient sites and monuments. By this method a large area can be surveyed quickly. By this method closely overlapping photographs are taken by special camera, so that nothing is missed and also for subsequent stereoscopic examination. To take aerial photographs

an airplane is flown over a selected area covering parallel strips of land till the whole area is covered. From the photographs taken in this manner we can easily identify features looking round, square or rectangular, which probably represent some ancient structure. Ancient habitations could be easily identified due to the discolouration of the mound in comparison to the surrounding area. Completely buried structures also can be identified by observing the differences in relief, though very slight, caused by these buried structures, which throw shadow in oblique lighting conditions. For aerial photography, great care is necessary in choosing the time of the year, the weather, and the time of the day. The shadows thrown by minor variations in contour are much prominent when the light is lower and more oblique.

Archaeological Excavation:

The most important method of archaeological studies is the Excavation. Excavation is simply the controlled exploration of what lies below the surface, usually carried out systematically in gridded trenches with shovel and trowel. According to the Cambridge dictionary excavation is the method which use to remove earth that is covering very old objects buried in the ground in order to discover things about the past.

Archaeological excavation involves the removal of soil, sediment, or rock that covers artefacts or other evidence of human activity. Early excavation techniques involved destructive random digging and removal of objects with little or no location data recorded. Modern excavations generally involve slow, careful extraction of sediments in very thin layers, detailed sifting of sediment samples, and exacting measurement and recording of artefact location. Archaeologists employ a great variety of equipment to carry out a scientific excavation. The tools used will depend upon the nature of the project goals, time constraints, and the manner of excavation. For setting up a grid the following tools are generally use: compasses, transit and tripod, dumpy level, theodolite, stadia rods, sledge hammers, datum pipe, wooden stakes, measuring tapes, stick tapes, calculator string, gas-powered weed eater, line levels, machete and sickle, pocket knife, and map etc. For digging and main excavation one needs the following tools: shovel and spades, skimming shovels, hoes, trowels, wheelbarrow, dental picks, tweezers, drying trays, dust pans etc.

History of Archaeological studies:

The earliest origins of the Archaeological studies can be traced in 15th and 16th-century Europe, when the Renaissance-Humanists looked back upon the glories of Greece and Rome. Popes, cardinals, and noblemen in Italy in the 16th century began

to collect antiquities and to sponsor excavations to find more works of ancient art.

Archaeology proper began with an interest in the Greeks and Romans and first developed in 18th-century Italy with the excavations of the Roman cities of Pompeii and Herculaneum. Classical archaeology was established on a more scientific basis by the work of Heinrich Schliemann, who investigated the origins of Greek civilization at Troy and Mycenae in the 1870s; of M.A. Biliotti at Rhodes in this same period; of the German Archaeological Institute under Ernst Curtius at Olympia from 1875 to 1881; and of Alexander Conze at Samothrace in 1873 and 1875. Conze was the first person to include photographs in the publication of his report. Schliemann had intended to dig in Crete but did not do so, and it was left to Arthur Evans to begin work at Knossos in 1900 and to discover the Minoan civilization, ancestor of classical Greece.

Serious study of the remains of the ancient Near East began around 1800 when Napoleon invaded Egypt, taking with him artists and scholars to study the culture of that ancient land. These specialists studied the ruins of temples, palaces, and burial places. During this expedition, they found many ancient writings and inscriptions. A very famous stone, called the "Rosetta Stone" was discovered by some of Napoleon's soldiers. The stone had an inscription in three different languages: two forms of Egyptian and one of Greek. The letters on the stone were in the form of "hieroglyphs" or the pictures representing letters and words. After much hard work, a French scholar was able to decipher (translate or break down) the inscriptions. Through his important work, many inscriptions on the walls, tombs, and palaces in Egypt can be understood today. By the middle of the 1800s, ancient ruins in Mesopotamia, the land between the Tigris and Euphrates Rivers, in modern Iraq and Iran, were also uncovered by digging. These remains include cities, forts, palaces, and temples, as well as ordinary houses and shops.

However, prior to the development of modern techniques excavations tended to be haphazard; the importance of concepts such as stratification and context were completely overlooked. For instance, in 1803, there was widespread criticism of Thomas Bruce, 7th Earl of Elgin for removing the Elgin Marbles from the Parthenon in Athens. The marble sculptures themselves, however, were valued by his critics only for their aesthetic qualities, not for the information they contained about Ancient Greek civilization.

In the first half of the 19th century many other archaeological expeditions were organized; Giovanni Battista Belzoni and Henry Salt collected Ancient Egyptian artifacts

for the British Museum, Paul Émile Botta excavated the palace of Assyrian ruler Sargon II, Austen Henry Layard unearthed the ruins of Babylon and Nimrud and discovered the Library of Ashurbanipal and Robert Koldeway and Karl Richard Lepsius excavated sites in the Middle East. However, the methodology was still poor, and the digging was aimed at the discovery of artefacts and monuments.

Scientific archaeology continued to develop in the 19th century with advances in the studies of geology and biology. Charles Lyell helped spread the modern geologic system of uniformitarian stratigraphy, which gave archaeologists a reliable timescale on which to date items. The work of Lyell and the publication of Charles Darwin's The Origin of Species soon popularized the idea of evolution. Belief in man's antiquity exploded the study of prehistoric archaeology.

The 20th century opened with radical developments in the field: the 1904 publication of Flinders Petrie's Methods and Aims in Archaeology developed a systematic method for excavation. Massive finds like the 1922 discovery of King Tutankhamen's tomb or the 1926 unearthing of the Royal Tombs at Ur - which brought the entire forgotten Sumerian civilization to life - helped glamorize archaeology. Archaeologists began to work beyond the Near East, Mediterranean and Europe, and the subject finally became an academic discipline.

2.3 Theories or Paradigms of Archaeology

Since archaeology works on the basis of assumption it is unable to show any unanimity in interpretations of archaeological data. While interpreting the data, the archaeologists follow various intellectual frameworks. These frameworks are commonly known as the Paradigms of archaeology. Among these paradigms historical particularism, archaeological nationalism, social archaeology, Marxist archaeology, processual archaeology, behavioural archaeology and Post-processual archaeology are the most important paradigms.

Processual archaeology or the New Archaeology:

The term Processual archaeology refers an intellectual movement which advocated logical positivism as a guiding research philosophy and was modelled on the scientific method - something that had never been applied to archaeology before. This movement occurs during the 1960s. One of the most important advocate of this theory was Lewis Binford. The Processualists completely reject the cultural-historical notion of

the archaeology. For them culture should be taken as a set of norms held by a group and communicated to other groups by diffusion and instead argued that the archaeological remains of culture were the behavioural outcome of a population's adaptation to specific environmental conditions. The Processualists put stress on theory formation, model building, and hypothesis testing in the search for general laws of human behaviour. Processualism tries to focus on the processes of culture such as what kinds of things happened to make that culture etc. instead of simply building a record of changes. In this way they explicitly tried to go beyond the cultural-historical methods of the past, which simply build a record of changes.

Post-Processualism:

The post-processual movement originated in the United Kingdom during the late 1970s and early 1980s, pioneered by archaeologists such as Ian Hodder, Daniel Miller, Christopher Tilley and Peter Ucko, who were influenced by French Marxistanthropology, postmodernism and similar trends in socio-cultural anthropology. Parallel developments soon followed in the United States. Initially post-processualism was primarily a reaction to and critique of processual archaeology. Post-processual archaeology questioned the scientific archaeology of Processualist method and emphasized that archaeology is subjective rather than objective, and that what truth could be ascertained from the archaeological record is often relative to the viewpoint of the archaeologist responsible for unearthing and presenting the data.

2.4 Conclusion

In this unit, we have learned the different aspects of the archaeological studies: its meaning, definition, scope of studies and methods. Archaeology is a specialized branch of knowledge, which studies ruins and material remains for the understanding of origin, growth, spread and decline, and even transformation of the culture and civilization. It uses a number of methods ranging from primary exploration to archaeological excavation. The modern archaeological methods also introduce the drone technology and computational analysis. It is in fact the most scientific method of studying past in the most accurate way. Nevertheless, the debate continues amongst the archeologists on the question of the degree of subjectivity and objectivity in the discipline of archaeology.

2.5 Model Questions

1. Define Archaeology as a distinct discipline of study. Write briefly about the scope of the discipline.
2. Write briefly about the Exploration and Excavation as two important methods of Archaeological study.
3. Write a note on different paradigms of Archaeology.

2.6 Suggested Readings

Bahn, Paul, *Archaeology: A Very Short Introduction*, Oxford, 2012.

Bahn, Paul (Ed.), *The History of Archaeology: An Introduction*, London and New York, 2014.

Bentley, R. Alexander, et. al. (Eds.), *Handbook of Archaeological Theories*, Lanham, 2008.

Renfrew, Colin and Bahn, Paul (Eds.), *Archaeology: The Key Concepts*, London and New York, 2005.

Unit 3 ❑ Evolution of Human Body and Mind: From Ape to Modern Man

Structure

3.0 Objectives

- The objective of this unit is to study the evolution of human being
- The learners will also get an idea about how life originated on Earth
- Scientific explanations related to Fossils & taphonomy will also be discussed.

3.1 Introduction : Evolution-Meaning, Definition and History

Man has an immense interest since long on how this world was originated. Many myths and explanations had emerged on the origin of the world. God created this world within six days and on the sixth day human beings were created. Adam and Eve were the first couple from whom the human lineage originated. This Biblical explanation was the most common and popular for a long time. But during the renaissance of 15th century especially with the rise of scientific revolution in 17th century-Europe the notion of argument arose. Thus a new quest for a scientific explanation of origin had been started. During the middle of the 19th century a scientific explanation of the Origin was given for the first time by Charles Darwin. His On the *Origin of Species* was published in 1859 in which he argued that the origin of species is neither a

magical nor an instantly done process. It is a long process resulted with some 'descent with modification'.

The term 'evolution' can be defined as a continuous changing process through which species become modified, more complex and diverge to produce multiple descendant species. Another closely related term is Natural selection. These two terms are often conflated, but evolution is the historical occurrence of change, while natural selection refers the process in which individuals with a particular trait tend to leave more offspring in the next generation than do individuals with a different trait. Therefore, it would not be correct to equate evolution with natural selection. Natural selection process can or often causes evolutionary change. Conversely, processes other than natural selection can also lead to evolution.

The concept of ‘Evolutionary progresses’ or Evolutionism had dominated the social thought throughout the 19th century. It was a unitary paradigm that owed its foundation to the publication of Charles Darwin's On The Origin of Species in 1859 CE. But in the first edition of the said book the term 'evolution' does not appear. Instead of evolution he preferred 'descent with modification' as a more appropriate expression to define the process - the most simple but very significant expression that correctly reflects the essence of what evolutionary biology is all about. The evolutionary biology is according to him, the study of the transformation of species through time, including both changes that occur within species, as well as the origin of new species. Charles Darwin in the sixth edition of his book used the term 'evolution' specifically for the first time.

3.2 The Tree of Life - Phylogenetic Trees

Since the mid of the 19th century the evolutionary biologists believe in the common ancestral origin of all organisms on earth. Following Darwin's theory these biologists have sought to infer a 'Tree of Life' - a Phylogenetic Tree showing how all species are related to one another. In simple words, therefore, it can be said that the Phylogeny is the evolutionary history of organisms and the Phylogenetic tree is the depiction of that history. Phylogenies form the basis for our understanding of relationships among organisms.

3.3 Fossils and Taphonomy

The most important primary sources for constructing a Phylogenetic Tree are the fossils. Fossils are the stone-transformed bodies of different creatures - the remains or traces of ancient organisms preserved naturally in the rock records. These are found mainly in sedimentary rocks including sandstone, siltstone and limestone. These kinds of rocks have formed by the accumulation of particles of sediment and skeletal remains of organisms. Since sedimentary rocks form in surficial or near-surface environments especially in lake or ocean bottoms, these easily record the occurrence and activities of living organisms for the past 3.5 billion years.

Taphonomy is the study of the processes in which freshly dead organisms are incorporated into the fossil record. It explores the broad variety of processes including decay, post-mortem transport, fossilization and post burial alteration.

3.4 Origin of Life on Earth

Charles Darwin in his *On the Origin of Species* has stated that the evolutionary process or progressive journey from simple to complex began with origin of life on earth. But for his limited knowledge of biochemistry and molecular biology, he could not be able to explain how life originated on earth. Later with the advancement of scientific researches nowadays it is generally believed that the biological evolution began with compartmented systems of molecules that could grow and reproduce. Now what life means? Since life is a complex phenomenon, scholars have greatly divided in this point. Most of the molecular biologists say that the 'machinery of life is composed of polymers; very long molecules composed of subunits called monomers. The primary polymers of life are nucleic acids and proteins, often called biopolymers by definitio. During growth, the cyclic system of polymers reproduces itself, and the cellular compartment divides. Reproduction is not perfect, so that variations arise, resulting in differences between cells in a population. As a result, population of cells have the capacity for evolution'.

3.5 Human Evolution

Living human beings are the sole living representatives of a lineage, the hominines, which diverged from other living apes 5 to 7 million years ago. Hominines remained limited to Africa for 2/3rd of their history. With chimpanzee-sized bodies and brains,

early hominines diversified into several lineages with different dietary strategies. One of these found a path toward technology, food sharing and hunting and gathering, giving rise to our genus, Homo, approximately 2 million years ago. As populations of Homospread throughout the world, they gave rise to regional populations with their own anatomical and genetic distinctiveness. Within the last 1 million years, a massive dispersal of human beings from Africa absorbed and replaced these pre-existing populations. In the time since this latest emergence from Africa, human beings have continued to disperse, interact, and evolve. The rise of agricultural subsistence shifted human ecology fuelling evolution.

Charles Darwin avoided discussion of the evolution of human beings in his On the Origin of Species. He tackled the issue in another work of him named The Descent of Man, in which he defined the starting point for modern evolutionary anthropology. In the 19th and the early 20th centuries the main theme of anthropology was a perceived lack of fossil progenitors, prompting a much-hyped search for a 'missing link'. Gradually this concern diminished as paleoanthropologists especially over the last half century, succeeded in uncovering thousands of fossil specimens, representing diverse human ancestors and collateral relatives. Furthermore, archaeological finds have provided information on the behaviour of Hominines during the last half of human evolution, giving details about diet and social organization. Through all these lines of evidence a remarkably clear picture of human evolution is now emerging.

For a better understanding of the whole process it would be easier to consider human evolution in roughly three parts. The first, running from 7 million to 4 million years ago, saw the origination of the Hominine lineage and the initial appearance of our bipedal pattern of locomotion. The second, from 4 million up to around 1.8 million years ago, was the age of the Australopithecines. This group of species had a stable set of adaptations in body size and locomotion, while showing substantial dietary and geographic diversity. The third part is on our own genus, Homo. Homos throughout the world, along with many later dispersals and population expansions, laid the foundation for today's human populations.

3.6 Origin of Hominid

The first primates appeared in Africa amid the other mammals of the Palaeocene period around 65 million years ago. They were small ground dwelling animals exclusively insect-eaters. As they evolved they moved from the ground to trees. They

adapted to climbing and eating fruit. The larger Prosimians or the half-apes seem to have evolved from these first primates in the Eocene epoch. Developing strongly over the Oligocene epoch (about 40 million years ago), they began to differentiate from the apes. This is evident from fossils of the small ape known as Oligopithecus. Fossils of them are discovered from the Fayum depression in Egypt. The name Oligopithecus is derived from the Greek word Oligos and Pithekos. Oligos denotes small and Pithekos means apes. From a number of other scanty sources, their development can be linked to the Dryopithecus. These tree-dweller apes lived at the beginning of the Miocene epoch, approximately 13 million years ago.

A rich record of fossil apes has been recovered from the Miocene geological epoch, which lasted from 23 million to 5.2 million years ago. Before 15 million years ago, all known apes lived in afro-Arabia. Early in the middle Miocene, some apes dispersed into Asia and Europe, including the Asian ancestors of Orang-utans. Miocene apes ranged extensively in body size and adaptive niche, and evolved a diversity of locomotive strategies. Many were pronograde quadrupeds. A few had shoulders and vertebral columns, indicating an orthograde posture or climbing, but no early apes are known to have had the long arms and below-branch suspensory capability of today's great apes. Earlier scholars believed that the orthograde posture was a common ancestral feature of all apes including human beings. But recent scholars argue that this suspensory body plan evolved in convergent way in the African and Asian apes.

Living humans are obligate bipeds, with pelvis, foot, and vertebral adaptations that impede effective quadrupedal gait and climbing. The origin of Hominines is entangled with this unique adaptation. All living apes can move in bipedal way, and some Miocene apes, such as Oreopithecus, may have specialized in terrestrial bipedalism. Recognizing the beginnings of the Hominine adaptation to bipedalism has been central to identifying early Hominines, whose identity remains subject to debate. *Sahelanthropus tchadensis* from north central Africa is the earliest known species represented by a nearly complete skull and jaw. It shows an orthograde placement of the skull atop the spinal column. Orrorin tugenesisis of western Kenya also has a femur consistent with bipedal weight bearing. *Ardipithecus kadabba* of Ethiopia combines the above mentioned hominine dental features with a toe bone. This suggests that the toe generated force during bipedal walking, as occurs in modern human beings. *Ardipithecus ramidus* of Ethiopia, dating to about 4.4 million years ago, comprises a large fossil sample including one nearly complete skeleton. From its limb proportions, grasping feet, and ape like hands, *Ardipithecus ramidus* was a habitual quadruped that also had good

climbing abilities. But several of its features are similar to those of Hominines, including a shortened pelvis and an upright posture. It is often interpreted as the earliest well documented member of our lineage.

Australopithecines:

The first fossils to show clear evidence of a commitment to terrestrial bipedal locomotion are assigned to *Australopithecus anamensis*. This species existed in East Africa sometimes between c. 4.2 and c. 3.9 million years ago. Between c. 3.9 and c. 2.9 million years ago the same region was inhabited by *Australopithecus afarensis.* The teeth of these two closely similar species show several temporal trends, toward larger post-canine teeth and functional changes in the canine-premolar cutting anatomy. Because of these trends, most of the scholars regard them as successive members of a single evolving lineage.

Genus Homo:

Genus Homo, of the family Hominidae (order Primates) characterized by a relatively large cranial capacity, limb structure adapted to a habitual erect posture and a bipedal gait, well-developed and fully opposable thumbs, hands capable of power and precision grips, and the ability to make standardized precision tools, using one tool to make another. Together with modern human beings or the *Homo sapiens sapiens,* the genus includes the extinct species *Homo habilis, Homo erectus* and *Homo heidelbergensis* as well as the *Homo neanderthalensis,* the early form of *Homo sapiens* called Anatomically Modern Human (AMH) etc.

Homo habilis:

Homo habilis is regarded as the most ancient representative of the human genus, Homo. This extinct species inhabited parts of sub-Saharan Africa from roughly 2.4 to 1.5 million years ago. In 1959 and 1960 the first fossils of this species were discovered at Olduvai Gorge in northern Tanzania. This discovery was a turning point in the science of palaeoanthropology because the oldest previously known human fossils were Asian specimens of *Homo erectus.* Many features of *Homo habilis* appear to be intermediate in terms of evolutionary development between the relatively primitive Australopithecus and the more-advanced Homo species.

Homo habilis, although a scavenger rather than a master hunter, is thought to have mastered the Lower Palaeolithic Oldwan tool set which utilized stone flakes. These stone flakes were more advanced than any tools previously used, and gave

Homo habilis the edge it needed to prosper in hostile environments previously too formidable for primates. It is a matter of controversy that whether the *Homo habilis* was the first hominid to master stone tool technology or not, as fossil of *Australopithecus garhi,* dated to 2.6 million years ago, has been found along with stone tool implements at least 100,000 to 200,000 years older than Homo habilis.

Homo habilis co-existed with other Homo-like bipedal primates, such as *Paranthropus boisei,* some of which prospered for many millennia. However, *Homo habilis,* possibly because of its early tool innovation and a less specialized diet, became the precursor of an entire line of new species, whereas *Paranthropus boisei* disappeared from the fossil record. *Homo habilis* may also have coexisted with *Homo erectus* in Africa for a period of 500,000 years.

Homo habilis has often been thought to be the ancestor of *Homo ergaster,* itself the ancestor of *Homo erectus,* but debates continue; was *Homo habilis* a direct human ancestor? Some argue *Homo habilis* was made up of fossil specimens of Australopithecus and Homo. Others argue that *Homo habilis* and *Homo erectuswere* separate lineages from a common ancestor instead of *Homo erectus* being descended from *Homo habilis*.

Homo erectus:

Homo erectus, meaning 'upright man' is an extinct species of hominid that lived from the end of the Pliocene epoch to the later Pleistocene, with the earliest fossil evidence dating to around 1.9 million years ago and the most recent to approximately 200,000 years ago. The species originated in Africa and migrated as far as India, China and Java.

Regarding the origin of *Homo erectus* there are two theories. The first theory is that *Homo erectus* migrated from Africa during the Early Pleistocene about 2 million years ago and dispersed throughout the lands of Afro-Eurasia. The second theory is that *Homo erectus* evolved in Asia and then migrated to Africa, indicated by the discoveries on Java (known as Java man) and at Zhoukoudian in China, as well as the site of Dmanisiin Georgia, slightly before the earliest evidence in Africa.

Homo erectus appeared almost 2 million years ago at a time when the global climate changed, making Africa drier and more open. This suited *Homo erectus,* who was agile; the feet were arched for walking and running. Eyes could be trained on a distant target due to the balance provided by the vestibule-cochlear apparatus - an

organ of balance and movement change, a new anatomical feature similar to that of modern humans. *Homo erectus* had little body hair which meant it could shed heat and be active throughout the course of the day. This may have heralded a change from scavenger to hunter. *Homo erectus* had a smaller gut and smaller teeth than its predecessors, suggesting a better diet. Moreover, there is evidence to suggest the use of fire to cook food. This would produce a higher-energy diet, reallocating calories, and encouraging brain growth.

Homo erectus had a cranial capacity greater than that of *Homo habilis*, between 850 cm3 and 1100 cm3, with a frontal bone less sloped, smaller teeth and a faceless protrusive than the Australopithecines or *Homo habilis.* It stood about 1.79 meters tall. The sexual dimorphism between males and females was slightly greater than seen in *Homo sapiens*, with males being about 25% larger than females. However, their dimorphism is drastically lesser than that of the earlier Australopithecus genus.

Homo erectus used comparatively primitive tools. However, these tools demonstrated a degree of planning, with hand axes fashioned with flaking on 2 sides and a straight edge all the way around. It has been suggested that *Homo erectus* may have been the first hominid to use rafts to travel. It lived in a hunter-gatherer society, hunting in co-ordinated groups. It may have used a proto-language, as indicated by the Dmanisi evidence.

Neanderthals:

Neanderthal, (*Homo neanderthalensis* or sometimes identified as *Homo sapiens neanderthalensis*), is a member of a group of archaic humans who emerged at least 200,000 years ago during the Pleistocene Epoch and were replaced or assimilated by early modern human populations (*Homo sapiens*) between 35,000 and perhaps 24,000 years ago. Neanderthals inhabited Eurasia from the Atlantic regions of Europe eastward to Central Asia, from as far north as present-day Belgium and as far south as the Mediterranean and south-west Asia. Similar archaic human populations lived at the same time in eastern Asia and in Africa. Because Neanderthals lived in a land of abundant limestone caves, which preserved bones well, and where there has been a long history of prehistoric research, they are better known than any other archaic human group. Consequently, they have become the archetypal "cavemen." The name Neanderthal derives from the Neander Valley in Germany, where the fossils of this species were first found.

Anatomically Modern Human (AMH):

Anatomically Modern Humans evolved from archaic humans in the Middle Palaeolithic, about 200,000 years ago. The emergence of Anatomically Modern Human marks the dawn of the subspecies Homo sapiens sapiens, i.e. the subspecies of Homo sapiens to which all humans alive today belong. The oldest fossil remains of Anatomically Modern Humans are the Omo remains found in modern-day East Africa, which date to 195,000 years ago and include two partial skulls as well as arm, leg, foot and pelvis bones.

Compared to the Neanderthals and other late archaic humans, modern humans generally have more delicate skeletons. Their skulls are more rounded and their brow ridges generally protrude much less. They rarely have the occipital buns found on the back of Neanderthal skulls. They also have relatively high foreheads, smaller faces, and pointed chins.

The first fossils of early modern humans to be identified were found in 1868 at the 27,000-23,000 year old Cro-Magnon rock shelter site near the village of Les Eyzies in south western France. They were subsequently named as the Cro-Magnon people. They were very similar in appearance to modern Europeans. Males were 5 feet 4 inches to 6 feet tall. That was 4-12 inches taller than the Neanderthals. Their skeletons and musculature generally were less massive than the Neanderthals. The Cro-Magnon had broad, small faces with pointed chins and high foreheads. Their cranial capacities were up to 1590 cm, which is relatively large even for people today.

Thus in this way through a long way of evolution the present-day form of human beings appeared.

3.7 Conclusion

The evolution of human body and mind has been discussed in the present unit. We have learned that over the years, the body and mind of human being had to adapt to the changing situation, circumstances and ecology and environment. It is through evolution, which could be considered as a continuous process of change, adaption, transformation and modification, all the species including humans tried to survive. The human body and mind also evolved accordingly. It was in fact due to the long journey from ape to human: a series of proto-human species evolved and became extinct on the earth. The evolution of proto-humans and humans show the existence of diversity

in the prehistoric period. The present day civilization bears all the marks and characteristics of the prehistoric struggle of survival for existence.

3.8 Model Questions

1. Write a short note on the origin of life on earth.
2. Briefly discuss the evolution process of human with special emphasis on the genus Homos.
3. Write a short note on Neanderthals.
4. What is the full form of AMH? Write a short on this species.

3.9 Suggested Readings

Childe, V. Gordon, *What Happened in History*, Harmondsworth, 1942.

Le Gros Clarke, W. E., *The Fossil Evidence for Human Evolution*, Chicago, 1955.

Leakey, Richard, *The Origin of Humankind*, London, 1996.

Unit 4 ❑ Palaeolithic Culture

Structure

4.0 Objectives

- The objective of this unit is to study the Palaeolithic people and their culture
- Under this section, learners will get an idea about,
  - The Palaeolithic stone tool techniques
  - Their society &
  - The regional variations of Palaeolithic cultures
- Lastly, the out of Africa hypothesis about human migration will also be discussed

4.1 Introduction : Palaeolithic Peoples and their Culture

Archaeologists have divided the course of human civilization into different phases on the basis of technological advancement and the materials used most commonly. The earliest known human culture was almost solely based on the use of large and medium size stones. This culture is known as the Palaeolithic culture. Therefore the Palaeolithic culture can be defined as the earliest stage of the cultural evolution of human civilization, characterised by almost sole use of primitive stone implements. The word 'Palaeolithic' derives from two words i.e. 'Palaeo' and 'Lithos'. 'Palaeo' means old and 'Lithos' means stone. The Palaeolithic period is particularly significant in human history because of the use of artefacts. Humans turned to tool users during this time. The term artefacts refer to 'artificially made objects'. The Palaeolithic people

were able to artificially make objects for their daily life purposes.

The Palaeolithic peoples can be divided into two types on the basis of skeletal morphology. Based on sporadic finds of parts of early human skeletons dating from the Ice Age, these are identified as Neanderthals and Anatomically Modern Human (generally abbreviated as AMH). Neanderthals were associated with flint tools. They had a long skull ending in a point at the back of the head, a lower jaw with barely any chin and a very low brainpan. In spite of having longer arms they walked upright. The AMHs had striking similarities with the modern humans or the *Homo sapiens sapiens.* The skeletal remains of AMHs show a well-developed skull, a high forehead and a pronounced chin. They were associated with hand axe and flake pebble tool cultures.

4.2 Timeline and Classification

The Palaeolithic period lasted for a large period of time. In fact, this was the lengthiest cultural phase of the human civilization. Starting from about 2.7 million years ago, the culture had lasted almost up to about 10000 years ago. The archaeologists have divided this vast period into three sub-ages on the basis of tool cultures. These three sub-ages are - lower, middle and upper Palaeolithic periods.

The lower Palaeolithic culture is characterised by roughly constructed tools. These stone tools usually were made of flint, which occurred mainly in areas of calcium and chalk deposits. Palaeolithic people most probably used palm-long rounded rocks for chipping sharp flint edges for spear points and arrowheads. In this context on thing should be remembered that the first hominid species who were able to make tools were not the AMHs but the *Homo habilis.*

The middle Palaeolithic period began during the third interglacial period. The Neanderthals appeared for the first time during this period. Levallois technique was chiefly associated with this time. Mousterian culture was also a main feature of the time. At first it was generally believed that the Mousterian tools were made by the Neanderthals. But recent studies show that *Homo sapiens* or the AMHs had already being existed before the advent of the Neanderthals. A considerably large numbers of skeletal remains of the *Homo sapiens* have been found in Mousterian layers of different regions. These evidences indicate clearly that the Neanderthals and the AMHs or the Homo sapiens co-existed during the middle Palaeolithic period.

Some remarkable changes and developments in cultural innovations took place

during the upper Palaeolithic period. The upper Palaeolithic tools exhibited an increasing degree of specialisation. Refined and specialised tools made for specific purposes were the most important feature of this period.

4.3 Palaeolithic Stone Tool Techniques

The earliest human made stone tool was an almond shaped rough hand axe. Gradually other flint and flake tool techniques grew.

Acheulean/Abbevillian: The extremely simple almond shaped, randomly chipped, semi-sharp edged primitive hand axe culture was first discovered in St. Acheul region. Therefore, the culture was named as the Acheulian culture by the archaeologists. These primitive tools were used to butcher animals and to carve wood.

An offshoot of Acheulean culture had been developed near the North African town of Abbeville. This lower Palaeolithic stone tool culture became known as the Abbevillian culture. A very kin difference between the Acheulean and Abbevillian hand axes was the blunt edges of the Abbevillian axes. Acheulian axes were sharper than the Abbevillian one. But the bluntness of edges does not indicate technological backwardness. Rather it showed definite advances over the simple chopper in the technique of stone processing.

It is generally assumed by the archaeologists that the Acheulian and its offshoot cultures were developed sometimes around the beginning of the Middle-Riss Interglacial or the second Interglacial period.

Core and Flake tools: During the later lower Palaeolithic period, hand axes became more advanced. Many other stone tool making techniques were emerged. During this time both Core tool and Flake tool making technologies co-existed. Flake tools were made from the chips that were broken off large parent stones. Such chips are termed blades. Generally, blades were twice as long as it is wide. It is impossible to differentiate lower Palaeolithic stone tool cultures into water-tight blocks. Core axes and Flake blade tools have often been discovered together.

Kafuan-Villafrancan Industry: a Palaeolithic flake pebble tool industry mostly common alongside of the river Kafu in Uganda of southern Africa. Later similar tool remains had been found in Villafranca region of Spain. Thus the industry named after these two regions, though it is still unknown to us that how these two regions were culturally connected.

Oldwan: one of the most important and wide spread Palaeolithic tool tradition is known as Oldwan. The industry is named after the type site of Olduvai Gorge located near Tanganyika region of eastern Africa. Professoressor L.S.B. Leaky in 1859 had discovered some flake tools associated with a number of hominoid fossils from this region. This industry was fully based on core and flake tools - hand axe making technique was not known to them.

Clactonian: a Palaeolithic uni-facial core and flake tool industry mostly common in Clacton on Sea region of England. It has striking similarities with the Asian flake pebble tool industries. This industry also was hand axe free industry.

Levalloisian: an advanced Palaeolithic stone tool industry first discovered from Levallois-Perret type site located near Paris of France. The industry is named after this type site. Oval and triangular stone tools were the most common types of this industry.

Mousterian: an advance form of the Palaeolithic Acheulian industry. Remains of this form first discovered from La Moustre type site of France. Therefore, the industry named after this type site. Ring shaped stone tools were typical of this industry.

Aurignacian: a blade based Palaeolithic industry mostly common in Aurignac region of France. It flourished mainly during the upper Palaeolithic period.

Solutrean: a leaf shaped pointed tool based Palaeolithic industry mostly common in Solutre region of France. This industry was also typical of upper Palaeolithic period.

Magdalenian: an upper Palaeolithic advance stone tool industry mostly common in France. The industry was named after la Madeleine type site of Vezere valley, France.

4.4 Palaeolithic Society

It is indeed a tough job to reconstruct the social history of the Palaeolithic period, as we have only a very few archaeological remains of that time. Socio-anthropologically we may divide the Palaeolithic society into two different Hominid cultures - the Neanderthal social culture and the *Homo sapiens* social culture. It is needless to mention that both the cultures had many similarities and they had co-existed for a long period of time.

Palaeolithic peoples were mostly cave dwellers. They usually lived either inside a cave or in any rock shelters. But some open air temporary shelters had also discovered. Archaeologists generally assumed that these open air shelters were used as temporary habitation sites by the Neanderthals. These hut like shelters were constructed by using hides. Palaeolithic peoples also invented the art of scraping and cleaning of hides. Cleaned scraped hides were used for bedding, clothing, as well as for making tents. The art of tanning leather was not known to them. But they were able to make and control fire, and to use it for lighting-heating as well as for cooking purposes.

The socio economic structure of the Palaeolithic people was based on hunting and food gathering. Initially they hunted small animals like frog, rat, bird etc. Some herbs and fruits were also consumed by them. Later they became able to hunt larger animals and catch fishes as the social bonding became stronger among them with the passage of time. The physiological analysis shows that the Palaeolithic people i.e. the Neanderthals and the AMHs both were omnivorous. There is a debate among scholars regarding the practice of cannibalism. Some scholars assumed that the Neanderthals were cannibals. This hypothesis is based on the evidences of some Neanderthal skeletal remains having cut marks similar to butchered animals. The nature and level of cannibalism is still not clear to us. Some scholars assumed that this was practiced either in a scarcity of food situation or it may be a part of their mortuary rituals.

Palaeolithic graves:

Palaeolithic people believed in the concept of afterlife. Remains of some upper Palaeolithic graves clearly indicate this. We do not have much evidence of burials up to middle Palaeolithic era. Deceased bodies were usually coloured with red ochre and buried with stone tools and food stuffs. An example of this complex burial practices is found in the Sunghir site of present day Russia. Skeletal remains of three peoples have found from this grave site of which two bodies were buried in head to head pattern. The third body shows evidence of a possible violent death. Another grave of an adult man found from the same site i.e. the site of Sunghir show the evidence of an elaborate and luxurious burial practice. The skeletal remains suggest that the cause of death was due to the penetration of a sharp blade through the first thoracic vertebra severing the carotid artery. This may be a result of a hunting accident or a violent confrontation or even a ritual killing. But the most important thing is the extremely high standard of this particular grave. It contains almost thousands of ivory beads and other stuffs. It clearly indicates towards some sort of hierarchical social

structure instead of egalitarian society. Use of red ochre was common practice throughout the eastern and western Europe. This decoration supposed to indicate some kind of commemorative ritual practice. Recently two infant burials have been found in eastern Austria. These burials also show the evidence of same practice. This indicates that even the new-borns also considered as the full member of the community and were treated in death much the same as the adults. One of the most spectacular burials from the Upper Palaeolithic period is from a triple inhumation in Dolní Vêstonice in Moravia (c. 26 kya) which feature three well preserved skeletons but with unusual funerary signatures which may say something about the society which interred them. Buried side by side and probably simultaneously, the middle skeleton shows severe bone deformity in the form of acute bowing of the limbs likely an inherited disorder, while the other skeletons are male and healthy in appearance. The skeletal remains however show a commonality in genetic material. The male on the left has his arm extended to the pubic region of the female while the male on the right is positioned face down. The grave is dated to 26,500 BP in the late phase of the Upper Palaeolithic era.

The upper Palaeolithic graves indicate towards an unbalanced sex ratio. The number of male inhumations is larger than female. However, the female graves are equally decorated like the male graves. The chemical analysis of the skeletal remains found in different graves helps us to know about the food habit of the upper Palaeolithic people. The chemical analysis of the skeletons found at Sunghir show healthier chemical composition in their bone structure which indicates towards their healthy eating habits. Their diet was not only consisting of mammals and fish but also of plants and invertebrates.

New insights into the societies of the Upper Palaeolithic appear at the grotto cave excavations at Romito which show evidence of interbreeding. Endogamy is present in one of the graves of an individual with dwarf characteristics attesting to serious genetic disease caused by inbreeding Perhaps the consequences of this practice may have become obvious with the birth of this person and others. Realisation of the effects of interbreeding was likely to have caused a change in societal practices with the outlawing of sexual intercourse between closely related tribal members. The fact that the dwarf seems to been afforded all the burial honours of other persons within the group suggests no particular stigma was attached to his deformity, nevertheless the effects of interbreeding must have been obvious.

4.5 Regional Variations of Palaeolithic Culture

Africa: Africa is the land where the biological transition from ape to hominin took place for the first time. Therefore, it is needless to mention that the Palaeolithic culture of Africa is the oldest among all the other Palaeolithic cultures. For a better understanding of the regional variations of the African Palaeolithic culture the region can be divided into four parts - northern region, the Nile valley, eastern region and South Africa. Tunisia, Algeria, Morocco and sub-Saharan regions are rich in Palaeolithic sites. A number of flake tools, Chellean/Abbevillian tools, Levalloisian tools and Acheulian tools are found from these regions. Two distinct cultures had flourished in northern Africa during the Palaeolithic times. These are known as Aterian culture and Oranian culture. Aterian culture is a stone tool tradition of the middle and late Palaeolithic period. This was common throughout northern Africa. Aterian people were the first who became able to use bow and arrow successfully. Technologically Aterian tools are an advanced African form of the European Levalloisian tradition adapted to desert use. Leaf shaped blade was the most common tool of this culture. Another important North African Palaeolithic industry is the Oranian culture. It is also known as the Ibero-Maurusian culture as it has very close similarities with the Magdalenian culture of Spain. It had connection with the Halfan culture of Nile valley also.

A number of Afro-Clactonian, early Acheulian and Abbevillian stone tools had been found from the Nile valley region. Halfan culture was the most important Palaeolithic culture of this region. This industry was mainly characterised by Halfan flakes, backed micro flakes and backed micro blades. Some scholars suggested that this culture was an offshoot of the Khormusan culture of Egypt.

Remains of Palaeolithic settlements had been found in Kenya, Uganda, Tanganyika regions of eastern Africa. Olduvai Gorge site of north Tanganyika is the most important Palaeolithic site of Africa. The Oldwan industry was named after this site. Among the others, Kafuan and Sanguan cultures were also very important. Some Palaeolithic sites had also been found in north Rhodesia, Mozambique and Angola regions of South Africa.

Europe: Among the early Palaeolithic sites of Europe Aragón and Tautavel of France, Bilzingsleben, Maure, Steinheim of Germany, Boxgrove, Swanscombe of England, Fontana Ranuccio of Italy, Atapuerca of Spain and Petralona of Greece are the most important. European Palaeolithic culture had two main tool techniques -

hand axe and flake. Abbevillian, Acheulian, Clactonian and Levalloisian industries were most common during the Lower Palaeolithic time. Middle and Upper Palaeolithic times were characterised by Mousterian, Aurignacian, Perigordian, Salutrean and Magdalenian industries.

4.6 Out of Africa Hypothesis

This theory proposes that the transformation of ape into AMH or the anatomically Modern Human was done inside the African continent and later some groups had migrated towards Europe and Asia. There were at least several "out-of-Africa" dispersals of modern humans, possibly beginning as early as 270,000 years ago and certainly during 130,000 to 115,000 ago via northern Africa.These early waves appear to have mostly died out or retreated by 80,000 years ago. In the 2010s, studies in population genetics have uncovered evidence of interbreeding of Homo sapiens with archaic human in Eurasia and Oceania but not in Africa,which means that all non-African modern population groups, while mostly derived from early Homo sapiens, to a lesser extent are also descended from regional variants of archaic human.

Geological age	**Archaeological age**	**Time frame M.Y.**	**Nature of human**	**Tool tradition**	**Socio-economic structure**
Pleistocene	Lower Palaeolithic	4 million-2 million	*Homo habilis*	Oldwan	Hunter and food gatherer
Pleistocene	Lower Palaeolithic	All most contemporary	*Homo erectus*	Acheulian	Hunter and food gatherer
Pleistocene	Lower Palaeolithic	All most contemporary	Neanderthal and AMH	Acheulian	Hunter and food gatherer
Pleistocene	Middle Palaeolithic	40 - 20 M.Y.	Neanderthal and AMH	Levallois	Hunter and food gatherer
Pleistocene	Upper Palaeolithic	6 M.Y.	*Homo sapiens*	Layered Blades	Hunter and food gatherer

4.7 Conclusion

The present unit has discussed the origin and development of the Palaeolithic culture in the evolution of the civilization. In this prehistorical period, the first artistic expressions of human creativity were accomplished. This age clearly indicates the capability of proto-human and human species both in terms of material requirements and creative consciousness. Even during this period, language was first articulated in a more or less meaningful way. This age also witnessed the articulation and production of knowledge as well as sharing and transmission of knowledge even to the future generations, in this sense, During the Palaeolithic age, the regional variations also emerged. In this sense, it was a great watershed in the history of human evolution.

4.8 Model Questions

1. Write an essay on Palaeolithic culture emphasising on the regional variations of stone tools.
2. Write a short note on Palaeolithic society.
3. Write briefly about the grave culture of the Palaeolithic age.
4. What is 'Out of Africa Hypothesis'?

4.9 Suggested Readings

R. J. Wenke, *Patterns in Prehistory,* New York, 2006.

G. Clark, World Prehistory: *A New Perspective,* Cambridge, 1977.

Farooqui, Amar, *Early Social Formations,* Delhi, 2002.

Unit 5 ❑ Mesolithic Culture

Structure

5.0 Objectives

- The objective of this unit is to study the Mesolithic people and their culture.
- The learners in this unit will get an hint about,
  - The Mesolithic tool technology
  - The Mesolithic settlement patterns and
  - Mesolithic religion
- The migration of humans propelled by extreme climatic variations will also be discussed.

5.1 The Mesolithic Period

Mesolithic period is the ancient cultural stage that existed in the middle of the Palaeolithic and Neolithic periods. The term Mesolithic derives from 'meso' and 'lithos' which means middle stone. This period witnessed a number of advances. The most important feature of the Mesolithic stone tools was their small size. These were also made of chipped stone. Very small stone tools were mounted together on a shaft. These very small tools are termed as the Microliths. Stones were chiefly used material for making tools. But bones, antlers and woods were also used. A few Microliths have been discovered where polished stones were used.

5.2 Climate Change, Extinction and Migration

Mesolithic period witnessed a massive change in environment. The Ice Age was over now and the climate became warm. Climate changes during the Mesolithic included the retreat of the Pleistocene glaciers, a steep rise in sea levels, and the extinction of mega fauna (large-bodied animals). These changes were accompanied by a growth in forests and a major redistribution of animals and plants. Mega-faunal extinctions refer to the documented die-off of large-bodied mammals (mega fauna) from all over our planet at the end of the last ice age, at about the same time as the human colonization of the last, farthest-flung regions from Africa. The mass extinctions were neither synchronous nor universal, and the reasons Professorfered by researchers for those extinctions include (but are not limited to) climate change and human intervention. Before migrating far from Africa, early modern humans and Neanderthals co-existed with mega fauna in Africa and Eurasia for several tens of thousands of years. At the time, most of the planet was in steppe or grassland ecosystems, maintained by mega herbivores, massive vegetarians that impeded the colonization of trees, trampled and consumed saplings, and cleared and broke down the organic matter.

It is not clear which of these forces - climate change, human migration, and mega-faunal extinctions - caused the others, and it is very likely that the three forces worked together to re-sculpt the planet. When our earth became colder, the vegetation changed, and animals that did not adapt rapidly died out. Climate change may well have driven human migrations; people moving into new territories as new predators might have had negative effects on the existing fauna, through overkill of a particularly easy animal prey, or the spread of new diseases. In spite of that it must be remembered that the loss of the mega-herbivores also drives climate change. Enclosure studies have shown that large-bodied mammals such as elephants suppress woody vegetation, accounting for 80% of woody plant loss. The loss of large numbers of browsing, grazing, and grass-eating mega-mammals certainly led or added to the decrease of open vegetation and habitat mosaics, the increased occurrence of fire, and the decline of co-evolved plants. Long-term effects on seed dispersion continue to affect plant species distributions for thousands of years.

5.3 Mesolithic Technology

Mesolithic culture was known for adapting in many different ways to certain environments. Therefore, it would not be an exaggeration to say that the Mesolithic

hunters were more successful than the hunters of the Palaeolithic period, utilizing many more vegetable and animal food sources. The changeover is based chiefly on the development, yet again, of new techniques in tool manufacture. A great many small artefacts have been found, dating from this time that was fashioned with craftsmanship similar to that of the Gravettians, but more refined.

During the Mesolithic period, humans began the first steps in land management. Swamps and wetlands were purposely burned; chipped and ground stone axes were used to cut down trees for fires, and for constructing living quarters and fishing vessels. Stone tools were made from Microliths-tiny chips of stone made from blades or bladelets and set into toothed slots in bone or antler shafts. Tools made of composite material-bone, antlers, wood combined with stone-were used to create a variety of harpoons, arrows, and fish hooks. Nets and seines were developed for fishing and trapping small game; the first fish weirs, deliberate traps placed in streams, were constructed.Boats and canoes were built, and the first roads called wooden track ways were built to safely cross wetlands. Pottery and ground stone tools were first made during the Late Mesolithic, although they did not come into prominence until the Neolithic.

5.4 Settlement Pattern

Mesolithic hunter-gatherers moved seasonally, following animal migrations and plant changes. In many areas, large permanent or semi-permanent communities were located on the coasts, with smaller temporary hunting camps located further inland.

Mesolithic houses had sunken floors, which varied in outline from round to rectangular, and were built of wooden posts around a central hearth. Interactions between Mesolithic groups included the widespread exchange of raw materials and finished tools; genetic data suggest that there was also large-scale population movement and intermarriage across Eurasia.

Recent archaeological studies have convinced archaeologists that Mesolithic hunter-gatherers were instrumental in beginning the long slow process of domesticating plants and animals. The traditional switch to Neolithic ways of life was fueled in part by an intensifying emphasis on those resources, rather than the fact of domestication.

5.5 Mesolithic Religion

Mesolithic religions brought about a new way of life for the people of that time. In some places the Mesolithic humans had built some temple like structures which

they probably use for their religious purposes. In Urfa a stone temple has been found. The erection of this stone temple meant bringing together the people. It was a way for the people to be more open about their religious beliefs, although this led to conflict, and giving them a way to express themselves. The purpose of the temple was a place for people to gather and practice their religion once or twice per year. It was not a lived in, or home base, temple. It is important to understand that although the temple was monumental in changing the lives of these people, it was also responsible for a lot of their pain. The construction of the temple at Urfa caused a new set of religious behaviors.

The new set of religious behaviors presented in the people where a dramatic shift in their overall attitudes towards nature. The people began changing their entire way of life because of the new religious concepts they were learning. Herders stopped hunting the animals. They started using them as ritual sacrifices. They thought that by being more understanding towards their gods and giving offerings, they would be spared ill-will. Some of the farmers even began using humans for sacrificial purposes. It went as far as ritual sex and human sacrifice because the farmers believed that this would make their crops more fertile and grow larger.

5.6 Regional Variations

Europe: The time span of the Mesolithic period in Europe is considered as roughly between 23000 BCE and 12000 BCE. But some Pre-historians claim that it is in between 15000 BCE to 8000 BCE.

The European Middle Stone Age may be divided into two phases, first one is the early phase and second one is the middle and late phase. However, both of these two transitional phases include the following cultures.

- Phase 1 or Early Phase: Azilian, Tardenoisian and Asturian.
- Phase 2 or Middle and Late Phase: Maglemosean, Kitchen Midden or Ertebolle, and Campignion.

Azilian: The Azilian is a name given by archaeologists to an industry in the Franco-Cantabrian region of northern Spain and southern France. It probably dates to the period of the Allerød Oscillation around 14,000 years ago (uncalibrated) and followed the Magdalenian culture. It can be classified as part of the Epipaleolithic or the Mesolithic periods, or of both. The Azilian was named by Édouard Piette, who excavated the Mas d'Azil type-site in 1887.

Painted and sometimes engraved pebbles or cobbles are a feature of core Azilian sites; some 37 sites have produced them. The decoration is simple patterns of dots, zig-zags, and stripes, with some crosses or hatching, normally just on one side of the pebble, which is usually thin and flattish, and some 4 to 10 cm across.

Tardenoisian: The Tardenoisian or Beuronian is an archaeological culture of the Mesolithic or more specifically Epipaleolithic period from northern France and Belgium. Similar cultures are known further east in central Europe, parts of Britain and west across Spain. It is named after the type site at Fère-en-Tardenois in the Tardenois region in France, where E. Taté first discovered its characteristic artefacts in 1885. The presence of geometric microliths, microburin, scalene triangles, trapezoids and chisel-ended arrowheads and small flint blades made by the pressure-technique are the main characteristic features of this culture.

Asturian: The Asturian culture is an Epipalaeolithic or Mesolithic archaeological culture identified by a single form of artefact - the Asturian pick-axe, and found only in coastal locations of Iberia, especially in Eastern Asturias and Western Cantabria. It is believed that the Asturian tool was used for seafood gathering, and the sites where they are found are associated with very large shell-middens, which can fill caves to the ceiling.

Maglemosian: Maglemosian is the name given to a culture of the early Mesolithic period in Northern Europe. This culture had existed around 9000 BCE and was continued up to around 6000 BCE. In Scandinavia, the culture was succeeded by the Kongemose culture.

Ertebolle: The Ertebolle culture is the name of a hunter-gatherer and fisher, pottery-making culture dating to the end of the Mesolithic period. It began around 5300 BCE and continued up to around 3950 BCE. The culture was concentrated in Southern Scandinavia, but genetically linked to strongly related cultures in Northern Germany and the Northern Netherlands. It is named after the type site, a location in the small village of Ertebolle on Limfjorden in Danish Jutland.

Asia:

Jeulmun Pottery Culture: The Jeulmun Pottery culture is a prehistoric culture originated in Korea. Broadly the period spanned between c. 8000 BCE and c. 1500 BCE. This period subsumes the Mesolithic and Neolithic cultural stages in Korea, lasting c. 8000 BCE to c. 3500 BCE and c. 3500 BCE to c. 1500 BCE respectively. Because of the early presence of pottery, the entire period has also been subsumed

under a broad label of "Korean Neolithic". The Jeulmun pottery period is named after the decorated pottery vessels that form a large part of the pottery assemblage consistently over the above period, especially between c. 4000 BCE and c. 2000 BCE. The Jeulmun was a period of hunting, gathering, and small-scale cultivation of plants. Archaeologists sometimes refer to this life-style pattern as "broad-spectrum hunting-and-gathering". The Early Jeulmun period (c. 6000-3500 BC) is characterized by deep-sea fishing, hunting, and small semi-permanent settlements with pit-houses. Some Middle Jeulmun period (c. 3500-2000 BC) sites have yielded evidence of cultivation in the form of carbonized plant remains and agricultural stone tools.

Trialetian: Trialetianis an Upper Paleolithic and Epipaleolithic stone tool industry which had flourished in the area located at the south of the Caucasus Mountains and to the northern Zagros Mountains.

Kebarian culture: The Kebarian was an archaeological culture in the eastern Mediterranean area (c. 18,000 to 12,500 BP), named after its type site, Kebara Cave south of Haifa. The Kebarian were a highly mobile nomadic population, composed of hunters and gatherers in the Levantand Sinai areas who used Microlith tools. The Kebarian culture was characterized by small, geometric Microliths, and is thought to lack the specialized grinders and pounders found in later Near Eastern cultures. Small stone tools called Microliths and retouched bladelets can be found for the first time. The Microliths of this culture period differ greatly from the Aurignacian artefacts.

Africa:

Capsian culture: The Capsian culture was a Mesolithic culture centred in the Maghreb that lasted from about 8,000 to 2,700 BCE. It was named after the town of Gafsa in Tunisia, which was Capsa in Roman times. The Capsian industry was concentrated mainly in modern Tunisia and Algeria, with some lithic sites attested from southern Spain to Sicily.

During this period, the environment of the Maghreb was open savanna, much like modern East Africa, with Mediterranean forests at higher altitudes. The Capsian diet included a wide variety of animals, ranging from aurochs and hartebeest to hares and snails; there is little evidence concerning plants eaten.

5.7 Conclusion

The Mesolithic period is a transitory era between the Palaeolithic age and Neolithic age. Therefore, it had the features of both the age: Palaeolithic and Neolithic. As this

period witnessed the major climate change and environmental catastrophe, the human species had to adjust with it enormously. The first domestication of animals and plants was evident during this era. It was one of the big leaps of the civilization, we must note that religious consciousness was also articulated during this period with the changing mode of survival. The issues of regional variations, which had first appeared in the Palaeolithic culture, took a more concrete shape during the Mesolithic period. This period created the conditions required for the coming of Neolithic Period.

5.8 Model Questions

1. What is Microlith?
2. Write an essay on Mesolithic culture with special reference of its regional variations.
3. Write a short note on the climatic condition of the Mesolithic age.
4. Write a short note on Mesolithic belief system.

5.9 Suggested Readings

R. J. Wenke, *Patterns in Prehistory,* New York, 2006.

G. Clark, *World Prehistory: A New Perspective,* Cambridge, 1977.

Farooqui, Amar, *Early Social Formations,* Delhi, 2002.

Module II

Food Production

Unit 6 ❑ Neolithic Cultures - Beginnings of Agriculture and Animal Husbandry

Structure

6.0 Objectives

- The objective of this unit is to study the Neolithic people and their culture. Learners will get an idea about,
  - The coming of agriculture & sedenterization of nomadic humans
  - The Neolithic tool technology
  - The religion & belief system of Neolithic people
- A brief idea about the pre-historic rock art will also be discussed

6.1 Introduction : The Neolithic Period

The third stage of human cultural evolution is known as the Neolithic period. The period witnessed a number of structural changes made by the human. The Australian

archaeologist V. Gordon Childe described this period as the Neolithic revolution for this huge cultural leap - a structural change. It is may be needless to mention that among all the changes occurred during this time the most important change was the coming of agriculture. This was the time when human for the first time being able to plant or cultivate some edible grasses, roots and trees. This progress gave man control over his food supply. Another important change of this period was the successful domestication of animals. These two closely related steps changed the entire scenario of the prehistoric time.

6.2 Neolithic People

Biologically the course of human evolution had reached in its final stage during the Neolithic time. The skeletal remains of Neolithic time indicate their similarities with the modern human in all aspects. Anthropologically this species of human beings are known as the *Homo sapiens sapiens.*

6.3 Coming of the Agriculture

The most important change for which this period is termed as the revolution was the coming of the agriculture. Homo sapiens sapiens was responsible for this revolution. Beginning of agriculture paved way for many other structural changes, such as the sedentary lifestyle, rural community formation and finally led to urban revolution. Therefore it is obvious that we cannot overlook the vital role of the agriculture in this regard. But it is yet not been very clear to us that how and why agriculture began at that particular time. Scholars are greatly divided in this matter. A very simplistic and speculative notion about the origins of agriculture which we all know from our childhood days that one day suddenly/accidentally men discovered the seed-plant relationship. This accidental discovery changed the further course of history.

Desiccation theory: Some scholars have regarded climatic change as an important factor for the coming of the agriculture. V. Gordon Childe observed that the food producing economy coincided with the end of the ice age. This post Pleistocene era witnessed a process of desiccation. This process had created water crisis at one hand and food crisis on the other. Therefore, a movement together with other animals towards the areas having at least some source of water was common. This common movement resulted in a close human and animal relationship. Some of these animals were soon domesticated. Wild cereal producing grasses started to be cultivated to

supplement the food supply. This crisis of food and subsequent wild grass cultivation led to a full-fledged agro based economy. Childe's explanation regarding the beginning of cultivation was widely accepted for long time.

During the post 1950s period, V. Gordon Childe's desiccation theory was started to be criticised by some scholars. The criticism started after Robert Braidwood's extensive excavations at northern Iraq. After thorough examination Braidwood had failed to find any evidence of desiccation there of post Pleistocene epoch. Therefore, he tried to explain this transformation in cultural terms. For him it was nothing but a result of abundant availability of some potentially cultivable plants and animals that had potential ability for domestication in some 'nuclear zones'. The people using those plants and animals were able to collect much information about them. This knowledge led to the origin of agriculture in those nuclear zones. Gradually the food producing culture had flourished all over the world.

Demographic theory: Demographic theory is another important view regarding the emergence of agriculture. This theory put stress on the changes in population. Famous anthropologist Lewis Binford had explained this transformation from hunting-gathering to cultivating society using this demographic theory for the first time. He argued that the pattern of adaptation would only change if the equilibrium between population and environment is disturbed. This equilibrium can only be changed either for the drastic environmental change or for the demographic change. The excavations at west Asia clearly show that there were no such drastic environmental changes in post Pleistocene era as once suggested by V. Gordon Childe. Therefore Binford tried to focus on demographic changes. For him increasing population was the main responsible factor for this transformation. He divided the habitats into two categories - optimal habitats and marginal habitats. During the end of the Pleistocene time a tendency towards sedentary lifestyle grew among the optimal habitats. This triggered population growth. This huge growth in population very obviously created huge crisis in food supply. In this context a shift towards food production took place.

Later Mark Cohen also put stress on population growth. But he differed with Binford in sedentary lifestyle point. For Binford, tendency to lead a sedentary way of life played the most important role in the increment process of population. Mark Cohen argued that the growth of population was not a new thing. It was rather a continuous process since the Palaeolithic time. Until the eve of the Neolithic revolution the Demand-Supply equilibrium was more or less undisturbed. But gradually it became difficult to accommodate the expanding population within the existing hunting-gathering

economy. In this situation people were compelled to explore new ways to procure food. Thus Cohen concluded that agriculture was a natural response to increasing population pressure.

Kent Flannery and Barbara Bender had strongly criticised the demographic expansion theory regarding the emergence of the agriculture. Flannery explained the transformation of socio-economy as a shift from a 'narrow spectrum' to a 'broad spectrum' economy. For him this transformation was neither a result of population growth nor of environmental changes. It was simply a result of taste change. He argued that upper Palaeolithic people of some regions gradually started giving more attention to certain types of plants. Growing attraction towards these few species damaged the equilibrium of hunting and gathering economy as the economy was mostly based on meat having practices. This new taste made agriculture mostly needed. Barbara Bender argued that demography is nothing but the result of a hierarchy of causes. Therefore, we should start by looking at social relations as a whole. Bender concluded that the adaptive strategies changed during the Neolithic period because social relations undergo changes.

6.4 New Life Style - Sedentary Way

The reason behind the coming of the agriculture is still unknown to us. But it may be said that the coming of the agriculture played a vital role in making of the further history of the mankind - the history of human civilization.

Barley and wheat were cultivated for the first time. Gradually cultivation of rice, millet, maize, yams and sweet potatoes etc. had started. Domestication of some wild animals was already done by human. Innovation of the art of cultivation helped people to make control over their food. This helped further growth of other occupations. As the grain growers can enjoy substantial spells of leisure, they can easily devote themselves to other occupations such as pot making or any other creative activities. Potter's wheel was invented by this time. At first pots were made on baskets. Cane wood or ropes were used as moulds. Wheel made clay pot making skill developed a little later. The clay used for making pots was usually refined. Although knitting skill had developed by this time but no evidence of cotton textile has yet been found.

It is generally believed that the coming of the agriculture paved the way of sedentary life style. Sedentary culture denotes the practice of living in one place for a long time. As the agriculture secured the supply of food, migratory life was no longer required for the Neolithic people. Thus settled agriculture based life style had emerged during this time.

V. Gordon Childe disagreed with this view for it's over simplicity. He argued that even during the late Neolithic period nomadism was not abandoned completely. Secondly, the adoption of a sedentary life style was not directly connected. He observed that many hunting gathering and fishing communities of ancient world possessed permanent villages of substantial, ornate wooden houses. Pacific coasts of Canada witnessed this kind of sedentary settlements. The Magdalenians of France during the ice age were also habituated in a sedentary living manner. They occupied the same cave over several generations. On the other hand, some special methods of cultivation impose some kinds of nomadism. This nomadic cultivation method is generally known as the hoe-culture or garden culture.

It is true that nomadism and sedentary settlements both coexisted during the Neolithic period. But a tendency towards adopting sedentary life style can clearly be traced. This change had an impact over the environment also. Organisms changed in accordance with the new living style. Species like house mice, rat, sparrow etc. increased in numbers and they settled along and near the human settlements.

The most important change occurred during this time was the rise of the concept of authority. This period witnessed cooperation among different groups which had settled down at one place on one hand and the emergence of some persons who had authority over the others. The existence of those authorised persons helped to maintain peaceful cooperation among different groups as well as speeded up the shift from food gathering to food production. Thus an efficient social organization was built during the Neolithic period.

Neolithic period witnessed changes in ritual and religious belief system. Ritual practices became more elaborate. A large number of female figurines have been found from different regions. This indicates a concept of promoting fertility was developed during this time. This was the birth time of mother goddess cults which is the most common characteristics of agrarian societies.

The changes occurred during the Neolithic period was not sudden but these marked massive qualitative change. The coming of the agriculture created conditions for developing a more complex society. Surplus production of food eventually led to the beginnings of urban civilizations. Thus it would not have been an exaggeration to term the Neolithic changes as the 'Neolithic Revolution'.

6.5 Neolithic Tools

Tools of stone, bone and deer antler were widely used in all the phases of the Neolithic, for economic activities, taking place both inside the settlement (e.g. food-preparation, weaving) as well as outside its confines (e.g. agriculture, hunting).

Stone tools constitute after pottery the most numerous classes of finds in the excavations of Neolithic settlements. Blade tools of flint and obsidian helped the Neolithic farmer and stock-rearing population to cut his food, reap cereals, cut hides etc. Larger tools of polished stone provided adzes for tilling the earth, axes for the logging of trees, chisels for wood, bone and stone working (e.g. stone vessels, seals, figurines).

Bone and antler tools although easily perishable, constitute one of the most important classes of finds in terms of numbers and form. Hooks, arrow heads, awls, spatulas, and needles were tools essential in fishing, hunting, leather working, basketry, weaving and pottery.

Tools of every kind were manufactured during the Neolithic either by the users themselves or by members of the community possessing a special ability in the working of one or another material, without any specialization though in this particular job.

6.6 Neolithic Belief System

In the Neolithic Era, people focused more on the importance of fertility, or productivity and reproduction. The fertility of the land needed to grow crops, the domestic animals that fed the people and the reproductive abilities of women, so that children could care for the fields and for their parents in old age, were all major concerns during this time.

Neolithic people worshiped the Mother Goddess of earth fertility, who also represented the life cycle of plants. She died and disappeared when the weather turned cold only to be reborn in the spring. The Mother Goddess was the mistress of nature and the protector of animals and crops. She typically took the form of a small clay statue in the shape of a girl or a woman giving birth.

People of the Neolithic age were animists. They believed that all the elements of the natural world, like animals, forests, mountains, rivers, and stones, had self-consciousness. We do not know exactly what properties Neolithic men attributed to

natural elements. However, by studying the animist religions that survived, we can suppose that Neolithic people assumed that the elements found in the natural world had a soul and that they could benefit or harm people.

6.7 Neolithic Burial Practices

Burial practices in this period are characterized by collective burial in large, highly visible monuments, and by ritual practices resulting in the scattering of human bones in non-funerary contexts.

Early Neolithic (6000-5200 years ago)

Large collective monuments for the dead began to appear on the coastal fringes of Western Europe (including major parts of Britain) at this period. In inland Europe the Mesolithic tradition of burial in simple earth graves continued. The areas in which these large monuments were constructed correspond with the densely populated regions of the Mesolithic and may have been built as markers of territory between the new and old populations. They represented a permanent link between the community, the ancestral dead, and the land which they occupied, generally being placed close to settled areas in dominant positions. A good example is the West Kennet long barrow (Wiltshire) which dominates the skyline.

There is some suggestion that the shape of tombs is related to the type of housing favoured in an area (round, rectangular, trapezoid or irregular). Houses of the dead were usually more permanent than those of the living, because the ancestors represent the community and the tombs were shrines to these supernatural beings.

The tombs may have had several functions aside from that of disposal of the dead, in the same way that a parish church is not simply a burial place. However, the main function which is visible in the archaeological record is the burial of human remains. Generally these tombs contain several bodies, with an average in Wessex of six per tomb. In most cases the bodies are disarticulated and incomplete, with some degree of erosion or animal gnawing, suggesting that the bodies were exposed to the elements before burial. This practice is known as excarnation.

In some cases, it seems likely that the first structure on a site was a timber mortuary enclosure which may have been used for exposure. This was later burnt down and covered by a mound, with some charring of the human remains inside. Deliberate complete cremation is rare.

In Wessex, excavation of causewayed enclosures such as Hambledon Hill has shown that these monuments may also have acted as mortuary enclosures. The ditches are filled with feasting debris, particularly bones of cattle, sheep and pigs, broken pottery, and disarticulated human remains. Skulls were placed at the bottom of ditches soon after they were dug, and deposits continued throughout the natural silting of the ditches.

There is some evidence to suggest that bones were removed from tombs to be used in ritual activities. Skulls are common in enclosures, but generally under-represented in tombs. Sorting of bones within the tombs is also common, and it is likely that tombs were periodically cleaned out for reuse. Adult bones are more common in tombs, but there are more children in causewayed enclosures. This could be a result of scattering of smaller remains by animals so that they were not collected for burial.

Burial in a long barrow may have been reserved for individuals of high status, but there are other possibilities. People may have been selected for their relevance to the rituals in which they were being used, such as shamans, transvestites, wise women, people who died in a certain way, had a certain spiritual type, representatives of each family in a group, etc.Grave goods or display items were sometimes present, for example pottery, shale beads, bone scoops, flint tools and arrowheads.

Not everyone was buried in long barrows. A few isolated flat graves have been found of this date, for example a female with an Abingdon-type bowl at Pangbourne, Dorset. These are sometimes marked by a post, and as similar animal burials have also been found it may be that the post and not the burial was the important feature, possibly as a totem pole. Casual burials are also found in the ditches of causewayed enclosures and in the shafts of flint mines. Over 250 burials are known from caves in Britain, and these consist of a much larger proportion of children than is found in long barrows, perhaps because they are undisturbed.

Later Neolithic (5500-4700 years ago)

There was a change in burial practices in Yorkshire and other areas around this time. Collective burial continued, but the bodies were undisturbed after burial and survive as intact articulated crouched skeletons. There was also an increase in the use of cremation. Both types were buried under mounds.

6.8 Prehistoric Rock Art

European Rock Art

Europe is particularly famous for its pictographic cave murals in southern France and Spain. They include: the Horse Panel and the Panel of Lions and Rhinoceroses at Chauvet Cave; the hand stencils and polychrome paintings in the underwater Cosquer Cave; the charcoal and ochre pictures of Dappled Horses at Pech-Merle Cave; the incredible Hall of the Bulls at Lascaux Cave; the animal paintings at Font de Gaume Cave and Cueva de La Pasiega; the extraordinary large scale wall paintings in the polychrome chamber at Altamira.

Franco-Cantabrian cave art can be divided into three phases. In the first or Lower Aurignacian phase, there are engravings drawn with the finger on soft clay walls. They are either simple spirals and frets, or crude representations of animals. There are paintings of animals, the crude contours done in black, yellow or red. And there are stenciled silhouettes of human hands, produced by laying the hand on the wall and blowing the colour over it or tracing the outline.

In the second or Upper Aurignacian phase we find engravings, paintings and charcoal drawing of animals represented with remarkable adherence to nature. The colours used are red and black, and the most essential details of the body are reproduced as well as the contours.

In the third or Lower Magdalenian phase both engravings and paintings reach the highest stage of their development. Proportions and details are masterfully portrayed. In the engravings, spaces are often rendered by hatching. Paintings are black partially filled in with brown or red, and there is expert use of shading. Quite apart from their artistic interest, these representations give us an idea of the life of these Paleolithic men. We see them in their principal occupation, hunting, and we can study their weapons, tools and ornaments. The Stone Age painters were complete masters in the art of rendering movement. A large number of their pictures are full of excitement and animation, as for instance the fighting scene from the Galeria del Roble, near Morella la Vella, Castellon in Spain.

Africa:

African rock paintings and engravings were, curiously, discovered earlier than European ones: those in southern Africa as early as the mid-18th century, those in the North in 1847 when they were found by a group of French soldiers who reported

engravings of elephants, lions, antelope, bovids, ostriches, gazelles, and human beings armed with bows and arrows. The best-known site of desert paintings in the north is the Tassili plateau, active from the age of Mesolithic art, which was explored and described by Henri Lhote in the 1950s. This is a mountainous area - 2000 sq. miles (5180 sq km) of rock and shifting sand - now inhabited by only a few Tuareg shepherds. Thousands of years ago, when the paintings were made, the land was fruitful, covered with forests and crossed by rivers alive with fish.

The style of the pictures is naturalistic, animated, and entirely different both from the conventionalized Libyan-Berber style, and from the early naturalistic, group of the Atlas. They seem to be much more closely related to South African Bushman art. Of particular interest are several polychrome paintings in the Tassili mountains representing graceful human figures with dappled cattle close by. To the south-west of this region, the French Ahagger expedition discovered in 1935 another site with the same kind of polychrome wall-paintings, showing various animals, but chiefly cattle. A few human figures are distinguished by extraordinarily animated and often graceful movements. The work is carried out entirely in spaces, so that they are genuine paintings and not linear drawings. On the same site, however, there are also a number of prehistoric engravings similar to the type in the Atlas region. There is a strong similarity between the Ahagger paintings and Bushman art, and, in addition they have a striking resemblance to the art of Ancient Egypt.

Some of the Saharan paintings depict Negroes and a hunting way of life (dating from the prehistoric Roundhead period), while others (from the Cattle period, 4000 BCE - 800 CE) show pastoralists, figures with copper-coloured skin and straight hair who resemble the Fulani cattle-herders of the west African savanna. Art historians have suggested, and ethnographical research partly confirmed, that these works of Neolithic art were created by proto-Fulani groups: they contain elements that correspond to features of Fulani myths taught during boys' initiation rites, such as the hermaphroditic cow from whose chest emerge the heads of domestic animals, and the graphic portrayal of what resembles a Fulani initiation field (a circle with the sun in the centre and heads of other cows, representing different phases of the moon, spaced around it).

The rock pictures in the Atlas region of Algeria were first investigated in 1913. They are almost all engravings: only two pictures painted in ochre were discovered and these belong to earlier periods. Three principal art groups may be distinguished. There are first the very early naturalistic drawings of animals which are now either extinct in this area, or belong to a very remote geological period. The huge impressive

design of a lion at Djattou is a good example. Next come a group of somewhat less naturalistic drawings, of slightly more recent date. Finally, there are the comparatively late Libyan-Berber designs, described as in part rather crude animal outlines, in part designs that are of a purely geometric and schematic character.

India:

The Daraki-Chattan Caves in Madhya Pradesh, Central India contain the world's oldest known petroglyph engravings. Another important site of Stone Age rock art in India is the Bhimbetka Rock Shelters, a UN World Heritage Site which was known to Indian archaeologists as early as 1888.

6.9 Conclusion

From the present unit, the significance of the Neolithic period is clear. It is one of the most important ages in the history of human civilization. It witnessed the transformation of the human civilization from the hunter-gatherer stage food producing stage through the settled agriculture. It also implies the establishment of settlements especially permanent types. The other developmental trends - tools, techniques, culture - also flourished indicating the continuity of the Paleolithic and Mesolithic periods. The emergence of consolidated societal bonds was also reflected in new cultural practices and religious beliefs in this era of human civilization. This period also saw the beginning of the use of Bronze. In this sense, the Neolithic period may be characterized as a revolution.

6.10 Model Questions

1. How do you explain the coming of the agriculture?
2. Do you agree with the view that the changes occurred during the Neolithic period was revolutionary?
3. Write a brief note on the Neolithic sedentary way of life.
4. Write a short note on Prehistoric Rock art.

6.11 Suggested Readings

Childe, V. Gordon, *Man Makes Himself,* London, 2000.

R. J. Wenke, *Patterns in Prehistory,* New York, 2006.

G. Clark, *World Prehistory: A New Perspective,* Cambridge, 1977.

Farooqui, Amar, *Early Social Formations,* Delhi, 2002.

Module III

Bronze Age Civilizations

Unit 7 ❑ A Survey of Chalcolithic Cultures

Structure

7.0 Objectives

- The objective of this unit is to study the Chalcolithic people and their culture
- Learners will also get a brief idea about the Bronze ages in various parts of the world, viz. in Europe, Egypt and China
- The tool & craft industries of Chalcolithic age will also be discussed

7.1 Introduction : The Chalcolithic Cultures

Human history has passed through many different ages and among these ages, the Bronze Age holds prime importance due to several different factors. The three features that distinguish the Bronze Age from the other ancient ages are urban civilization, utilization of bronze and proto-writing. To qualify for Bronze Age an ancient civilization must either produce its own bronze or it should it at least be trading in it. It is a fact that Bronze is more durable and harder than some of the other metals that are available on this earth. Since Bronze is more durable hence it is a kind of technological advantage to the Civilizations that exist in the Bronze Age.

7.2 Technological Progress and Other Features

Alloying as a higher metal working technique appeared at the end of the Copper Age. Bronze is an alloy of copper and tin. In contrast to copper, the malleable soft

metal, bronze possesses a superior quality of hardness. Tin has to be mixed with copper in a proportion of about one-tenth to produce bronze. A higher percentage of tin renders the alloy increasingly brittle. However, bronze predominated between the Copper Age and the Iron Age and therefore this particular period has been referred as Bronze Age.

Several types of bronze were found in the Bronze Age. Everywhere copper was the principal material. A small admixture of tin, phosphorous, arsenic or even sometimes the gold or silver is used with it. Copper-tin mixtures were found most widespread. Some good quality of bronze appeared in the Early Dynastic period in Egypt, close to 3000 BCE.

Some of the pre-historians believe that the entire bronze technique was percolated from outside, probably being cultivated by the people of the mountainous regions of Asia Minor and Armenia who later came to Egypt in search of raw materials. But the fact is far from proved to everyone's satisfaction. Those who believe bronze ted in South Russia around 3000 BCE advocated a rapid spread to East Europe, Near East and North India by 2500 BCE. Whatever may be, once the invention occurred, it was utilized effectively in different adjacent regions.

Since the copper-bearing strata are much more widely spread over the surface of the globe than those bearing tin, copper was discovered first and then tin. Archaeologists debate as to whether bronze was prepared by measuring out the proportion of the two elements in the metallic state or whether the ores were mixed up before putting them into the furnace.

By these hypotheses they wanted to explain the notable differences in the quality of the bronze arising from difference of tin content in the bronze. Not only can the tin, a very small proportion of arsenic, antimony or zinc modify the molecular shape of copper.

Ancient metal workers through their experience understood the varied properties of amalgamated metals. Because they found some copper ores produced a metal that cast better and naturally that particular kind of metal made better and harder implements than others. Thus the early workers became conscious about the nature of the ores. Gradually they understood that copper as a metal is rarely available in the natural state but abundantly found in various ores being mixed with rocks and other metals as copper sulphides, copper oxides, copper carbonates, etc. The metallic copper in ores is formed as a result of a prolonged contact of the outcropping copper veins and lodes with the atmosphere.

The most common compound is the copper carbonate (malachite). It was often grounded up to use as a green paint and regarded as the best source of metallic copper. Another kind of copper carbonate, which gave the blue colour, is called azurite. Besides, there are two forms of copper oxide-cuprite and melacouite and many sulphides of copper. As sulphide ores occur in deep veins and hard to find out, early people did not use them much. They have been the chief source of the metal only in recent days.

Early men first picked up the nodules of native copper either to get paint or to make an ornament. Primitive metal workers never went in search of great, concentrated deposits, not even in the period of Bronze Age when industrial use of the copper reached to the peak. However, there were many surface deposits throughout Asia and the mountainous regions of the Near East.

In Europe also, they were abundant. But the best sources are believed to be situated in Cyprus, Hungary and Spain. In Africa, the largest number of deposits is scattered in the Katanga region of the Belgian Congo and it is not known that whether they were worked before the Middle Ages.

The Tin which is essentially required for bronze was not readily available in past. Tin-bearing strata are actually rare as well as limited to a few localities. Tin ores occur in the original deposits in veins and in the form of small crystals in the crystalline rocks known as granulite; it is always an oxide called cassiterite and never found as a native metal.

Moreover, as cassiterite looks like a heavy dark sand, it does not seem to be a metallic substance and so very difficult to be identified. Small and moderate deposits occur in Armenia, Syria, North-West Persia and Bengal. Large deposits are only found in Malay Peninsula, in South-East Africa and China. The principal European sources are Bohemia, Spain and the British Isles. In Africa, same old tin mines have been reported from the Northern Nigeria and Transvaal but their age is not certain.

The attrition of rock-matrices and outcropping veins by atmospheric agencies produced alluvial formations in which stream-tin occurs in the form of sand. It is only necessary to wash this alluvium in order to extract the cassiterite. This method was used in the exploitation of tin in Malaya, at Brangka, Perak, etc. places. The first metallurgists found the beds of copper and tin in a virgin state. They simply dealt with oxides and used a reducing fire of charcoal to separate the metal. This metallurgical process is still utilized in Malay with the primitive furnaces or smelting hearths.

Cassiterite is always found in a siliceous gangue, which flakes in the fire. As for the carbonates of copper, the gangue is either calcareous or siliceous; it splits with the heat. From the very early times fire was used for the disaggregation of rocks containing metals.

It is held that man discovered the alloy of these two metals by chance of favouring circumstances, which played an important role in the history of mankind. In the closed moulds, not only the bronze, but any alloy was found suitable. Most copper ores contained other metals such as nickel, lead, phosphorus, antimony, arsenic etc. as natural impurities. Presence of these different metals produced good effects on the casting process and the products.

For instance:

(a) The manufactured object if contains arsenic with copper becomes harder than pure copper and provide a more durable cutting edge. It attains a property similar to bronze objects. Warriors with bronze weapons have always found their advantage over the enemies having copper or stone weapons.

(b) When metals with a lower melting point remain mixed with copper ore, the melting point for the whole alloy automatically comes down. This property provided a great convenience to the early metal workers who worked on primitive furnaces. The melting point of pure Copper is about 1085°C whereas for Antimony it is 630°C, for Lead 327°C and for Tin 232°C.

(c) The greatest advantage is found in the process of casting. In a closed mould, it is very difficult to cast copper because explosions or cracking of the moulds often take place. But the presence of other metal with copper minimizes this difficulty.

For successful casting 10 per cent to 12 per cent tin was mixed with 90 per cent to 88 per cent copper. All weapons and tools were made with this percentage. Since the addition of higher tin percentage renders the material increasingly brittle, a content of 30% of tin was used to produce a very fragile white metal which had been very popular as mirror in that olden time.

Bronze Age has been divided into four sub-periods by the early archaeologists. They attempted to classify the objects of each period on the basis of their size, shape, tangs, sockets, blades and ornamentation. It was especially significant in reference to the site of Montelius in France.

But more and more excavations throughout the Old World exhibited that the

sequences for the development of Bronze Age cultures are not similar in all places. Some types, which occurred earlier in some places, found from a later period in other places. Influences passed forward and backward in the adjacent areas but the main trend went outward from the Near East and the Eastern Mediterranean.

Professor V. Gordon Childe forwarded a new classification on the basis of usage of the metal. His classification had an academic support as he collected more evidences before presenting the classification.

He made three stages like:

(a) When the metal was used for making weapons and ornaments only.

(b) When the metal made tools for using them in various crafts and skilled trades.

(c) When the metal came into use in agriculture and rough work.

The Bronze was seldom used at the beginning for the difficulty of mining, smelting and working. It served as weapon, tool and ornaments of the wealthy people. The mass population, especially in ore-less regions, treated a bronze-piece as treasure.

It took several centuries for this new metal to diffuse from the upper classes to farmers and carpenters. Though stone tools were replaced gradually by bronze in Western Asia and parts of Europe, in China it remained confined to the limit of rich and powerful. Bronze proved itself better for the most purposes than the materials like stone, bone, wood and shell. Different tasks like ploughing the field, felling of trees, harvesting of crop, building of houses became easy as well as quick with the help of hard metal (bronze) tools. Some Bronze implements also stood unquestionable for the domestic uses.

Numerous bronze razors indicate that the shaving of men became quite popular during this period. Vessels had been made of bronze and bronze ornaments for personal adornments also appeared in this time. Elegant bracelets and necklaces were most notable; safety pins out of bronze became plenty for the use of both men and women. A great variety of weapons developed at the same time.

Most of them began to outgrow from an old form but with time they took a distinct form. For example, the bronze Celt at the beginning was very simple; wings and flanges were added later and finally the wings had grown so large that they met to form a complete socket. Such a transformation of a Celt to an axe was complete at the last phase of the Bronze Age. In the same way, long swords grew out of the chipped-stone dagger.

In the early Bronze Age these swords were very simple in type but in the late Bronze Age they were converted into broad-bladed double-edged sword. Neolithic polished stone axe with the haft hole gave rise to beautiful decorative battle-axe. Bronze spearheads developed out of flint spearheads. Although bronze arrowheads were not absent, but the scarcity of this weapon indicates that bow and arrow lost its popularity.

In the Bronze Age, pottery became a more developed craft of skill; different local styles were evolved. But the decorative art found on jewellery, tool or pottery was not considered as pure art. Megalithic monuments continued to be built in the Bronze Age, but the practice seemed to decline, as burial in cysts became popular.

At the late phase, cremation became fashionable. In Bronze Age we further find the sea-going boats which replaced the dugout canoe in order to carry a large number of passengers. Commerce therefore got a chance to be flourished through the river ways.

Weapons made of bronze altered the warfare strategy. But it is sure that the life was not peaceful. The nature as well as the number of weapons suggests that the people preferred face to face combat with hand. Villages were like fortified camps and men used to keep arms with them.

However, the intelligence of man lifted them up from their lethal capacities. They invented defensive devices against each killing tool. Therefore, shields, helmets, cuirass etc. were built during this period. Chiefs or kings were in the habit of using the precious bronze armours. Larger settlements were grown in general; in the advanced centres of civilization great palaces of stone and plaster were found to be built.

The use of bronze in almost all countries succeeded the use of pure copper. Neolithic stone implements disappeared slowly. The copper age towns, by the processes of cultural development, invention, diffusion (trade) and migration, gradually turned into Bronze Age cities and new ones were also built. In Mesopotamia, on the agriculturally rich Tigris-Euphrates valley, Sumerian cities grew up in the place of Copper Age settlements like Sumer, Ur, Layash, Erech and Eridu.

The Sumerian culture afterwards spread to the North upto Khabur and also to the vicinity of Baghdad. Archaeologists have divided it into two phases, the Uruk and Jemdet Nasr; the names were derived from two important sites. Parallel Bronze Age cities sprang up along the river Nile in Egypt. Bronze Age cities of Egypt are better known than their Copper Age predecessors.

Bronze Age cities grew up more or less at the same time in India on the Indus

River valley and its tributaries in the Punjab. Those people knew carts and the potter's wheel and also the bronze making techniques. Some of their techniques were found identical with the Mesopotamian techniques.

The evidences of trade can be traced between Indus and Tigris-Euphrates. Bronze Age influences spread from Egypt and the Syrian coast to Cyprus, Troy and other cities in Asia Minor and also to the Greek islands and mainland where the classic Mediterranean civilizations arose. In the next phase, Bronze Age culture advanced westward through Italy towards Europe. Trade routes were maintained both in land and sea. Thus, Bronze Age spread eastern, western and central Europe and from those areas to Gaul and Britain, and finally to Germany and Scandinavia.

It is difficult to be precise about the date of the inception of bronze industry in different lands and different localities. In the ancient centers like Chaldea and Egypt it existed towards the end of the fifth millennium before the present era; in the Eastern Mediterranean it would be about third millennium before the present era. Perhaps in Gaul it reached around 2000 BCE and in the North of Persia and Caucasus only a thousand years earlier. Nevertheless, all these estimates are merely approximate and unfortunately the documentation is not as perfect as to establish a chronology with absolute certainty.

Copper phase was not a universal phenomenon in prehistory, nor it lasted more than a few centuries. Copper Age appeared largely in those places where the natural distribution of copper nuggets was accidentally found. As soon as the use of copper was established, the discovery of bronze was followed in rapid pace. However, the copper producing zones can be distinguished into two groups.

Europe witnessed a brief and fleeting era of copper. The Aegean islands Western Asia and Egypt were left. Among them, Egypt can be expelled from the group of copper-producing countries because this country probably got the knowledge of copper from Asia. The Altai and the Pamir are equally rich in copper but the antiquity of metallurgy in both the regions does not seem to go very far. In all probability, it was the north of Western Asia where the metallurgic knowledge was first discovered.

Thereafter the knowledge, in a rudimentary state, would have gone down into Chaldea with the men who first went there to establish their settlements. Then it would have passed over to Egypt, the Phoenician Coasts and the Aegean islands i.e. the centres from which the knowledge spread to Europe.

Indo-china and China were favoured by nature for the discovery of bronze as

plenty of cupriferous ore and Stanniferous ore were found there. But we should restrain our pen from drawing any inference until the Central Asia and China are better explored. Although the social effect of the copper was not very remarkable. But the full-fledged bronze technology influenced the entire culture as well as the structure of the society. As the craft of extracting ores and working with bronze required special skills, the labourers like smiths, artisans and the miners came into being. Each of them assumed a vital role in the society.

Miners and particularly the bronze-founders tended to become a set-off caste with hereditary trade secrets. So class divisions appeared in the society. Not only that, advent of agriculture itself sowed the seeds of social inequality and class-distinctions. Since all soils had not same amount of productive power, it was very likely that some particular families might produce much more crops in the field than others might.

Naturally the classification like rich and poor was already in vogue. This inequality increased sharply in the Bronze Age. Different classes like rulers, the nobles, the traders or businessmen, the artisan, the farmers and slaves came into existence. Emergence of cities was found in this Age; the copper Age towns by the process of cultural development grew up into cities.

Apart from the farmers, all other people used to live in the towns. Increase in the production of crops generated surplus food which was enough to foster the town-dwellers. The rulers and nobles living in the town accumulated much wealth in their hands and they often used to employ the bronze- smiths to acquire the products such as weapons, armour and various kinds of tools made of bronze.

As none of them produced food-grains, they were in the habit of taking crops from the farmers of the village. In lieu, they supplied the farmers some necessary things like tools, sickles, Celts, etc. This period can be said as the germination period of trade and commerce. The exchange of goods was done exclusively by barter. However, the people who lived in town had various occupations. So they had different interest as well.

The necessity of an organization was felt at this time to regulate and control the urban life. This necessity gave the rise to state. With the rise of city-states, the kingdoms became widespread; the political and economic system came into existence. Kings and priests achieved the status like God. These kings along with the priestly class were found to rule the society.

Some monumental temples were built to house the kings and priests, and all their

works and wealth including the images of Gods and Goddesses. These monuments were built of stone, brick or wood, or by the combinations of these materials, depending on their availability in the locality. The commerce flowed in and out of the so-called temples.

Old barter system was no more found suitable for active and complicated trading, so money economy was invented and great wealth was accumulated within the cities. With the increased scope of leisure and wealth, man's intelligence flourished in different directions; art, architecture, commerce, craft, script etc. all developed at a time.

Foundation of our modern science was also laid down during this period. The knowledge of arithmetic and geometry facilitated in dealing with weights and measurements; lunar or solar calendars contributed to human attributes. On the whole Bronze Age brought revolutionary changes in the growth of cities, of states and kings, of social classes, of enduring structures, monuments and writing. All new developments were interconnected with copper-bronze metallurgy.

7.3 Bronze Age in Europe

The European Bronze Age poses interesting features. There are no Bronze Age cities in Europe no known political unification, no writing; even the potter's wheels were not adopted until about 1000BCE when the Bronze Age was ending in Asia. Actually Bronze Age Europe continued like Neolithic Europe with a peasant - culture.

A class of bronze-working smiths obviously appeared at that time but the rest of the people were the farmers. The reason for all these is that the infiltration of bronze took place in Europe after an expectable lag. In fact bronze crept to Hungary around 1900 BCE, Czechoslovakia, Central Germany and Italy around 1800 BCE; the Rhine, France and Britain around 1700 BCE and lastly to the Baltic Shores and Scandinavia around 1500 BCE.

7.4 Bronze Age in Egypt

The Protodynastic period of Ancient Egypt is very much linked with the Bronze Age. The Basic hallmarks of the Egyptian bronze civilization are their religious beliefs, art and architecture. The city which is highly popular in Egyptian Bronze age is Memphis. The Bronze Age of Egypt also has passed through various phases. Archaeologists have divided the bronze age of Egypt into three phases, such as, early, middle and late bronze dynasties.

7.5 Bronze Age in China

The Chinese Bronze Age came onto the face of this earth in 1700 BCE. It was the time when the monarchy of Shang Dynasty ruled China. The Monarchy had its reign in Northern China. It is said that the Bronze Age Chinese did not enjoy rice and tea. Both the rice and tea came from southern China. The Bronze Age Chinese mostly enjoyed cakes of millet, cereals and breads. The Chinese society of the Bronze Age had mystical beliefs such as it was their conviction that the rule of their king depends on his relations with the spirits of the ancestors.

7.6 Conclusion

The Chalcolithic culture—its formation, spread and impact could be considered as one of the most distinctive phases in the history of human civilization. During this period, the human civilization made certain significant advancement in spheres like use of metals, town planning, measurement, sophisticated agricultural production and trade and commerce. The development of urban culture means during this period of history, people were able to control and regulate the supply of agricultural products to the towns from the villages. In other words, the steady functioning of the socio-economic and administrative structure was the most important aspects of the Chalcolithic culture.

7.7 Model Questions

1. Write an essay on the general features of various chalcolithic cultures of the world.
2. Write a short note on the classifications of Bronze age with special mention of the classification made by V. Gordon Childe.

7.8 Suggested Readings

Childe, V. Gordon, *Man Makes Himself,* London, 2000.

R. J. Wenke, *Patterns in Prehistory,* New York, 2006.

G. Clark, *World Prehistory: A New Perspective,* Cambridge, 1977.

Farooqui, Amar, *Early Social Formations,* Delhi, 2002.

Unit 8 ❑ Mesopotamia

Structure

8.0 Objectives

- The objective of this unit is to study Ancient Mesopotamia.
- The preliminary idea of Mesopotamian geography along with various archeological excavations in the same will be thoroughly discussed
- Learners will get a rough idea about the origins of Early Sumerian city states
- A brief description of the early political history of Mesopotamia will also be portrayed, that would include the Akkadian Invasion under Sargon the Great & the foundation of Latter Akaddian state
- Lastly, the Epic of Gilgamesh will also be discussed.

8.1 Introduction

One of the most ancient civilizations of the world is Mesopotamia. The term Mesopotamia derives from Greek word which literally means the land between two

rivers. These two rivers are Tigris and Euphrates. The valley of these two rivers gave birth to the most ancient civilizations like Sumer, Akkad, Babylonia and Assyria. As our syllabus ends with the Akkadian period we will discuss here only up to that period.

8.2 Geography

Mesopotamia is the valley of two rivers called Tigris and Euphrates. The Tigris River begins in western Asia in two branches. These two branches join together at Til and flow towards south-east. The length of the River Tigris is about 1850 km. the River Euphrates originates in the Taurus Mountains of Turkey. It has also two branches known as the Eastern and Western Euphrates. It flows about 2735.3 km towards the Persian Gulf. It meets with the Tigris at al-Qurnah and together form the Shatt-al-Arab. It flows about 193.1 km. to the Persian Gulf. Although southern Mesopotamia has virtually no reliable rainfall but the regular flood of the Tigris and Euphrates helps the entire region to be so rich. The flood waters were well irrigated by the Mesopotamians since long past. The Tigris River begins to rise in March as its many tributaries in the north swelling because the snow melts, especially in the mountains of Turkey. Receiving water from the Taurus Mountains, the Euphrates River also starts to rise in March. The floods last until June. As a result of the successful and clever use of these flood waters the barren plains of this region became so rich. The ancient Mesopotamians called this region as the Fertile Crescent. This region is also often identified as the cradle of humanity as its history and myths are closely related to the history of the Jewish people recorded in the Bible.

8.3 Archaeological Excavations at the Fertile Crescent

Until the middle of the 19th century the Sumerian civilization was completely unknown to us. Excavations at many Assyrian sites like Nineveh, Dur Sharrukin, Calah, etc. led to the discovery of thousands of clay tablets much older than the Assyrian civilization. The tablets were mostly inscribed in Akkadian cuneiform. Sir Henry Creswicke Rawlinson and Edward Hincks discovered that some of the tablets were inscribed in an unknown language. In 1869 CE, the French archaeologist Jules Oppert named it Sumerian language because of the frequent mention of the king of Sumer in the inscriptions.

Later extensive excavations were done in this region by Paul Emile Botta, Victor

Place, Hormuzd Rassam, Sir Austen Henry Layard and many more. These excavations reveal the past history of Sumer, Akkad, and Babylonia etc. Our main sources of knowledge regarding the ancient history of Sumer are the inscriptions on clay tablets and archaeological findings at Lagash, Nippur, Kish, Adab, Uruk, Eridu, Eshnunna, Jamdet Nasr, Shuruppak, Tel al-Ubaid, Tutub and Ur. In spite of extensive excavations and explorations, no one has yet been able to reach the remains of the earliest human settlements in the region, because the ground water level has risen.

The deepest layers reached as so far have revealed evidence of a people with complex belief systems and social organizations. These people used primitive pictography. The evidence of the earliest existence of these people indicates that they arrived about 5000 BCE. Most of the scholars believe that the Semitic speaking people from the deserts of Arabia and Syria began to populate the region. By 3400 BCE the Sumerians started to use a unique language of their own. This language became the common speaking language of a new civilization. There were no separate Sumerian or Semite races. Intermarrying with the indigenous people, the so called Sumerians built a strong and vibrant culture, bound by religion and rich in art and architecture.

8.4 Early Sumerian City-States

The earliest period of Mesopotamian history is known as the Uruk period. It is named after the excavated city-site of Uruk. This period witnessed the emergence of some small settlements, usually built around a large sanctuary. The Sumerian cities of Ur, Uruk, Nippur, Adab, Eridu, Isin, Kish, Lagash and Larsa were the most important settlements of this time. The Sumerian people believed that the god is not only the giver of fertility, but also, through the temple, the owner of the most land and cattle herds. Thus, the temple occupied a central position in Sumerian life. The architecture of the temples reflects clearly its importance in Sumerian life. The most stupendous and conspicuous structure in any village was the temple. These were usually built on a number of terraces, forming the typical Mesopotamian temple tower called a Ziggurat. During the Uruk period, temples were decorated by cone mosaics, clay or stone cones with coloured tips hammered into the clay walls, creating colourful patterns.

Initially the cities were ruled by a governor on behalf of the god. The governor was known as the Ensi. Gradually the cities expanded and became larger city-states. These city-states were in conflict with one another. As they expanded, they absorbed

ever larger numbers. A new political figure emerged during this time, the Lugal. This term although literally means great man but it is usually translated as 'king'.

Gradually with the expansion of the city-states, the Sumerian element was eroded even as the power of the Sumerian city-states increased. The Semitic language from this era is called Akkadian. The city of Akkad became the capital of the Mesopotamian Empire. By the 3rd millennium BCE Akkadian language became more common and dominant in popular matters, while Sumerian remained the language of religion, jurisprudence and science in much the same way that Latin was used in Europe during the medieval period.

8.5 Sumerian Inter-City-States Battles

The first period with reliably recorded history in Mesopotamia is known as the early Dynastic period. During this time, Sumer was divided into several City-States. These states were often identified as polities (political organizations). They had continuous conflict with one another, usually because of disputes over ownership of water rights and land. Many of the historical rulers of these small polities, such as Enmerkar, Lugalbanda, Gilgamesh and Dumu-zi, became the subjects of later legends that probably contain a kernel of truth. The rulers of early Dynastic Sumer oversaw a great flowering of the arts and architecture.

Inter-City-States battles continued throughout a long period of time. Ennatum of Lagash managed a brief takeover of Sumer about 2425 BCE. The last of his successors was the remarkable social reformer-king Uruinimgina or Urukagina, who flourished about 2365 BCE. According to some cuneiform records, he was a religious ruler who reinstated many temple privileges. He had a new attitude toward his fellow men, reducing the influence of bureaucrats and forgiving the debts of small farmers.

Unlike him, Lugalzaggisi, the Lugal of the neighboring city-state of Umma about 2370 to 2347 BCE, was a confirmed warrior. He eventually succeeded in destroying the kingdom of Lagash. Lugalzaggisi reigned as the strongest ruler in southern Mesopotamia for about twenty years. He established regular trade relations with the coastal regions of the Mediterranean. Thus a new era was about to begin, when the development of a united Sumerian state was interrupted by the rise of the Akkadians. He was well on his way to forging full Sumerian control. His plans, however, were at odds with those of the Akkadian Sargon, already ruling the far north of Sumer.

8.6 Akkadian Invasion: Sargon the Great

Akkad was a small city-state located in north of Sumer, founded by Sargon. He was a man of unknown origin, who performed outstanding deeds under the auspices of gods. Thus it is quite natural that a number of myths had been created on his birth and career.

As Sargon was an expansionist, the conflict between him and Lugalzaggisi was inevitable. According to a cuneiform record, thirty-four battles were fought between Sargon and Lugalzaggissi. Sargon eventually triumphed, going on to conquer the rest of the country. He established a new empire of Sumer and Akkad in about 2335 BCE and set up a new capital of this united empire in the city of Akkad.

Under the rule of Sargon the great, Akkad became the greatest city of Mesopotamia, though it had none of the prestige of Sumer's ancient holy cities at its initial stage. Using his army, Sargon the great expanded his economic power. Because he needed to procure most raw materials from outside of Mesopotamia, he established a state monopoly over the supply routes for them. He took control of the upper Euphrates River and conquered a number of cities. He made trade in tin, essential to manufacture of bronze, a state monopoly.

The Akkadian period initiated by Sargon the great was one of the most splendid eras of Mesopotamian culture. This process took place without notable sociological conflict, largely because the Akkadian ascent to power was never accompanied by the destruction of Sumerian culture. They assimilated the Sumerian culture without giving up their own identity. The Semitic language now developed a written form, known today as Akkadian cuneiform, similar to the earlier Sumerian writing. Although the ruins of the city of Akkad have yet not been discovered but there are a number of archaeological finds from the Akkadian period. A number of cylinder seals of exceptional quality and a smaller number of steles have been found. The Sumerian artists were mostly concerned with portraying the eternal and the divine, while the Akkadian expressed more human qualities and the portrayal of historical events. Their art tells a story and reflects clearly the change in culture.

The major political difference from the preceding Sumerian period was, of course, the establishment of a unified government, the empire of Sumer and Akkad. Although the Sumerian Lugals had been moving in that direction for centuries, none had achieved the dominance of Sargon. Instead of several more or less equal sovereigns vying for

power, there was now a government structured like a pyramid, with the omnipotent king at its head. It is significant that the old Sumerian title Ensi was now used to mean 'deputy of the king' rather than 'representative of god'.

Sargon also handed out land under loan agreements with himself as the only landlord. All this was completely different from the customs of the Sumerian city-states, where the gods, through temples, were the major land owners. Sargon's daughter Enheduama, priestess of Nanna, the moon-god, had tried to make a religious infusion in order to justify his father's political and religious innovations on a theological level. Akkadian goddess Ishtar was elevated from the goddess of war to the goddess of love and fertility and identified with the Sumerian goddess Inanna.

8.7 Naram-Sin and Later Akkadians

It is needless to mention that the old Sumerian cities did not accept all these innovations without resistance. But until Sargon's grandson, Naram-Sin, ascended the throne about 2254 BCE, they staged a massive rebellion. Naram-Sin not only managed to subdue it, he began to establish garrisons in the far corners of his empire, including Susa in Elam, to the east of Mesopotamia, and Ashur in the north. Reigning overall of Mesopotamia, he extended his power to the surrounding regions. He called himself 'the king of Four Quarters', a title assumed by later Mesopotamian kings to indicate their claim to a world empire. He had himself portrayed wearing horned headgear, a sign of divinity. He even identified himself as the husband of Ishtar.

Such deification of a king was not customary in Mesopotamia unlike the Pharaonic Egypt. Therefore, it did not last. The last king of the Akkad dynasty was Sharkalisharri. He ruled between c. 2217 BCE and c. 2193 BCE. He is known to have conducted campaigns against the Amorites of Syria and Gutians in the east. In the south, Uruk almost succeeded in gaining its independence.

The end of Sargon's empire hastened an invasion by the Gutians, one of the many mountain peoples on the Zagros Mountains. From those regions, people continued to descend into the river valleys to plunder the riches of the cities. These invaders were given different names, depending on the tribe that was dominant in the mountains at the time.

The Gutians did not found their own empire and occupied only a few regions. Probably they destroyed the capital city of Akkad.

8.8 Epic of Gilgamesh

The Epic of Gilgamesh is the most ancient epic of the world. It tells of the Sumerian Gilgamesh, the hero king of Uruk, and his adventures. This epic story was discovered in the ruins of the library of Ashurbanipal in Nineveh by Hormuzd Rassam in 1853. Written in cuneiform on 12 clay tablets, this Akkadian version dates from around 1300 to 1000 BCE.

According to the tale, Gilgamesh is a young energetic semi-divine king of the city of Uruk. Gilgamesh is rambunctious and energetic, but also cruel and arrogant. He challenges all other young men to physical contests and combat. He also proclaims his right to have sexual intercourse with all new brides. Gilgamesh's behaviour upsets Uruk's citizens and they cry out to the great god of heaven Anu for help with their young king. The gods send a wild man, Enkidu, to challenge Gilgamesh. At first, Enkidu lives in the rural wilds, living with animals. He is partially civilized by a temple priestess, Shamhat, who seduces him and teaches him how to eat like a human being. Enkidu then heads for Uruk and meets Gilgamesh and they fight. Gilgamesh wins the fight, and he and Enkidu become the best of friends.

The first half of the epic concerns the adventures of Gilgamesh and Enkidu. The second half of the epic has Gilgamesh searching for immortality as he deeply mourns Enkidu's death and worries about his own. Gilgamesh had a long tour and then he returns to Uruk and becomes a good king. He rules for 126 years, according to the Sumerian King List.

8.9 Conclusion

The birth, development and spread of the civilization in Mesopotamia may be considered as one of the oldest marks as far as the progress of culture, state system, law and order, and administration are concerned. In fact, the ancient people first experimented the articulation of an administrative system, methods of warfare, taxation system, trade regulations, enforcement of law and order and emergence of a ruler as the symbol of authority at Mesopotamia. All these developments were possible because of the expansion of agriculture and trade in a wider scale. It must be remembered that the development of laws encroached on the rights of the women and adopted brutal attitude towards the slaves. The class differentiations were therefore another aspect of the Mesopotamian civilization.

8.10 Model Questions

1. Write a short note on Epic of Gilgamesh.
2. Write an essay on Mesopotamian civilization up to the Akkadian period.
3. Write a short note Sargon the Great.

8.11 Suggested Readings

Childe, V. Gordon, *What Happened in History,* Harmondsworth, 1942.

Hawkes, Jacquetta, *The First Great Civilizations,* New York, 1973.

Postgate, J.N., *Early Mesopotamia,* London, 1992.

Unit 9 ❑ Egypt (Old Kingdom)

Structure

9.0 Objectives

- The objective of this unit is to study the Ancient Egyptian civilization.
- Learners will get a clear & concise idea about how human civilization originated in Nile Valley
- A rough discussion about the early Political history of Egypt will also be included, viz.
  - The Early Dynastic Period (c. 3100 - c. 2686 BCE)
  - 9.5 The Old Kingdom (c. 2686 - c. 2181 BCE)
- Other important aspects of Egyptian society like Egyptian grave culture, the building of Pyramids & mummification will also be discussed.

9.1 Introduction : The Egyptian Civilization

One of the earliest civilizations of this world is Egyptian civilization. Ancient Egypt is often identified as the 'land of the Pharaohs'. This was the land, which was enriched with great temples, cities, hieroglyphs and pyramids. This was the wonder land of Mummies. All of these wonderful features came into being with the formation of a centralized and unified state. This formation took place sometimes around c. 3100 B.C.E. It may be an important point that what the responsible factor behind this unification was. Archaeologists and historians have suggested so many points but perhaps the most important one is the unification of culture. Around c. 3100 BCE, the buff colored pottery based Naqada culture became the standard Egyptian culture. This cultural unity paved the way of the political unity throughout the Nile Valley and the Delta. By c. 3000 BCE, Egypt became a highly efficient political state. It had an administrative bureaucracy and an efficient single ruler-centric ruling system.

9.2 Unification of Nile Valley and the Delta

Unification of northern and southern Egypt played a very important role in the making of the Egyptian urban civilization. But the most important question in this regard is the reason why it happened during the 3rd millennium BCE. Some scholars argue that the environmental change was the main factor behind this unification. A question may be raised that how it helped? The changes occurred in climate were tied in with a growth of population, increasing production and freeing of specialists from subsistence farming. All these resulted with an elitist domination over the poor. Growth in population also caused the need for increasingly sophisticated technology to meet the rising demand, which in turn resulted in the need for a central organization.

Another theory regarding the consolidation of power put stress on the same point, i.e. the climatic change, but in a different way. This theory argues that the changes in environment forced people to move northwards. Geographically this is the Delta region of the Nile. This northward movement of the southern Egyptians caused both conflicts as well as alliances among different groups. This situation paved the way of the emergence of chiefdoms, territorial competition and the merger of local chiefdoms. It is needless to mention that this situation finally led to the consolidation of power in the hands of few people.

The unification was not a result of solely internal factors - some outside influences were also played important role supposedly. Some scholars observe that a cultural

transmission from Mesopotamia and Elam played a catalytic role in this process. It is true that cultural transmission from other contemporary culture can make radical change in any particular culture. However recent studies highly contest this cultural transmission theory. Recent Scholars observe that the foreign ideas exhibited in different Egyptian artifacts in a very Egyptian manner. Development of scripts helped to consolidate the political power undoubtedly. But there is no single evidence that the Egyptian hieroglyph had its origin in any foreign writing system.

Thus in short it may be said that the consolidation process of Egyptian civilization is yet not very clear to us. All the theories regarding this phase are highly speculative.

9.3 Chronology

It is always better to study chronologically for making a clear concept on Egyptian history. The historical period of Egypt started around c. 3100 BCE. The long prehistoric phase of the Egyptian history is generally termed as the pre-dynastic period. The entire Nile valley is geo-culturally divided into two regions - northern Delta and Upper Egypt or the southern Egypt. The northern culture was more eclectic while the latter one was more isolated and conservative. Northern culture had frequent contact with the neighbouring cultures of the Mediterranean and the Sinai. Around c. 3100 BCE, these two distinct Egyptian cultures were consolidated into a united kingdom under one king.

The 3rd century BCE-priest cum historian Manetho was the first who tried to make a chronological history of Egypt. He grouped all the rulers into thirty-one dynasties. Later, the nineteenth-century Egyptologists divided the entire history into three broad 'kingdoms' - Old, Middle and New. It is still very uncertain that who the first ruler of this united territory was? According to legends Menes was the first ruler who united the country around c. 3100 BCE.

The early historic or the early dynastic period lasted up to around c. 2686 BCE. During this time two successive dynasties ruled over the entire region. These two dynasties are known as the First dynasty and the Second dynasty. These dynasties are also known as the Memphite dynasties as the capital of them were Memphis. The period between c. 2686 BCE and c. 2181 BCE is known as the period of Old Kingdom. The Old Kingdom consisted of four successive dynasties. These are known as the Third, the Fourth, the Fifth and the Sixth dynasties. The Third dynasty ruled between c. 2686 BCE and c. 2613 BCE. The reign of the Fourth dynasty lasted up

to c. 2494 BCE. The Fifth dynasty ruled up to c. 2345 BCE and the Sixth or the last ruling dynasty of the Old Kingdom ruled up to c. 2181 BCE. Our syllabus extends up to the end of the Old Kingdom.

9.4 The Early Dynastic Period (c. 3100 - c. 2686 BCE)

The early dynastic period is also known as the archaic period. Very little information about this period is available. Some archaeological remains help us to reconstruct this phase of time. Some later texts also help us in this regard. Mention may be made of the chronicles of later kings, especially the list of Pharaohs and dynasties written by priest cum historian Manetho. This text was written sometimes around the 3rd century BCE.

The early dynastic period lasted until around c. 2686 BCE. The region was ruled by about twelve kings of two successive dynasties i. e. the First and the Second dynasties. In spite of having very little information it may be said that during this period Egypt possessed most of the important features of the mature pharaonic culture. Many sun-dried clay blocks made Great tombs were constructed for the kings of this period. These tombs were the predecessors of the pyramid grave culture. During the rule of the First dynasty, the kings were buried at the royal burial complex of Abydos. The kings of the Second dynasty were buried at the royal burial complex of Saqqara. Some smaller tombs for the members of the court were also built around the royal burial sites. The royal graves held many storage rooms filled with food and other valuable goods. Other graves also contained many burial gifts. This shows their faith towards life after death.

Narmer Palette

One of the most important archaeological evidence of ancient Egypt is this Palette. This Palette originally recovered from Heirakonpolis. Now it is preserved in the Cairo Museum. This Palette depicts the early king Narmer (c. 3100 BCE), wearing the crown of both upper Egypt and lower Egypt. This gives an indication of the unification of the two regions under one king. For a long time, it was generally believed by the most of the scholars that this southern King subdued the people of Delta and subsequently unified the entire region. But the recent studies show that the Narmer Palette reflects an established situation, with a 'sole' king already in control of the 'Two Lands', rather than recording the conquest of the North by a Southern king. The identification of king Narmer yet has not been possible. It is still a matter of debate

that whether king Narmer and the legendary king Menes were the same or not. Most of the ancient Egyptian and Greek chroniclers mention Menes as the first king and the founder of the capital Memphis. Some scholars speculate an early dynastical rule of about thirteen rulers, ending with Narmer in c. 2950 BCE. Although the Narmer Palette threw so many questions and made many confusions among the scholars, but the significance of this cannot be ignored. This was the earliest known hieroglyphic writing.

The early dynastic period lasted until about 2686 BCE, under some twelve kings of two dynasties, known as the First and the Second dynasties. In spite of having very little information, it may be said that during this period Egypt possessed most of the important features of the mature Pharaonic culture. Many sun-dried clay blocks-made Great tombs were constructed for the kings of this period. These tombs were the predecessors of the pyramid culture. During the rule of the First dynasty, the kings were buried at the Royal burial complex of Abydos. The kings of the Second dynasty were buried at the Royal burial complex of Saqqara. Some smaller tombs for the members of the court were also built around the Royal burial sites. The Royal graves held many storage rooms filled with food and other valuable goods. Other graves also contained many burial gifts. This indicates the Egyptian belief towards life after death.

9.5 The Old Kingdom (c. 2686 - c. 2181 BCE)

The first great period in Egyptian history began with the rule of the Third Dynasty and it lasted up to the reign of the Sixth Dynasty. This period is known as the Old Kingdom. Memphis was the capital and the most important centre of this period.

Reconstruction of the history of the Old Kingdom is comparatively easy than the earlier period. Since the Pyramid burial culture flourished fully by this time, a host of archaeological remains has been recovered. These remains help to make a comparatively clear picture of the Old Kingdom period. King Zoser or Djoser, the second ruler of the Third Dynasty was the first important figure. He is noted for creating an administrative system for construction projects. Imhotep was his chief architect. He is regarded as the founder of the Pyramid burial tomb tradition. The buildings constructed during Djoser's reign were unique for the uses of stone blocks instead of mud bricks which were previously common. This complex of buildings was surrounded by a wall niches cut in it to replicate gates. Only one niche was the actual entrance. All the buildings inside the complex although having massive form but had only a

symbolic function related to the celebration of the royal jubilee. This ceremony was known as Sed. It was believed that through this ceremony the Supreme power of the ruler to be ritually renewed. The actual tomb of Zoser is a sixty-one meter high Step Pyramid, located at the centre of the complex. This symbolizes the hill on which creation began.

The Memphite kingdom expanded its trade and other economic activities much during the Fourth Dynasty. The Pyramid culture was also reached at its zenith by this time. Snefru was the first king of the Fourth Dynasty. The first proper pyramid was built at Dahshur under his patronage. His son was Cheops or popularly known as Khufu. Khufu built the Great Pyramid at Giza. Another important socio-religious change occurred during the rule of the Fourth Dynasty - the introduction of Re as the Sun god into the Egyptian pantheon. It was done by Pharaoh Reldjedef, who reigned from about 2528 BCE to about 2520 BCE. He was succeeded by his brother Khafre. The second pyramid of Giza was built under the patronage of Khafre. The smallest pyramid of Giza complex was built by Menkaure. He reigned from about 2490 BCE to c. 2472 BCE. Although the pyramid grave culture had reached in its culminating phase, however, the pyramid text culture had not been flourished by this time. This culture developed little later than the pyramid grave culture.

The burial complex of Saqqara was constructed during the Fifth dynasty's reign. Saqqara burial complex contain pyramid texts, carved inside the walls of the pyramid chambers. The earliest pyramid text was of Pharaoh Unas who ruled between c. 2356 BCE and c. 2323 BCE. According to the List of Pharaohs Unas was the last pharaoh of the Fifth Dynasty.

Undoubtedly it can be said that the pyramid texts are very useful primary source for reconstructing the Egyptian history. The pyramid texts clearly indicate that the power of pharaohs was started to undermine as a result of the rapidly growing strength of bureaucracy. The strength of bureaucracy grew more during the reign of the Sixth Dynasty.

9.6 Administrative Structure

Very little is known about the administrative structure of Egypt under the rule of the Old Kingdom. Pharaoh was the centre of all powers. He ruled with the help of the court members. Court members held high position in the administrative structure though their main function was advisory. Pharaoh held the chief power of decision making. Vizier or the chief minister held the second highest position in the administrative

hierarchy. Usually the Prince held this post. Another important post of the royal court was the post of the Chief Priest. The state was divided into some provinces. These provinces were known as the Nomes. The provincial rulers or the subordinate administrators of the Nomes were known as the Nomarchs.

9.7 Society and Culture under the Old Kingdom

The pharaohs of the Old Kingdom became successful to establish a good control over the society. The organization of labour force required for the construction of massive pyramids clearly indicates this control. The pharaohs used both their own resources as well as resources collected as tributes and taxes. Court members held very high social position. Most of them had blood relation with the pharaoh. Society was patriarchal in general but women held a good position in the society. Egyptian society permitted women to perform the tasks of priesthood. No other contemporary society permitted that.

Egyptians generally used cotton and linen as clothes. Precious metals like gold and silver and gems were used as ornaments. Egyptian ladies used colour based cosmetics.

Old Kingdom showed significant advancement in science and medicine, especially in anatomy, surgery and antiseptics. Memphite astronomers excelled at navigation and created first solar calendar with a year of 365 days.

9.8 Egyptian Grave Culture

Ancient Egyptians believed in eternal life. This faith had reflected in its grave culture. They buried their deceased body with various grave goods to fulfil the needs of the deceased in the afterlife. They regarded death as a passing process from this worldly life to the next. This metaphysical belief of ancient Egypt helped them to form a very rich grave culture. Commonly the Egyptian grave culture often identified with the pyramid culture. But the pyramid culture had a long evolutionary history behind this. It developed during the mature Pharaonic era. But the grave culture having grave goods existed since the pre Dynastic era. At first the graves were simple. Later, during the reign of the Old Kingdom, some splendid tombs were built. They had constructed even burial complexes for the royal house.

9.9 Development of the Pyramid Culture

The latter part of the pre Dynastic period of ancient Egypt witnessed consolidation of various cultures. Naqada II and Naqada III culture gradually replaced other regional cultures. The most impressive archaeological remains of the pre Dynastic and the Early Dynastic periods discovered from Naqada, Saqqara and Abydos. Mud bricks built Mastabas or the burial chambers were discovered in these sites. Mastaba had a pit cut into the desert plateau. This was divided by mud bricks walls into the burial chambers and store rooms.

The Tomb of Djer: The extensive excavations by Flinders Petrie at Abydos revealed many unknown histories of Egypt. The tomb of King Djer was also recovered by him. It was commonly known as the God's tomb. According to Egyptian myth, Osiris, the god of death, was killed by his jealous brother Seth and was buried in Abydos. Sometimes during the rule of the Middle Kingdom, this old tomb of the King Djer was remodelled as the God's tomb or the tomb of Osiris. Although it was remodelled but the original burials were also remained at the same place. Archaeologist Emile Amelineau during her/his excavation found a stone statue of Osiris from this tomb. Later Petrie re-excavated the site and found a set of four bracelets attached to part of a mummified arm.

Djoser's Step Pyramid: The step pyramid of king Djoser at Saqqara was the first ever completely stone construction in this world. The basic plan of the burial complex was almost similar with the previous Mastabas. The whole complex was surrounded by a stone made wall. Small blocks of dressed limestone were used here. The main entrance of the complex located at its south eastern corner. Inside the main entrance a colonnade of twenty pairs of half engaged columns is found. This colonnade imitates huge bound bundles of reeds.

The Meidum pyramids: The pyramids discovered at Meidum complex are very significant for understanding the evolution of pyramid culture. These pyramids clearly reflect the transition from step pyramid to true pyramid. This also marks the transition from the early Dynastic period to the Old Kingdom.

It has often been assumed that the original builder of this Step Pyramid was Huni, the last king of the Third dynasty. This is, however, merely based on the desire to credit at least one major building to this otherwise elusive king. Huni's name has not been found in or near the Meidum Pyramid, making it quite unlikely that this monument was built forhim.

The fact that the pyramid was named 'Snofru Endures' has led others to suggest that it was Snofru who built this monument. The fact that none of the mastabas surrounding the pyramid are older than the early Fourth dynasty and that several sons of Snofru were buried there also confirms that the pyramid must be dated to the beginning of the 4th rather than the end of the 3rd Dynasty.

Recent archaeological research has led to the assumption that Snofru built this pyramid before his 15th year, and then abandoned the site to start a new royal cemetery at Dashur, some 40 kilometres to the North. What is certain is that Snofru at one point during his reign -and some suggest a high date such as the 28th or 29th year of his reign-ordered the transformation of the original Step Pyramid into a true pyramid. It is unlikely that Snofru usurped this pyramid, since he already had built two other pyramids at Dashur. The reason why this king would have wanted three pyramids, making him the most productive pyramid builder in the history of Egypt, is not known.

The Great Pyramid of Giza: The Great Pyramid of Giza was built for the Fourth Dynasty Pharaoh Khufu (or Cheops), and was completed around 2560 BCE. It is part of a complex of three large pyramids in the Giza Necropolis located in modern Cairo, Egypt. The Great Pyramid is the largest of the three pyramids, and it is part of its own smaller complex that also contains three small pyramids that were built for Khufu's wives.

It took approximately twenty years to complete, and several theories are debated by scholars as to how it was built and by whom. Some theories point to slave labor, but it seems more plausible that Egyptians themselves lent their efforts, working during the times of year when the Nile was flooded and their farm work would not have been possible. It would have been a sort of civil service.

How the pyramid was constructed has always been the subject of very passionate debate by scholars. Some evidence and theories suggest that 20,000 workers over the course of twenty years built it, and were even paid to do so. This would have required a great deal of organization and manpower in the way of accounting and record keeping. This indicates a good Pharaohnic control over the labour force as well as over the society.

The pyramid was constructed out of stone blocks, each weighing at least two tons. There are theories suggesting that multiple men together maneuvered each block over a ramp that encircled the structure as it rose, or that they moved each stone up long ramps that got higher and longer as the pyramid got taller or even that scaffolding

was used. Many eschew each of these theories for different reasons, including the idea that wood that could have been used for scaffolding or ramps would have been at a premium, and using mud brick for those purposes would not have held under the enormous weight of each massive block. And, of course, there are the ideas that aliens built the pyramids. However the pyramid was constructed, it is a marvelous feat, and should be awed and respected, especially because it is standing today with relatively minor damage.

9.10 Mummification

Egypt is particularly world famous for the art of mummification. The word 'mummy' derived from Arabic word 'mummiya' which means bitumen. Egyptians considered human body as a pious thing. Thus they wanted to keep deceased bodies fresh. They had faith on afterlife also. The Egyptian embalmers were very skilled and were able to preserve dead bodies for years. Many categories of mummies discovered from various sites of Egypt. Usually the embalmers drew out the brain from nostrils. They drew out all the internal organs except heart from the deceased body. The internal organs were preserved in canopic jars. There were four kinds of canopic jars. These four kinds of jar represent the four sons of Horus - the Sky god of the Egyptian pantheon. The lids of the canopic jars formed the shape of the Four Sons of Horus. The liver was associated with Imset who was depicted with a human head. The lungs were associated with Hapi who was depicted with a baboon's head. The stomach was associated with Duamutef with the head of a jackal. The intestines and viscera of the lower body was associated with the falcon headed Kebechsenef. After removing the organs, the body was cover up in natron for seventy days. Natron is a naturally occurring white, crystalline mineral salt which absorbs water from its surroundings. It was mined from dry lake beds and used in the mummification process to soak up water from the body.

After seventy days in natron the dried out and shriveled body was washed and rubbed with oil and fragrant spices. The inside was packed with cloth before being wrapped in linen. The face was painted to make it look lifelike and the hair neatly arranged.

9.11 Conclusion

The contribution of the Egyptian civilization is immense. The ancient Egyptians were able to develop skill of writing, sophisticated literature, science and art and

architecture. They were able to standardize measurement accurately. In the field of medical science, astronomy and calender preparation, they had made remarkable progress. The political system of the ancient Egypt was also highly sophisticated and professional. It is evident from the implementation of rules, regulations and norms in controlling the socio-economic life of the people.

9.12 Model Questions

1. Write briefly about the significance of Narmer Palette as a source of Egyptian history.
2. Write a short note on the early dynastic era Egyptian history.
3. Write an essay on the Old Kingdom of Egypt.
4. Write an essay on the development of pyramid culture.
5. Write a short note on Egyptian belief system.
6. Write a short note on mummification.

9.13 Suggested Readings

B. Trigger, *Ancient Egypt: A Social History,* Cambridge, 1983.

Farooqui, Amar, *Early Social Formations,* Delhi, 2002.

Hawkes, Jacquetta, *First Civilizations: Life in Mesopotamia, the Indus Valley and Egypt: the History of Human Society,* New York, 1973.

Unit 10 ❑ China (Shang), Eastern Mediterranean (Minoan and Mycenaean), Mesoamerican Civilizations-Maya, Aztec, Inca-Social stratification, State Structure, Religion

Structure

10.0 Objectives

● The objective of this unit is to study the various Ancient civilizations across the Globe that includes, the Chinese civilization, the Minoan Civilization, the Mycenaean civilization and the Mesoamerican civilizations of Maya, Inca and Aztec

● Learners will get a clear & concise idea of the science & culture practiced among the different Mesoamerican civilizations.

● A brief description about the art & architectural geniuses of these ancient civilizations will also be discussed.

10.1 Introduction

In this unit, we are going to discuss the progress of human civilization in various parts of the world. It includes China, the Eastern Mediterranean and the Mesomerico civilization. There civilizations and cultures represent the different paths of development. However, the basic features remained distribution of commodities the maintenance o f law and order and search for expansion.

10.2 China

In Asian continent China witnessed one of the earliest prehistoric settlements of human beings. There is an on-going debate as to when the first people appeared in China. One view is that an early hominoid, Homo erectus, originated in Africa and moved from there throughout the world, including to China. Remains of Homo erectus, found near Beijing, have been dated back 4.6 million years. In conflict with this theory is the notion that an independent development of humans took place in Asia, probably in the Huang He (Yellow River) valley.

Very little is yet been known about the early history of China. One of the earliest dynasties which ruled over some parts of China was Shang dynasty. According to myths and traditions, the Shang people originated along the middle and lower reach

of the Yellow river. They defeated the Xia under the king Chengtang and established a number of city states. The Shang rulers have been known in the archaeological record from around 1898?99, when Oracle Bones drew attention to the site of Anyang, revealing the last capital of the Shang, and confirming the existence of the dynasty.

The Shang dynasty reigned in north central China about 1384 BCE, making its capital at Anyang. It is believed the Shang moved their capital at least five times, and several dozen Shang sites have been identified. However, the best known sites are at Anyang and Zhengzhou.

One of the important factors in determining the history of the Shang is the presence of written records. Writing at this time was mostly pictographic, meaning that a word was represented by a picture that closely resembled its meaning. Over time, this writing would become more ideographic. There is more information about the late Shang state (c.1250-1050 BCE) than about the early, due to the survival of written texts, using over 2000 characters. During the Shang, there were scribes who recorded important events. What have survived are inscriptions on bronzes, and more importantly, inscriptions on oracle bones used by the Shang for divination.

Shang kings maintained a tightly controlled state. They acted not only as priests, but also waged military campaigns and controlled numerous workshops for producing ceramics, bone objects and most importantly, bronzes. Cowrie shells, an imported item, were used as currency. The technological advances in the production of bronze did not benefit the average person. Bronze was produced for the ritual and military needs of the state. Overall its economy was agricultural based on millet, wheat, barley and perhaps some rice. During the Shang period people cultivated silkworms and raised dogs, pigs, sheep and oxen. Urbanization had begun at that time. A monumental architectural find of palaces, temples and graves was found in and near those cities. They used wood, clay and thatch for construction. They produced bronze vessels, tools and weapons, often lavishly decorated.

The Shang society was aristocratic and hierarchical, headed by a hereditary monarch. Farmers and common persons lived in a Stone Age fashion still. They used wooden spades and stone sickles. Their earthenware was rough, while their masters' was delicate and beautifully decorated. The rulers appointed by the king were the masters of the farms, the landed estates, and the villages surrounding the cities.

A literate priestly class, neither aristocrats nor commoners, were responsible for administrative records and matters of religion. The priests were expected to divine the

future by interpreting oracles of bone and to provide advice from a pantheon of gods headed by Shang Ti or the Lord on High. The Shang people worshipped their ancestors as well as their gods, sacrificing animals and humans to them.

10.3 Oracle Bones

Oracle Bones are the most important sources of the Shang period. Thousands of bones have been recovered, many of them broken. The bones contain not only intriguing questions about what will happen and whether or not certain actions are bound to be effective or not, but also the names of kings. The oracle bones attest to the importance of ritual divination among the Shang rulers. The oracle bones were used to divine, or determine, answers to various questions concerning agriculture (i.e. the success of a particular harvest), military expeditions, future events such as pregnancies or military engagements, and very personal matters such as what to do about a toothache. The questions, answers and outcomes were all recorded on the bones, usually plastrons and scapulae of cattle and turtles. A metal rod or perhaps a burning ember was heated and placed on the bone near where the question had been written. The shape of the crack determined the answer, and the outcome (what followed) was sometimes written on the bone.

10.4 Anyang

In 1927, the first sod was cut for archaeological research near the city of Anyang. Almost immediately, beautiful bronzes were discovered, dating from the late Shang period (c. 1250-1050 BCE). The wealth of bronze gave evidence that Anyang had been a very important city. It stretched along the Huan River, tributary of the Huang-p'u, for 3.6 miles (5.8 Km), and included a string of royal graves, palaces and temple complexes, and residential as well as industrial areas.

The royal graves have almost all been plundered, but out of the one intact burial site left, an immense wealth of bronzes and jades has been recovered. Some two hundred pieces of ritual vessels were found in the grave of Fuhao, possibly the consorts of Wu Ding, the fourth king at Anyang. The power and prosperity of those buried at Anyang can also be determined from the very large size of the graves and from the numbers of people and animals sacrificed during the burial ceremonies. The oldest chariots in China are found there.

10.5 Eastern Mediterranean Civilization

The ancient peoples of western civilization saw the Mediterranean region as the whole of the civilized world and regarded those little known peoples beyond their world as barbarians. Those who inhabited the Mediterranean shores were isolated by geological phenomena. North of the sea were high mountain ranges diverting major rivers away from the Mediterranean and acting as a barrier to migrations and interaction with the peoples of central and northern Europe. South of the sea was a broad impenetrable desert separating the Mediterranean from the cultures of central Africa. The peoples of the Mediterranean formed prosperous seafaring kingdoms, by necessity, and the sea became a broad highway of trade and commerce.

During the middle and late Bronze Age two successive civilizations had flourished in this region. These two civilizations are known as the Minoan and Mycenaean civilizations.

10.6 Minoan Civilization

Minoan civilization is one of the most important Bronze Age cultures which developed in the middle Bronze Age on the island of Crete located in the eastern Mediterranean region sometimes around c. 3000 BCE. Crete is the fifth largest island in the Mediterranean region. This island had a good climate and overall a favourable natural condition since prehistoric times. This natural condition helped there to grow a rich agriculture based civilization as early as in the middle Bronze Age.

The Minoans had significant contributions to the development of western European civilizations. They made contacts with other cultures across the Aegean. Thus an exchange process of different cultures took place during this time.

Greek myth: According to Greek legend Crete Island was ruled by the king Minos. He had a special treasure - a beast called Minotaur. Minotaur was described as a fearsome creature that was a bull from the waist up and a man from the waist down. The Greek legend tells us allegorically the decline story of the Cretan civilization. According to this myth Greek hero Theseus slayed Minotaur and thus the Greek superiority had established over the Cretan region.

Sir Arthur Evans and his Excavations: Sir Arthur John Evans was a British archaeologist, who uncovered the ruins of the ancient city of Knossos in Crete. Evans named this Bronze Age civilization as Minoan civilization after the name of the

legendary king Minos. This discovery helped to cast light upon a period of Aegean civilization.

During the last decade of the nineteenth century Evans got some ancient Cretan coins and carved sealing stamps. These remains had increased his interest on Crete Island. In 1894 he published Cretan Pictographs and Pre-Phoenician Script. In this book he suggested about the Cretan origin of pre-classical Mycenaean civilization. To carry his further researches and excavation, he bought land on the island in 1899 and had started his excavation at the site of Knossos. Within a year of his excavation, he uncovered the ruins of a palace at Knossos. Beneath this Minoan layer he discovered an even earlier settlement from the Neolithic period. He continued his excavations until 1935. His most important publication was four-volume The Palace of Minos.

Timeline: Evans drew up a chronology of this civilization based on his excavation. He divided the entire period into three main sub periods. These are Early Minoan, Middle Minoan and Late Minoan. Early period started around 3000 BCE and lasted up to c. 2000 BCE. Started from c. 2000 BCE Middle period lasted up to c. 1600 BCE. The Late Minoan period started from c. 1600 BCE and lasted up to around 1050 BCE. Later some archaeologists have divided the entire period into four sub-periods such as the Pre-Palatial lasted between c. 3000 and c. 1900 BCE, Proto-Palatial lasted between c. 1900 and c. 1700 BCE, Neo-Palatial lasted between c. 1700 BCE and c. 1470 BCE, and Post-Palatial lasted between c. 1470 and c. 1100 BCE. Another timeline of this civilization divides the period into five sub-periods, such as, Pre-Palace (c. 3000 - c. 1900 BCE), first Palace Period (c. 1900 - c. 1700 BCE), second Palace Period (c. 1650 - c. 1450 BCE), third Palace Period (c. 1450 - c. 1200 BCE), and the Post Palace Period (c. 1200 - c. 1000 BCE).

Proto-Palatial/ First Palace Period: The palaces of the First Palace period no longer exist. But ruins of some palaces of this period have been discovered from Knossos, Phaestos, Mallia and Zakro. The palace site of Phaestos is located in the Mesara plain. Mallia site is located on the northern coast, about 40 KM east of Knossos site. The site of Zakro is located on the east coast. Although the palaces are no longer exist but remains of many other things like potteries, figurines, seals etc. excavated from these sites help us to reconstruct an idea about the culture of the First Palace period.

An overall idea about the architecture of these palaces may be obtained from a collection of small plaques found in the ruins of the palace site of Knossos. These

plaques were made of refined and polished clay. Clear depictions of city houses made of masonry bound with large wooden beams have at least two floors. Several window openings are painted bright red on the images. Perhaps the use of oiled parchment or some other precursor of windowpanes had been started from this time. The houses in the plaques have flat roofs. A type of central tower has been depicted in these plaque images. Most probably these towers were served as an air and light shaft.

A special type of polished pottery has been recovered from these ruins. These had extremely thin walls. These wheel made potteries were decorated with spirals and plant motifs in red, orange, yellow and white on a blue or black background. This unique pottery culture is known as Kamares ware culture. This highly skilled pottery culture clearly indicates the technical excellence of the Minoan potters. It will not be an exaggeration to assume that the Kamares potteries had a good market in export trade as well as in internal trade.

Some terracotta figurines had recovered from these palace sites. These figurines are good sources for making idea of Cretan look and their fashion. Statue of a male figure has been found from a mountain sanctuary on the east coast of Crete. His skin is red or dark brown. He wears only a loincloth and a sash, tied tightly around his waistline, perhaps to accentuate it. This figurine has striking similarities with the Egyptian statues. An accompanying statue of a female has skin of pale white, again the same colour as in Egyptian specimens. The female figurine wears a long skirt which falls to her feet. A narrow bodice leaves her breasts bare. Her hair is piled high on her head.

Seals are also very useful source of information for reconstruction of the past Minoan history. Many seals have been discovered from the palace sites of this period. Seals were in common use for placing a personal or official stamp as a signature on certain objects. These were also used as amulets. Some seals had depictions of many animals and human beings. Some seals also depict legendary animals like the Griffin and the Sphinx. Around 1900 CE, an entire archive of Minoan seals had been discovered at Phaistos. Some of these seals bear a type of hieroglyphic writings. Later, these hieroglyphs were replaced by a simplified syllabic script called Linear A. these scripts are yet not been deciphered.

The palaces of this period served as storage places for agricultural products as well as workshops for artisans and also as the administrative centres. The nature of the administrative system is still unknown to us. The palaces may be served as

independent principalities or these may be parts of a federation led by Knossos - the largest and the most centrally located palace among the other sites.

Decline: It is yet unknown to us that why the first Palatial phase came to a gradual or sudden end. Around 1700 BCE it had been ended. Some scholars suggested earthquake as the main cause of decline. There are many signs of earthquake damages on Crete. But a catastrophe occurring simultaneously throughout the island is unlikely. Some scholars suggested internal war as another possible cause. The decline of the first palatial phase was temporary. It was immediately followed by a revival - the period of second palaces.

Second Palace Period: The second palace period had started to flourish around 1650 BCE. During this period the large complexes at Knossos, Phaistos, Zakro and Mallia were rebuilt. The Knossos palace was not only reconstructed but also made extensively elaborate. It was made three stories high and further elaborated with many large rooms, most notably, the magnificent throne room. These reconstructions indicate the power of the kings of Knossos had been strengthened. They started to dominate the Aegean region and trade relation extensively with Egypt. Knossos held friendly relations with the Hyksos at the Aegean, and were exchanging gifts and ideas. Crete now is beginning to flourish, in a magnificent manner, a more naturalistic formal art in sculpture and dance, but especially in frescoes (scenes of gardens, such as the "Crocus gatherer", representation of marine fauna). In ceramics (white painting on a dark background) appear forms (fishes) next to the ornament element (continuous whorls).

Growing can be seen at the art of the faience (Goddesses with snakes at Knossos, marine fauna, houses imitation.

In writing, the linear script begins to prevail against pictographic. Around 1600 B.C. the palaces of Knossos and Phaestos were destroyed again probably by an earthquake. It appears that the ruins of Knossos were looted after the disaster, perhaps even by Greek invaders. In the Aegean, the Yxos were expelled around 1580 by the Pharaohs of the 18th Dynasty, perhaps with the support of the Greeks of Mycenae. Crete reconstructed again from the ruins and four palaces glittered now (Knossos, Phaistos, Malia and Zakros) with full splendor.

Around 1450 BCE the glamour of Knossos had slowly declined. This period witnessed the gradual shift of power from the Minoans to the Mycenaean Greeks. The region had been occupied by Greeks knights and princes. This explains and the use

of the Greek language in Linear B, as well as the Mycenaean weapons which were found in the warrior tombs at Knossos and Phaistos. Also, ceramics show Mycenaean influences (simulated technique of Greek mainland). Knossos now overruled all over Crete and organized strictly the island. The courtier lifestyle of Knossos although, followed the Minoan traditions and cults. Around 1400 B.C, Knossos was destroyed perhaps again by an earthquake and the palaces were not reconstructed anymore.

Late Minoan Period: In this period the settlements of the Greek Mycenaeans spread everywhere. Mycenaean grave circles appear now and mansion buildings. Of course, there were noblemans and palaces, the traditions, however, of the Minoan culture continued in the religious section only. The ruins of the palace of Knossos partially reconstructed. But it was done only for worship purposes. In general, small worship temples are discovered in the ruins. The palaces of Phaistos, Malia and Zakros had been abandoned, while there was a considerable Mycenaean activity in Agia Triada, and Archanes retained their importance for the lords of Knossos, which explains the presence of their tholos tombs there. Around 1200, Crete accepted migrations of marine peoples and followed their own systems of government. For this reason, we can speak now for a sub-minoan season. In the 11th century the Dorians settled and the Minoan identity limited within the eastern Crete (Presos).

Palace of Minos (Knossos): The Palace of Minos was built over several centuries from about 2000 onward. It was an extensive structure, with an impressive grand staircase and many wings, additions, and storage chambers. In designing some of its architectural features the Minoans displayed remarkable technical ability. The palace had a plumbing system with water running through fitted clay pipes, and the palace windows were covered with a form of glazed windowpane. It was in the grace and beauty of their art that the Minoans achieved their greatest distinction. Minoan art bears witness to a civilization that valued elegance and style. The walls of the palace were decorated with frescoes.

The peaceful nature of Minoan civilization is suggested by the absence of fortifications at Knossos and at palaces excavated at other sites in Crete. Knossos was clearly the wealthiest of the Cretan cities and, judging from the size of its palace, was the centre of a complex administration. Surviving records indicate that the king was served by an efficient bureaucracy. About 1380 BCE disaster engulfed Knossos and other Cretan cities; the stately palaces were burned or destroyed. The Greek city of Mycenae had then entered on a period of prosperity and power.

10.7 Mycenaean Civilization

The Mycenaean civilization was also a late Bronze Age civilization which had flourished around the 15th century BCE in Peloponnese region of Greek mainland. Although Mycenaean peoples were influenced by the Minoan culture at first but later they had been successful to spread control over Crete and Cycladic Islands. Thus a new chapter in Greek history had begun.

Remains of Mycenaean civilization had been discovered from Peloponnese region especially from Mycenae, Tiryns, Pylos, Thebes, Orchomenos, Argos, Sparta, Nichoria etc. The sites show cultural similarities but their administrative nature or inter relationship is yet unknown to us. However, as I have already mentioned that there were many shared cultural features such as architecture, frescoes, pottery, jewelry, weaponry, and of course, the Greek language and writing in the form of Linear B.

A large palace complex has been found at most of the Mycenaean centres. The complexes were built around a large rectangular central hall or Megaron. The Mycenaean Megaron was the precursor for the later Archaic and Classical temples of the Greek world and consisted of an entrance porch, a vestibule and the hall itself. This was the heart of the palace and contained a large circular hearth, usually more than 3m in diameter, with four wooden columns supporting a holed ceiling or light-well. It was also the throne room of the ruler or wannax. There is usually a second, smaller hall (Queen's Megaron), many private apartments and areas set aside for administration, storage and manufacturing. Rooms were richly decorated with fresco paintings on the walls and plaster painted floors. The whole palace complex was surrounded by a fortification wall of large unworked blocks. These blocks were termed as Cyclopean as it was believed that only the Cyclopes could have moved such massive stones. Corbel galleries - arched corridors created by progressively overlapping stone blocks, circular stone tombs with corbelled roofs, and monumental doorways with massive stone lintels with relieving triangles are also common features of various Mycenaean sites.

Between 1400 and 1200 BCE, Mycenae reached the height of its prosperity and created the most imposing monuments in all Bronze Age Greece. Between 1350 and 1300 BCE the stupendous walls around the citadel were built in their present form; it is significant that such defences were apparently needed, as they were not or at least none was built on Crete. The mighty Gate of the Lionesses or Lion Gate was erected

as an entrance to the city, and the most expensive Mycenaean tombs were built. These are the beehive-shaped, or tholos, tombs, large vaults with walled entranceways. The grandest and best preserved is the so-called Treasury of Atreus, conventionally named for the legendary father of King Agamemnon-but we do not really know which rulers were buried here. The high vaulted ceiling is still intact, and the somber cavern creates a breath-taking effect.

Each city of the Mycenaean period was probably independent under its own king. The only time these cities appear to have united was during the war against Troy, a prosperous city in Asia Minor near the Dardanelles. The origin of the Trojans is not yet clear, but some of their pottery suggests a close relationship to the Greeks. Apparently the Trojans were rich and offered a tempting prospect to pirates and looters. This was probably the real cause of the Trojan War, but ultimately Greeks explained the origins of the war by the romantic story in Homer's Iliad about the seduction by a Trojan of Helen, the wife of the king of Sparta. The excavation of Troy, begun by Schliemann at Hissarlik in Turkey, has disclosed several layers of building. One layer, called Troy VII A, was destroyed by an enemy about 1250 BCE. This evidence suggests that Homer's account of a successful Greek expedition against Troy contains some historical truth.

The war against Troy was the last feat of the Mycenaean Age. About 1300 BCE or a little later, various marauders began to attack Greek ships and even mainland Greece. The identity of these warriors is still uncertain. Historians usually call them sea-peoples, and their homes were probably somewhere in Asia Minor. Whoever they were, they made trading by sea so dangerous that the export of Mycenaean pottery virtually ended. The raids by sea were temporarily destructive. But much more significant was a series of attacks by land, lasting roughly from 1200 to 1100 BCE. Near 1100 BCE, Mycenae itself was overrun and destroyed.

Mycenaean Religious Belief: Little is known for certain regarding Mycenaean religious practices beyond the importance given to animal sacrifice, communal feasting, pouring of libations and offerings of foodstuffs. The presence of double axe carvings and horns of consecration in art and architecture suggest strong links with the Minoan religion, although these symbols may have been adopted because of their political resonance.It is clear that burialwas an important ritual as evidenced by the presence of monumental tholos tombs, prominent grave sites and the quantity of precious objects which were buried with the dead - golden masks, diadems, jewellery and ceremonial swords and daggers.

10.8 Mesoamerican Civilizations

Mesoamerica denotes the middle region of American continent. Three major Bronze Age civilizations flourished in this region. These were Maya, Aztec and Inca. Although these civilizations were used to with the Bronze Age living pattern, but in terms of time these were contemporary of almost European medieval period.

10.9 Maya

The Maya civilization was one of the major civilizations to develop in ancient Mesoamerica. It is noted for its elaborate writing, numerical and calendar systems, as well as its impressive art and architecture. The Maya culture lives on in the same areas where its civilization first developed, in the southern part of Mexico and part of Central America, and there are millions of people who speak Mayan languages.

10.9.1 The Ancient Maya

The Maya occupied a vast area covering southeast Mexico and the Central American countries of Guatemala, Belize, Honduras, and El Salvador. Mayan culture began to develop in the Pre-Classic period, around 1000 BCE and was at its heyday between 300 and 900 CE. The ancient Maya are well known for their writing, of which a great part can now be read (it was, for the most part, deciphered in the second half of the 20th Century), as well as for their advanced mathematics, astronomy, and calendric calculations.

Despite sharing a common history and certain cultural attributes, ancient Maya culture was extremely diverse, largely due to the range of geographic and environmental conditions in which it developed.

10.9.2 Maya Writing

The Maya devised an elaborate writing system which was largely deciphered in the 1980s. Prior to this, many archaeologists believed that Maya writing dealt strictly with calendric and astronomical themes, which went hand-in-hand with the concept that the Mayas were peaceful, studious stargazers. When Mayan glyphs were finally deciphered it became clear that the Maya were as interested in earthly matters as other Mesoamerican civilizations.

10.9.3 Mathematics, Calendar, and Astronomy

The Ancient Maya used a numerical system based on just three symbols: a dot for one, a bar for five and a shell which represented zero. Using zero and place notation, they were able to write large numbers and perform complex mathematical operations. They also formulated a unique calendar system with which they were able to calculate the lunar cycle as well as predict eclipses and other celestial events with great precision.

10.9.4 Religion and Mythology

The Maya had a complex religion with a huge pantheon of gods. In the Mayan worldview, the plane on which we live is just one level of a multi-layered universe made up of 13 heavens and nine underworlds. Each of these planes is ruled by a specific god and inhabited by others. Hunab Ku was the creator god and various other gods were responsible for forces of nature, such as Chac, the rain god.

Mayan rulers were considered to be divine and traced their genealogies back to prove their decadence from the gods. Maya religious ceremonies included the ball game, human sacrifice and bloodletting ceremonies in which nobles pierced their tongues or genitals to shed blood as an offering to the gods.

10.9.5 The Collapse of Maya Civilization

There is still much speculation about the decline of the ancient Maya cities. Many theories have been put forward, ranging from natural catastrophes (epidemic, earthquake, and drought) to warfare. Archaeologists today generally believe that a combination of elements brought about the collapse of the Maya empire, probably brought on by severe drought and deforestation.

10.10 Aztec Civilization

The Aztecs were a Mesoamerican people of central Mexico in the fourteenth, fifteenth, and sixteenth centuries. They were a civilization with a rich cultural heritage whose capital, Tenochtitlan, rivalled the greatest cities of Europe in size and grandeur.

The nucleus of the Aztec Empire was the Valley of Mexico, where the capital of the Aztec Triple Alliance was built upon raised islets in Lake Texcoco. After the 1521 conquest of Tenochtitlan by Spanish forces and their allies which brought about the effective end of Aztec dominion, the Spanish founded the new settlement of Mexico

City on the site of the now-ruined Aztec capital. The greater metropolitan area of Mexico City now covers much of the Valley of Mexico and the now-drained Lake of Texcoco.

10.10.1 Legends and Traditions

Aztec culture is generally grouped with the cultural complex known as the nahuas, because of the common language they shared. According to legend, the various groups who were to become the Aztecs arrived from the north into the Anahuac Valley around Lake Texcoco. The location of this valley and lake of destination is clear-it is the heart of modern Mexico City-but little can be known with certainty about the origin of the Aztec.

In the legend, the ancestors of the Aztec came from a place in the north called Aztlán, the last of seven nahuatlacas (Nahuatl-speaking tribes, from tlaca meaning "man") to make the journey southward. The Aztec were said to be guided by their god Huitzilopochtli, meaning "left-handed hummingbird." When they arrived at an island in the lake, they saw an eagle eating a snake while perched on a nopal cactus, a vision that fulfilled a prophecy telling them that they should found their new home on that spot. The Aztec built their city of Tenochtitlan on that site, building a great artificial island, which today is in the centre of Mexico City. This legendary vision is pictured on the Mexican flag.

According to legend, when the Aztec arrived in the Anahuac valley around Lake Texcoco, they were considered by the other groups as the least civilized of all, but the Aztec decided to learn, and they took all they could from other peoples, especially from the ancient Toltec (whom they seem to have partially confused with the more ancient civilization of Teotihuacan). To the Aztec, the Toltecs were the originators of all culture; "Toltecayotl" was a synonym for culture. Aztec legends identify the Toltecs and the cult of Quetzalcoatl (the feathered snake) with the mythical city of Tollan, which they also seem to have identified with the more ancient Teotihuacan.

Because the Aztec adopted and combined several traditions with their own earlier traditions, they had several creation myths; one of these describes four great ages preceding the present world, each of which ended in a catastrophe. Our age-Nahui-Ollin, the fifth age, or fifth creation-escaped destruction due to the sacrifice of a god Nanahuatl ("full of sores," the smallest and humblest of the gods), who was transformed into the Sun. This myth is associated with the ancient city of Teotihuacan, which was already abandoned and destroyed when the Aztec arrived. Another myth describes the earth as a creation of the twin gods Tezcatlipoca (the Smoking Mirror) and Quetzalcoatl. Tezcatlipoca lost his foot in the process of creating the world and all representations

of these gods show him without a foot and with a bone exposed. Quetzalcoatl is also called "White Tezcatlipoca." Quetzalcoatl represented conscious intelligence, and Tezcatlipoca the subconscious opposite. The former was the lighter, the latter the darker, side of human nature (although no real distinction was made between good and evil). Tezcatlipoca ruled the night, the earth's surface and was god of war. Quetzalcoatl, representing dawn and the rising sun, and healing, wisdom, art, poetry, skills, and crafts had been banished by the Smoking Mirror and war came to dominate human affairs. Aztec scholars had predicted that the year 1519 (500 years after his departure) would herald the Feathered Snake's return from exile, and with it the creation of a new, more harmonious era, under the guidance of Quetzalcoatl. Some said he would return with "white Gods" accompanying him.

10.10.2 Rise of Aztecs

After the fall of Tula in the twelfth century, the valley of Mexico and surroundings contained several city states of Nahua-speaking people: Cholula, Huexotzingo, Tlaxcala, Atzcapotzalco, Chalco, Culhuacan, Xochimilco, Tlacopan, etc. None of them was powerful enough to dominate other cities, all of them were proud of their Toltec heritage. Aztec chronicles describe this time as a golden age, when music was established, people learned arts and craft from surviving Toltecs, and rulers held poetry contests in place of wars.

In the thirteenth and fourteenth centuries, around Lake Texcoco in the Anahuac valley, the most powerful of these city states were Culhuacan to the south and Azcapotzalco to the west. Their rule extended over all the area around Lake Texcoco.

As a result, when the Mexica arrived to the Anahuac valley as a semi-nomadic tribe, they had nowhere to go. They established themselves temporarily in Chapultepec, but this was under the rule of Azcapotzalco, the city of the "Tepaneca," and they were soon expelled. They then went to the zone dominated by Culhuacan and, in 1299, the ruler Cocoxtli gave them permission to settle in Tizapan, a rocky place where no one wanted to live. They began to acquire as much culture as they could from Culhuacan: they took and married Culhuacan women, so that those women could teach their children. In 1323, they asked the new ruler of Culhuacan, Achicometl, for his daughter, in order to make her the goddess Yaocihuatl. The Mexica sacrificed her. The people of Culhuacan were horrified and expelled the Mexica. Forced to flee, in 1325 they went to a small islet in the center of the lake where they began to build their city "Mexico-Tenochtitlan," eventually creating a large artificial island. After a time, they elected their first tlatoani, Acamapichtli, following customs learned from the Culhuacan. Another Mexica group settled on the north shore: this would become the city of

Tlatelolco. Originally, this was an independent Mexica kingdom, but eventually it merged with the islet.

10.10.3 Class Structure

The society traditionally was divided into two social classes; the macehualli (people) or peasantry and the pilli or nobility. Nobility was not originally hereditary, although the sons of pillis had access to better resources and education, so it was easier for them to become pillis. Eventually, this class system took on the aspects of a hereditary system. The Aztec military had an equivalent to military service with a core of Professoressional warriors. An Aztec became a pilli through his abilities in war. Only those that had taken prisoners could become full-time warriors, and eventually the honors and spoils of war would make them pillis. Once an Aztec warrior had captured 4 or 5 captives, he would be called tequiua and could attain a rank of Eagle or Jaguar Knight, sometimes translated as "captain," eventually he could reach the rank of tlacateccatl or tlachochcalli. To be elected as tlatoani, one was required to have taken about 17 captives in war. When Aztec boys attained adult age, they stopped cutting their hair until they took their first captive; sometimes two or three youths united to get their first captive; then they would be called iyac. If after certain time, usually three combats, they could not gain a captive, they became macehualli; it was shameful to be a warrior with long hair, indicating lack of captives; one would prefer to be a macehualli.

The abundance of tributes led to the emergence and rise of a third class that was not part of the traditional Aztec society: pochtecas or traders. Their activities were not only commercial: they also were an effective intelligence-gathering force. They were scorned by the warriors, who nonetheless sent to them their spoils of war in exchange for blankets, feathers, slaves, and other presents.

10.10.4 Slavery

Slaves or tlacotin (distinct from war captives) also constituted an important class. This slavery was very different from what Europeans of the same period were to establish in their colonies, although it had much in common with the slave system in the classical European world of ancient Greece and Rome. The appropriateness of the term "slavery" for this Aztec institution has been questioned. First, slavery was personal, not hereditary: a slave's children were free. A slave could have possessions and even own other slaves. Slaves could buy their liberty, and slaves could be set free if they were able to show they had been mistreated or if they had children with or were married to their masters.

10.10.5 Human Sacrifice and Cannibalism

Human sacrifice was the most abhorrent feature of Aztec civilization. Human sacrifice was widespread at this time in Mesoamerica and South America (during the Inca Empire), but the Aztecs practiced it on a particularly large scale, sacrificing human victims on each of their 18 festivities.

Most cultures of Mesoamerica gave some kind of offerings to the gods, and the sacrifice of animals was common, a practice for which the Aztecs bred special dogs. Objects also were sacrificed; they were broken and offered to their gods. The cult of Quetzalcoatl required the sacrifice of butterflies and hummingbirds. Self-sacrifice was also quite common; people would offer maguey thorns, tainted with their own blood. Blood held a central place in Mesoamerican cultures; in one of the creation myths, Quetzalcoatl would offer blood extracted from a wound in his own penis to give life to humanity, and there are several myths where Nahua gods offer their blood to help humanity. In the myth of the fifth sun, all the gods sacrifice themselves so humanity could live.

In the usual procedure of human sacrifice, the victim would be painted with blue chalk (the colour of sacrifice) and taken to the top of the great pyramid. Then the victim would be laid on a stone slab, his abdomen ripped open with a ceremonial knife (an obsidian knife could hardly cut through a ribcage) and his heart taken out and raised to the sun. The heart would be put in a bowl held by a statue, and the body thrown on the stairs, where it would be dragged away. Afterwards, the body parts would be disposed of various ways: the viscera were used to feed the animals in the zoo, the head was cleaned and placed on display in the tzompantli, and the rest of the body was either cremated or cut into very small pieces and offered as a gift to important people. Evidence also points to removal of muscles and skinning.

While there is universal agreement that the Aztecs practiced human sacrifice, there is a lack of scholarly consensus as to whether they also practiced cannibalism and, if so, to what extent. While most historians of Mesoamerica believe that there was ritual cannibalism related to human sacrifices, they do not support that human flesh was ever a significant portion of the Aztec diet.

The Aztecs were conquered by Spain in 1521.

10.11 Inca Civilization

The Inca Empire was a vast empire that flourished in the Andean region of South

America from the early 15th century CE up until its conquest by the Spanish in the 1530s. Even after the conquest, Inca leaders continued to resist the Spaniards up until 1572, when its last city, Vilcabamba, was captured.

The Incas built their empire, called Tawantinsuyu or the "Land of the Four Corners," without the wheel, powerful draft animals, iron working, currency or even what we would consider to be a writing system. The empire stretched from modern-day Argentina to southern Columbia, and was divided up into four "suyu," which intersected at the capital, Cuzco. These suyu in turn were divided into provinces.

Machu Picchu sits nestled between the Andes mountains of modern-day Peru and the Amazon basin and is one of the Inca's most famous surviving archaeological sites.

The Inca Empire is thought to have originated at the city of Cuzco in what is modern-day southern Peru.

In some mythical tales, the Inca was created by the sun god, Inti who sent his son, Manco Capac to Earth. Legend has it that he first killed his brothers and then led his sisters into a valley near Cuzco, where they settled down around 1200 CE.

Cuzco was located at a nexus point between two earlier empires, one called the Wari and another based at the city of Tiwanaku. According to T.K. McEwan, one of the main reasons why the Inca were able to expand was because the infrastructure was already in place - things like hydraulic systems and highways were left behind by the preceding empires.

The expansion of the Inca Empire began by the time the fourth emperor, Mayta Capac took hold, but didn't gain momentum until the reign of the eighth emperor, Viracocha Inca. Viracocha began the practice of leaving behind military garrisons in lands to maintain the peace.

10.11.1 Inca Religion and Sacrifice

According to McEwan, the Inca pantheon had an array of gods that included the creator god Viracocha, sun god Inti, thunder god Illapa and earth-mother goddess Pachamama, among others. There were also regional deities worshipped by people whom the Inca conquered.

The Inca gods were honored in many ways, including prayers, fasting and animal sacrifice, but the most powerful form of honor was human sacrifice, typically of children and teenagers.

In 1999, archaeologists discovered the mummies of three children who had been left as sacrifices at a shrine near the summit of a volcano in Argentina. A teenage girl

who is now known as "the maiden" appears to have been the main sacrifice along with a boy and girl, who were thought to be her attendants. Research has revealed that, in the year before their sacrifice, the three consumed a special diet rich in maize and dried llama meat and were drugged with coca leaves and alcohol.

10.11.2 Mummy Feeding

Mummification was an important part of Inca funerary rites, even for commoners.

After the Spanish conquest, a man named Guaman Poma, who spoke Quechua and was native to the Andes, published a chronicle that described November as being the "month of carrying the dead," a time when people would try to feed the mummies of their ancestors.

"In this month they take their dead out of their storehouses which are called pucullo and they give them food and drink and they dress them in their richest apparel…and they sing and dance with them…and they walk with them from house to house and through the streets and the plaza," (In translation, from the book Food, Power and Resistance in the Andes by Alison Krögel, Lexington Books, 2011).

Krögel noted that while the mummies of commoners were only fed on special occasions those of royalty "received their own specially prepared meals [including corn beer] on a daily basis."

However, Inca oral history recorded by the Spanish, suggests that the expansion began in earnest during the reign of the emperor Pachacuti Inca Yupanqui, the son of Viracocha Inca, who reigned from 1438 to 1471.

Pachacuti became emperor after he halted an invasion of Cuzco that was being carried out by a rival group called the Chancas. The invasion had driven his father to a military outpost. Subsequently, Pachacuti worked to expand the territory the Inca controlled, extending their influence beyond the Cuzco region.

10.11.3 Art and Architecture

The Inca crafted magnificent objects from gold and silver, but perhaps their most striking examples of art were in the form of textiles. The Inca grew cotton, sheared wool and used looms to create their elaborate textiles. The finest grade of cloth was called cumpi, and was reserved for the emperor and nobility.

Inca stone-working abilities were also formidable. Their "craftsmen fitted building stone together perfectly without using any mortar, such that an object as thin as a razor blade could not be inserted between the stones," wrote Peter V. N. Henderson

in his book The Course of Andean History (University of New Mexico Press, 2013).

10.11.4 Conclusion : Inca Falls to the Spanish

The empire reached its peak after the conquests of Emperor Huayna Capac, who reigned from 1493 until around 1527. At its peak, the empire included up to 12 million people and extended from the border of Ecuador and Colombia to about 50 miles [80 kilometers] south of modern Santiago, Chile. To support this empire, a system of roads stretched for almost 25,000 miles (roughly 40,000 km), about three times the diameter of the Earth.

As the Spanish conquered the Inca Empire, they were impressed by what they saw. Inca cities were as large as those of Europe, but more orderly and by all account much cleaner and more pleasant places in which to live. In fact, the road and aqueduct systems in the Andes were superior to those in Europe at the time.Across the waters, the Spanish brought one of their strongest and invisible weapons with them - diseases that the Inca populations had never been exposed to. Smallpox wiped out much of the Inca population, including Capac and the successor he had chosen.

After Capac's death, his kin battled for the power and his son, Atahualpa eventually succeeded. But the Spanish conquistador Francisco Pizarro successfully lured and captured Atahualpa - eventually killing him and easily taking over Cusco with their more advanced weapons.

The Spanish, wanting to keep peace with the locals installed a "puppet king," Manco Inca Yupanqui, according to History.com. But he and his men were later forced to retreat to a village in the jungle called Vilcabamba, the last remaining bite of the Inca Empire, until it disappeared in 1572.

10.12 Conclusion

From the Unit 10, we have learned diverse historical developments: it includes China (Shang dynasty), Eastern Mediterranean (Minoan and Mycenaean), Mesoamerican Civilizations- Maya, Aztec, and Inca culture and civilizations. It comes to us that the progress of civilization means the articulation of state system, development of an ideology catering the needs of ruling classes, the disappearance of the clan and community culture and the improvement of technology. All these elements of civilizational progress were evident in the history of ancient China, the European region and South America. Another area of development could be found in the art, architecture and astronomy. The precision in astronomical calculations on the one hand and refinement of artistic sense on the other hand were manifested in the wide

cross sections of the ancient societies. We must note that the class structure of the Mesoamerican civilizations was based on slavery and even human sacrifices.

10.13 Model Questions

1. Write an essay on China during the reign of the Shangs.
2. Write a short note on oracle bones.
3. Write an essay on the Minoan culture of Crete Island.
4. Write a short note on Arthur Evans and his excavations.
5. Write an essay on the Mycenaean civilization.
6. Write an essay on the Maya civilization.
7. Write an essay on the Inca civilization.
8. Write an essay on the Aztec civilization.
9. Write a short note on Aztec class structure.
10. How far it is correct to say that the Aztecs practiced cannibalism?

10.14 Suggested Readings

Castleden, Rodney, *Mycenaeans,* London, 2005.

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Unit 11 ❑ Debate on the Advent of Iron and Its Implications

Structure

11.0 Objectives

- The objective of this unit is to study the advent of Iron Age
- Learners will get a rough idea about the discovery of Iron & the early manufacturing process related to it.
- The origin & foundation of Iron Age in various parts of the world will also be discussed, that includes,
  - Middle East (Anatolia, Mesopotamia & Egypt)
  - Europe &
  - Africa

11.1 Introduction : The Iron Age

The Iron Age was not a single time period that occurred simultaneously around the world. Instead, the Iron Age refers to when people in a particular location learned

to use iron for tools and weapons as well as when they started using iron more than other metals. Iron Age civilizations were still considered prehistoric because most of them did not keep detailed written records of their history. In most circumstances, these societies passed through three ages of technology starting with the Stone Age, then the Copper-Bronze Age, and finally the Iron Age.

It is a matter of great debate that how and when iron started to be used. The use of copper and alloys of copper, such as bronze, was the point at which the Stone Age transformed into the metal age. It is true that the copper was one of the first metals ever used by the humankind, but the use of iron made the most significant change in the history of the mankind. This was a great improvement over wood, stone and pre-iron age metals.

By the second half of the 2nd millennium BCE some important changes took place in eastern Mediterranean and west Asian regions. Mesopotamian and Egyptian civilizations helped to create such a condition in which the entire extended regions were ready for the transition to civilizations. Another important feature of this time was the continuous movement and displacement of various tribes including the Indo-Europeans. They had interactions and conflict with settled agrarian societies.Their displacements and interactions helped to spread Iron Age cultures in different regions. Anatolia played the most important role in this regard.

11.2 Smelting of Iron - A Technological Progress

Smelted iron requires hot-working and can only be melted in specially designed furnaces. Iron then had to be forged on an anvil while being struck and flattened into shapes with a hammer. Differing grades and quality of iron meant some tools could be very weak in comparison to other iron tools made with higher grade iron, such as bog iron which is generally a very low quality iron.

It is not known exactly where iron smelting first began, but this process is generally attributed to the Hittites of Anatolia during the late Bronze Age from about 1,500 BCE. It was introduced into Europe through Greece in the late 11th century BC, which ultimately led to the rise of the La Tène culture around 500 BCE. It was discovered that iron can be significantly improved if reheated in a furnace with charcoal (containing carbon), as around 2% of the carbon is transferred to the iron and then the hot metal rapidly cooled. This effectively turned the soft iron into steel.

11.3 Iron Age Tools

Farming tools: Iron-tipped ploughs (called an Ard or Scratch plough) pulled by oxen making cultivation of heavy clay soils possible. The Ard was made primarily from wood with an iron tip to penetrate the ground, but it did not have mould boards or large blades used on more recent European ploughs to turn the soil over. It made a simple furrow or narrow trench to sow the seed in; to obtain a good tilt, it is likely that fields were ploughed in one direction and then cross-ploughed in the other.

Iron Sickles were also used to harvest crops, as well as cutting and shaping branches for hurdles. Managing trees or hedges was necessary for Iron Age farmers as the wood was used in the construction of hurdles, buildings, tools and vehicles and also for firewood and charcoal.

War weapons: the Iron Age people wore armour made from bronze, iron, or a combination of both. Fashioned like a tunic, the armour might hang as low as the knees and extend all the way to the wrists. Their shields were cumbersome, too. In fact, they had to be carried into battle by a special corps of shield bearers. In Iron Age Britain, on the other hand, armour was rarely worn, and shields were generally wooden or leather.

Swords of the late Bronze Age tended to be sickle-shaped. But as iron was introduced, the curve of the blade became less pronounced. These swords were more like large daggers and were usually hung in sheaths across the chest or back. They did not hang from the belt the way later swords would. Short swords and daggers were the weapons of choice in early Iron Age Britain, as well. Though the long sword had earlier been in use, it fell from favour, only to return later in the Iron Age.

Javelins and spears were useful for assaulting an enemy from long ranges. Javelins were thrown, while spears were wielded by hand. These lighter weapons usually featured a metal tip attached to a wooden shaft. In the Near East, foot soldiers generally carried them into battle alongside a shield. When transported in a chariot, they were kept in a quiver attached to the side or rear. Javelins and spears were also used in Iron Age Britain. However, unlike the Near East, archery was used for neither war nor hunting. The bow and arrow would appear later in Northern Europe.

11.4 Anatolia, Mesopotamia and Egypt

Though it is a process of long evolution but it is generally believed that the

Hittites were the first to dominate a region by using the power they derived from their use of iron. The process of ironworking was considered to be a valuable military secret, one which gave the Hittites an advantage over those with whom they warred, often Mesopotamia and Egypt.

The Assyrians from Mesopotamia eventually acquired their own knowledge of iron, and used iron as a means of payment. In their palace of Khorsabad, a stock of 35,000 pounds of iron has been found in the storehouses.

Among the Egyptians, too, iron was considered to be extremely valuable. There is a well-preserved exchange of letters between the Hittite king Hattusilis III and Pharaoh Ramses II, who reigned about 1250 BCE. The letters reveal that after their last great battle at Kadash or present day Palestine, an armed peace existed between their two realms. In response to the Pharaoh's request send him articles made of iron, Hattusilis replied that he was very sorry, but there was no iron left. The reason for this refusal can perhaps be found in the expansion of power of the Hittites to the south. In Syria they had come up against Egyptian interests. The Hittites were so weakened by internal problems that they could offer no resistance to the invasions of what they called the 'Sea People', including those from the north.

11.5 Europe and Iron Age

Dating the end of the European Iron Age is problematic. Since the Iron Age initially was defined as a chronological period in prehistoric Europe, the term Iron Age usually is not applied to the ancient literate civilizations of Greece and Rome. In the European Mediterranean world, the Iron Age ends with the beginning of Greek literature in the archaic period roughly around 8th century BCE and the beginning of Latin literature in the third century BCE. The term "Iron Age" sometimes is applied to the Etruscans, who were literate but whose writings cannot be deciphered by modern scholars. For most of central and western Europe, the Iron Age ends with the Roman conquest during the last two centuries BCE and the 1st century CE. For example, Gaul, including modern France and Belgium, was conquered by Julius Caesar in the middle of the first century BCE, while southern Britain was incorporated into the Roman Empire in the first century CE. However, many parts of northern and eastern Europe never came under Roman political domination. In Ireland, the Iron Age ends with the introduction of Christianity and literacy by Saint Patrick in the 5th century CE. In north-eastern Europe, the Iron Age continues through the first half of the first millennium CE. Although these regions were never part of the Roman Empire,

they were not immune from Roman influence. In regions such as Germany, Poland, and southern Scandinavia, Roman trade goods appear in archaeological assemblages dating from the 1st to the 5th centuries CE. In addition, many non-Roman barbarians served in the Roman army and were exposed to Roman material culture and the Roman way of life. In north-eastern Europe, the period from about CE 1-400 is termed the Roman Iron Age.

The Iron Age thus did not start with the first appearance of iron but rather at the stage when its distinct functional properties were being exploited and it began to supplant bronze in the production of tools and weapons. This occurred at different times in various parts of Europe, and the transition to the Iron Age is embedded in local cultural developments. The reasons why iron was adopted differed among regions, but generally a similar pattern was followed. After an introductory period, iron quickly supplanted bronze for the making of tools and weapons. It was at this stage that metal, in spite of the earlier presence of bronze tools, replaced stone, flint, and wood in agricultural production. New and more effective tools were developed during the last centuries BCE, and subsistence production must have increased drastically. Along with these domestic changes, there were changes in the traditional routes of contact and trade. These routes had been established during the Bronze Age, and through them copper, tin and other commodities had travelled throughout Europe. With the appearance of the rich Late Hallstatt communities of south-central Europe, the orientation of contact changed. The northern links were increasingly ignored, and trade became concentrated on, and dependent upon, commodities from the south. South and west-central Europe were now included in the periphery of the expanding Mediterranean civilization; and the previous network of contact was broken. In the rest of Europe, regional diversity increased, a tribalized landscape emerged, and new types of social organization developed. During the Iron Age, the roots of historic Europe were planted. Proto-urban settlements, hierarchical social orders, new ideological structures, and writing were parts of this picture. It was also a time during which the difference between the Mediterranean world and temperate Europe became even more pronounced and new degrees and forms of dependency developed in the socio-political systems.

Archaeological and historical sources indicate that the barbarian societies of temperate Europe also experienced significant social, political, and economic changes during the first millennium BCE, and many of these developments are chronicled in this section of the encyclopaedia. Moreover, such sources also document a long and

complex relationship between the civilizations of the Mediterranean and the barbarian societies of temperate Europe. For example, Greek trading colonies were established in the western Mediterranean by 600 BCE During the latter part of the Hallstatt period (c. 600-480 BCE), a wide range of Mediterranean luxury items appear in rich burials in west-central Europe. These include Greek tableware, amphorae (designed to hold and transport wine), and Etruscan bronze vessels. Another example of technology moving between the Mediterranean and temperate Europe can be seen in the fortification walls of the Late Hallstatt town of the Heuneburg, in Germany. They were rebuilt in mud brick with stone foundations. This technique was otherwise unknown in temperate Europe during the middle of the first milleniumBCE but was widespread in the Mediterranean regions. At a later date, Roman pottery and glassware were traded widely outside the empire. However, the nature of Roman and Greek contact with the barbarian world differed in one fundamental way: while the Greek colonies that were established in the western Mediterranean and along the Black Seawere primarily trading colonies, the Romans were more interested in territorial conquest. It is the Roman conquest that marks the end of the Iron Age in much of Central and Western Europe.

11.6 Africa and Iron

The African Iron Age is traditionally considered that period in Africa between the 2nd century AD and about 1000 AD. During this time iron smelting was practiced in African land. In Africa, unlike the Europe and Asia, the Iron Age is not prefaced by a Bronze or Copper Age, but rather all the metals were brought together. The advantages of iron over stone are obvious--iron is much more efficient at cutting trees or quarrying stone than stone tools. But iron smelting technology is a smelly, dangerous one.

African Iron Age people built a cylindrical clay furnace and used charcoal and a hand-operated bellows to reach the level of heating for smelting. Once smelted, the metal was separated from its waste products or slag, and then brought to its shape by repeated hammering and heating, called forging.

From the 2nd century AD to about 1000 AD, the Chifumbaze spread iron throughout the largest portion of Africa, eastern and southern Africa. The Chifumbaze were farmers of squash, beans, sorghum and millet, and kept cattle, sheep, goats and chickens.

They built hilltop settlements, at Bosutswe, large villages like Schroda and large

monumental sites like Great Zimbabwe. Gold, ivory, and glass bead working and trade was part of many of the societies. Many spoke a form of Bantu; many forms of geometric and schematic rock art are found throughout south and eastern Africa.

11.7 Conclusion

The Iron Age is the most remarkable age in the history of human civilization. The use of iron completely transformed the fundamental structure of the economy, society, politics, and state system. The process, structure and organization of commodity production-both agricultural and non-agricultural—was fully changed. The use of iron not only increased production, but it was also closely associated with the emmerging class structure and state formation. It is a big leap in the human history.

11.8 Model Questions

1. Describe the development of Iron Age briefly.
2. Briefly state the tools used in the Iron Age.
3. How was the Iron Age developed in Anatolia, Mesopotamia nd Egypt?
4. Write a note on the development of Iron Age in Europe and Africa.

11.9 Suggested Readings

1. Boardman, John, et. al. (Eds.), *Oxford History of the Classical World,* Oxford, 1986.
2. Fagan, Brian, *People of the Earth: An Introduction to World Prehistory,* Illinois, 1989.
3. Farooqui, Amar, *Early Social Formations,* New Delhi, 2018.
4. Gurney, *The Hittites,* Harmondsworth, 1952.

Unit 12 ❑ Iron Age Civilizations: Hittites and Etruscans

Structure

12.0 Objectives

- The objective of this unit is to study the Iron Age Civilization among the Hittites and Etruscans of West Asia
- The different socio-political aspects of the Hittites & Etruscan civilizations will also be discussed.

12.1 Introduction : The Hittites

The Hittites had been mentioned several times in the Old Testament, but little was known about their civilization prior to archaeologists excavating and studying the site

of the Hittite capital: Hattusa (in the present-day Republic of Turkey). The Hittite Empire was cantered in Asia Minor. At its maximum boundaries, it extended from the Aegean coast of Anatolia, east to the Euphrates River, south-eastward into Syria as far as Damascus, and south along the eastern Mediterranean coast of the Levant. Beginning with the decipherment of a hoard of inscribed clay tablets (discovered at Hattusa in 1906), it was shown that the Hittites were, in fact, a dominant and sophisticated Bronze Age superpower; and true rivals of the mighty Egyptians. The secrets of this mysterious civilization are still being unearthed through recent archaeological discoveries.

The Hittite King Mursili sacked Babylon around 1595 BCE but did not attempt to hold the region. Historians do not know exactly where the Hittites originated or how they got to Asia Minor. Studies of their Indo-European language, however, indicate that they were probably of European origin; and might have migrated south from what is now the Ukraine through the Balkans, or past the eastern end of the Black Sea, sometime around 2000 BCE.

12.2 Hittites and the Egyptians: Two Conflicting Groups

When the Hittites entered Asia Minor around 2000 BCE, the region was populated by small yet sophisticated kingdoms. The Hittites began expanding their domain around 1900 BCE, using both force and diplomacy to bring rival city-states and kingdoms in Asia Minor under control. The Hittite realm went through several periods of expansion and contraction until around 1400 BCE. At that time, a series of strong kings expanded the Hittite Empire across all of Asia Minor, into Syria, and beyond the Euphrates River. The push into Syria brought the Hittites into conflict with the Egyptians, who also sought to dominate this region.

For several generations, the Hittites and Egyptians remained diplomatic and military rivals. The great battle of Kadesh (near the present-day Syrian-Lebanese border) was fought between these superpowers around 1274 BCE and was commemorated in Egypt by a pictorial relief, an epic poem, and an official written record. After years of uneasy stalemate, the two powers signed a peace treaty and mutual defence pact, perhaps in response to growing Assyrian power to the east. A copy of the treaty was inscribed in hieroglyphs on the walls of an Egyptian temple at Karnak (where it stands to this day); and on a Hittite clay tablet originating from Hattusa (currently at the Istanbul Archaeological Museum).

12.3 Administration and Warfare

Some researchers believe that the early Hittite government was the first constitutional monarchy. The Pankus, probably an assembly of noblemen, monitored the king's activities in relation to their laws and might have had the power to remove and install kings as needed. Hittites royal family was not a closed society against the outer world. If there weren't a man to be the king from the first and second generation, a prince's wife from the first generation could also be the king. Crown prince was announced by the king and he had to say the oath of allegiance after the approval of Panku. Apart from the king there was also institutionalised queen-ship. It is understood from the accomplishments of Hattu?iliIII's wife that the queen had a big role in political life. However, king was the absolute power in the state formation.

They had no law of succession until c. 1500 BCE. As a result, the death of a king often triggered a struggle for power. The authority of the Pankus waned as the empire began to grow and after a law of succession was adopted. During the imperial years, the Hittite ruler was called the Great King. Each year, the rulers of vassal states brought gifts to Hattusas and pledged their loyalty. In return for military protection and favourable trading status, vassal states contributed precious resources, grain and troops to the empire.

Hittite foot troops made extensive use of the powerful curved bow and bronze or iron tipped arrows. Surviving artwork depicts Hittite soldiers as stocky and bearded, wearing distinctive shoes with curled-up-toes. For close combat they used bronze and iron daggers, lances, spears, sickle-shaped swords, and battle-axes. Soldiers carried bronze rectangular shields and wore bronze conical helmets with earflaps and a long extension down the back that protected the neck.

The Hittites were apparently very competent at conducting sieges and assaulting cities that resisted. They were possibly the first to adopt the horse for pulling light two-wheeled chariots and made these vehicles a mainstay of their field armies. Egyptian engravings of the Battle of Kadesh show three men in Hittite chariots using spears, but other evidence suggests that the war vehicles carried only a driver and archer. Perhaps the chariot archer replaced the chariot javelin thrower. Hittite chariot armies were feared by most of their contemporaries.

12.4 Hittites Religious Belief

Hittites religion was a polytheistic religion; there were thousands of god and goddesses in pantheon (family of gods) and most of them were taken from the other tribes' religions.

The gods in Hittites were just like people. Both their physical appearance and spiritual features were just like the same as people. They eat and drank like people and they always did favour as long as they were treated well by people. Whenever they were neglected, they try to take revenge and they punish the people in a cruel way. A Hittite document compares the people with gods and it mentions that this relationship is just like the one between master and his housemaid.

Hittite pantheon consists of the local ones combined in the course of time in the cities of Anatolia and Syria.

The head god of Hittites was the god of thunder (Te?up) . God of thunder saves the country and the peace of kingdom. The king rules the country on behalf of his master.

The Great Temple at Hattusa was the religious center of the empire. The Hittite king was also the high priest of the kingdom and split his time between government, religious duties, and conquest. The king's dual role was useful in unifying the culture of the kingdom among its diverse peoples. Each year the king and high priest travelled extensively to preside at festivals. These personal appearances brought in rich donations and helped stabilize the realm.

12.5 Decline and Fall

Following the establishment of a treaty with Egypt c. 1259 BCE, there ensued decades of relative peace throughout much of the region. During the great catastrophe c. 1200 BCE, however, the Hittite empire was suddenly destroyed. Perhaps the Hittites had been suffering from an extended shortage of food: records on clay tablets reveal they had begun importing grain from Egypt during the middle of the 13th century BCE. Hattusa was eventually abandoned by the last known king Suppiluliuma II, and then the fortifications were thrown down and the city burned to ashes, possibly by the mysterious Sea Peoples or an Anatolian tribal people called the Kaskians. The carving of the smiling war god guarding the King's Gate is a copy of the original currently on display in the Museum of Anatolian Civilizations in Ankara, the capital of Turkey.

12.6 The Etruscans

The name Etruscans was given by the Romans to their neighbours in the district now known as Tuscany. Greeks called them Tyrsenians or Tyrrhenians. But the origin of the splendid civilization which flourished in Etruria from c. 700 BCE is one of the most vexed questions of early Italian history. The origin of the Etruscans is yet not been very clear. The age long debate regarding the origin of Etruscans was opened around 450 BCE when Herodotus reported that the Etruscans were an offshoot of the Lydians of western Asia Minor. Probably they had set out in quest of new lands because of a great famine in their homeland. But another Greek author Dionysius concluded that the Etruscans must be of Italian origin considering the differences between the Etruscan and the Lydian languages of his time.

12.7 Location

The central area of Etruscan civilization lay between the River Arno in the north, the Tiber in the east and south and the Mediterranean in the west. Into it was thrust the lower slopes of the Apennines. The northern part comprised fertile alluvial valleys, plains and rolling hills of sandstone and limestone where cities such as Clusium, Cortana, Perusia grew up; such was their attraction that the sites continued to be occupied through to modern times.

12.8 Society and Kinship

The cemeteries of the Etruscans give us considerable information about their society. They were a monogamous society that emphasized pairing. The word for married couple was tusurthir. The lids of large numbers of sarcophagi are adorned with sculpted couples, smiling, in the prime of life (even if the remains were of persons advanced in age), reclining next to each other or with arms around each other. The bond was obviously a close one by social preference.

Kinship among the Etruscans was vertical, or generational. They kept track of six generations. In addition to the mi ("I") an individual recognized a clan ("son") or a sec ("daughter"), a neft? ("grandson"), and a prumaths ("great-grandson"). Every individual had an apa and ati("father" and "mother") and relatives older than they. A division of relatives as maternal or paternal seems to have existed: the apanachna and the atinachna, the grandfather's and grandmother's relatives. On the

level of the self, the lack of any words for aunt, uncle or cousins is notable. Very likely, apa was a generational word: it meant father or any of father's male relatives. Similarly, ati would have meant any female relative of mother's age or generation. Ruva ("brother") is recognized, but no sister. It's possible, though hard to determine, that ruva had a broader meaning of "any related male of the self's generation." The Etruscans were careful also to distinguish status within the family. There was a step-daughter and step-son, sechfanthana and clan thuncultha (although this may in fact mean "first son" based on the root thun - "one"), as well as a step-mother, ativu (literally "little mother"), an adopted son, clanti, and the universal mother-in-law, netei. Other terms were not as high or democratic in status. The system was like that of the Roman. The etera were slaves, or more precisely, foreign slaves. When they had been freed they were lautni (male) or lautnitha (female), freed men or women, who were closely connected to the family and were clients of it in return for service and respect.

12.9 State and Administration

The historical Etruscans had achieved a state system of society, with remnants of the chiefdom and tribal forms. In this they were ahead of the surrounding Ancient Italic peoples, who still had chiefs and tribes. Rome was in a sense the first Italic state, but it began as an Etruscan one.

The Etruscan state government was essentially a theocracy. The government was viewed as being a central authority, over all tribal and clan organizations. It retained the power of life and death; in fact, the gorgon, an ancient symbol of that power, appears as a motif in Etruscan decoration. The adherents to this state power were united by a common religion.

The political unit of Etruscan society was the city-state, which was probably the referent of methlum, ("district"). Etruscan texts name quite a number of magistrates, without much of a hint as to their function: the camthi, the parnich, the purth, the tamera, the macstrev, and so on. The people were the mech. The chief ruler of a methlum was perhaps a zilach.

All the city-states of the Etruscans were gathered into confederacies, or "leagues." The sources tell us there were three. A league for unknown reasons, likely religious, had to include 12 city-states. The word for league was also mech. Once a year the states met at a fanu, or sacred place (Latin fanum) to discuss military and political

affairs, and also to choose a lucumo (ruler), who held the office for one year. What he did is described by the infinitive, lucair (to rule). The Etrurian confederacy met at the fanumVoltumnae, the "shrine of Voltumna." Their league was called the "duodecimpopuliEtruriae" or the "twelve peoples of Eturia."

The relationship between Rome and the Etruscans was not one of an outsider conquering a foreign people. The Etruscans considered Rome as one of their cities, perhaps originally in the Latian/Campanian league. It is entirely possible that the Tarquins appealed to Lars Porsena of Clusium (sixth century king), even though he was pro-republican, because he was lucumo of the Etrurian mech for that year. He would have been obliged to help the Tarquins whether he liked it or not. The kings of Rome at some point may also have been lucumo. The gens name, Lucius, is probably derived from lucair.

The Romans attacked and annexed individual cities between 510 and 29 BCE. This apparent disunity of the Etruscans was probably regarded as internal dissent by the Etruscans themselves. For example, after the sack of Rome by the Gauls, the Romans debated whether to move the city en masse to Veii, which they could not even have considered if Veii was thought to be a foreign people. Eventually Rome created treaties individually with the Etruscan states, rather than the whole. But by that time the league had fallen into disuse, due to the permanent hegemony of Rome and increasing assimilation of Etruscan civilization to it, which was a natural outcome, as Roman civilization was to a large degree Etruscan.

12.10 Religion

The Etruscan system of belief was an immanent polytheism; that is, all visible phenomena were considered to be a manifestation of divine power and that power was subdivided into deities that acted continually on the world of man and could be dissuaded or persuaded in favour of human affairs. Three layers are evident in the extensive Etruscan art motifs. One appears to be divinities of an indigenous nature: Catha and Usil, the sun, Tivr, the moon, Selvan, a civil god, Turan, the goddess of love, Laran, the god of war, Leinth, the goddess of death, Maris, Thalna, Turms and the ever-popular Fufluns, whose name is related in some unknown way to the city of Populonia and the populus Romanus. Perhaps he was the god of the people.

Ruling over this panoply of lesser deities were higher ones that seem to reflect the Indo-European system: Tin or Tinia, the sky, Uni his wife (Juno), and Cel, the earth goddess. In addition the Greek gods were taken into the Etruscan system:

Aritimi (Artemis), Menrva (Minerva), Pacha (Bacchus). The Greek heroes taken from Homer also appear extensively in art motifs.

The Etruscans believed in intimate contact with divinity. They did nothing without proper consultation with the gods and signs from them. These practices, which we would view as superstition, were taken over in total by the Romans. A god was called an ais (later eis) which in the plural is aisar. Where they were was a fanu or luth, a sacred place, such as a favi, a grave or temple. There you needed to make a fler (plural flerchva) "offering."

Around the mun or muni, the tombs, were the man or mani (Latin Manes), the souls of the ancestors. A deceased person travels to the underworld called Aita "Hades" and thus may be referred to as a hinthial, literally "one who is underneath". A special magistrate, the cechase, looked after the cecha, or rath, sacred things. Every man, however, had his religious responsibilities, which were expressed in an alumnathe or slecaches, a sacred society. No public event was conducted without the netsvis, the haruspex, or his female equivalent, the nethsra. They read the bumps on the liver of a properly sacrificed sheep. We have a model of a liver made of bronze, whose religious significance is still a matter of heated debate, marked into sections that perhaps are meant to explain what the bump in that region should mean. Divination through haruspices is a tradition originating from the Fertile Crescent.

Like the Egyptians, the Etruscans believed in eternal life, but prosperity there was linked to funereal prosperity here. The tombs in many cases were better than many houses, with spacious chambers, wall frescoes and grave furniture. Most Etruscan tombs have been plundered. In the tomb, especially on the sarcophagus, was a representation of the dead person in his or her prime, probably as they wanted to be in the hereafter. Some of the statuary is the finest and most realistic of any. We have no problem visualizing the appearance of the Etruscans. They wanted us to see them smiling and intimate with their kith and kin around them, as we do.

12.11 Decline

The political domination of the Etruscans was at its height c. 500 BCE, a time in which they had consolidated the Umbrian cities and had occupied a large part of Latium. During this period the Etruscans were a great maritime power and established colonies on Corsica, Elba, Sardinia, the Balearic Islands, and on the coast of Spain. In the late 6th century BCE a mutual agreement between Etruria and Carthage, with whom Etruria had allied itself against the Greeks c. 535 BCE, restricted Etruscan

trade, and by the late 5th century BCE, their sea power had come to an end.

The Romans, whose culture had been greatly influenced by the Etruscans (the Tarquin rulers of Rome were Etruscans), were distrustful of Etruscan power. The Etruscans had occupied Rome itself from c. 616 BCE, but in c. 510 BCE they were driven out by the Romans. In the early 4th century BCE, after Etruria had been weakened by Gallic invasions, the Romans attempted to beat the Etruscans back. Beginning with Veii (c.396 BCE) one Etruscan city after another fell to the Romans, and civil war further weakened Etruscan power. In the wars of the 3rd century BCE, in which Rome defeated Carthage, the Etruscans provided support against their former allies. During the Social War (90-88 BC) of Sulla and Marius the remaining Etruscan families allied themselves with Marius, and in 88 BC Sulla eradicated the last traces of Etruscan independence.

12.12 Conclusion

In the present unit, we have learned about the two foremost groups of the Iron Age Civilizations: Hittites and Etruscans. It is needless to point out that Iron brought fundamental change in the human progress over time in terms of production, warfare and state system. Both the Hittites and Etruscans represented the advent of this new era of the human civilization. The most significant point about the Hittites is that they had developed a kind of constitutional monarchy. It was a novel experiment. The Etruscans also belonged to the Iron age civilization. They also developed a state system, the nucleus of which was the city-state. The tribal features also remained in the state structure of the Etruscans.

12.13 Model Questions

1. Explain the conflict between the Hittities and the Egyptans.
2. Write a short note on the administration of the Hittities.
3. What was the religious belief of the Hittities?
4. Write a short note on the decline and fall of the Hittities.
5. What were the basic features of the social structure of the Etruscans?
6. Write a short note on the state and administration of the Etruscans.
7. Enumerate the religious belief of the Etruscans.
8. Briefly analyse the decline and fall of the Etruscans.

12.14 Suggested Readings

1. Boardman, John, et. al. (Eds.), *Oxford History of the Classical World*, Oxford, 1986.
2. Cary, M, Scullard, H.H., *A History of Rome,* New York, 1975.
3. Fagan, Brian, *People of the Earth: An Introduction to World Prehistory,* Illinois, 1989.
4. Farooqui, Amar, *Early Social Formations,* New Delhi, 2018.
5. Gurney, *The Hittites,* Harmondsworth, 1952.

Module V

Slave Society in Ancient Greece

Unit 13 ❑ Agrarian Economy

Structure

13.0 Objectives

- The objective of the present unit is to study the agrarian economy of Ancient Greek civilization. Students will get a rough idea about the views of different historians on the same The unit will help to understand a clear scenario of the agriculture & livestock rearing practices that prevailed in contemporary Greece.
- The taxation & currency system will also be discussed.

13.1 Introduction

The ancient Greek economy is somewhat of an enigma. Given the remoteness of ancient Greek civilization, the evidence is minimal and difficulties of interpretation

abound. Ancient Greek civilization flourished from around 776 to 30 B.C. in what are called the Archaic (776-480), Classical (480-323), and Hellenistic (323-30) periods.2During this time, Greek civilization was very different from our own in a variety of ways. In the Archaic and Classical periods, Greece was not unified but was comprised of hundreds of small, independent poleis or "city-states." During the Hellenistic period, Greek civilization spread into the Near East and large kingdoms became the norm. Throughout these periods of ancient Greek civilization, the level of technology was nothing like it is today and values developed that shaped the economy in unique ways. Thus, despite over a century of investigation, scholars are still debating the nature of the ancient Greek economy.

Moreover, the evidence is insufficient to employ all but the most basic quantitative methods of modern economic analysis and has forced scholars to employ other more qualitative methods of investigation. This brief article, therefore, will not include any of the statistics, tables, charts, or graphs that normally accompany economic studies. Rather, it will attempt to set out the types of evidence available for studying the ancient Greek economy, to describe briefly the long-running debate about the ancient Greek economy and the most widely accepted model of it, and then to present a basic view of the various sectors of the ancient Greek economy during the three major phases of its history. In addition, reference will be made to some recent scholarly trends in the field.

13.2 Sources of Evidence

Although the ancient Greeks achieved a high degree of sophistication in their political, philosophical, and literary analyses and have, therefore, left us with a significant amount of evidence concerning these matters, few Greeks attempted what we would call sophisticated economic analysis. Nonetheless, the ancient Greeks did engage in economic activity. They produced and exchanged goods both in local and long distance trade and had monetary systems to facilitate their exchanges. These activities have left behind material remains and are described in various contexts scattered throughout the extant writings of the ancient Greeks.

Most of our evidence for the ancient Greek economy concerns Athens in the Classical period and includes literary works, such as legal speeches, philosophical dialogues and treatises, historical narratives, and dramas and other poetic writings. Demosthenes, Lysias, Isokrates, and other Attic Orators have left us with numerous speeches, several of which concern economic matters, usually within the context of

a lawsuit. But although these speeches illuminate some aspects of ancient Greek contracts, loans, trade, and other economic activity, one must analyze them with care on account of the biases and distortions inherent in legal speeches.

Philosophical works, especially those of Xenophon, Plato, and Aristotle, provide us with an insight into how the ancient Greeks perceived and analyzed economic matters. We learn about the place of economic activities within the Greek city-state, value system, and social and political institutions. One drawback of such evidence, however, is that the authors of these works were without exception members of the elite, and their political perspective and disdain for day-to-day economic activity should not necessarily be taken to represent the views of all or even the majority of ancient Greeks.

The ancient Greek historians concerned themselves primarily with politics and warfare. But within these contexts, one can find bits of information here and there about public finance and other economic matters. Thucydides, for example, does takes care to describe the financial resources of Athens during the Peloponnesian War.

Poems and dramas also contain evidence concerning the ancient Greek economy. One can find random references to trade, manufacturing, the status of businessmen, and other economic matters. Of course, one must be careful to account for genre and audience in addition to the personal perspective of the author when using such sources for information about the economy. The plays of Aristophanes, for example, make many references to economic activities, but such references are often characterized by stereotyping and exaggeration for comedic purposes.

One of the most extensive collections of economic documents is the papyri from Greek-controlled Egypt during the Hellenistic period. The Ptolemaic dynasty that ruled Egypt developed an extensive bureaucracy to oversee numerous economic activities and like all bureaucracies, they kept detailed records of their administration. Thus, the papyri include information about such things as taxes, government-controlled lands and labor, and the unique numismatic policies of the Ptolemies.

Epigraphic evidence comes in the form of stone inscriptions from public and private institutions. Boundary markers placed on land used as security for loans, called horoi, were often inscribed with the terms of the loans. States such as Athens inscribed honorary decrees for those who had done outstanding services for the state, including economic ones. States also inscribed accounts for public building projects and leases of public lands or mines. In addition, religious sanctuaries frequently inscribed

accounts of monies and other assets, such as produce, land, and buildings, under their control. Although accounts tend to be free of human biases, honorary decrees are much more complex and the historian must be careful to consider the perspective of their issuing institutions when interpreting them.

Archaeological evidence is free of some of the representational complexities of the literary and epigraphic evidence. Pottery finds can tell us about pottery manufacture and trade. The vase types indicate the goods they contained, such as olive oil, wine, or grain. The distribution of finds of ancient pottery can, therefore, tell us the extent of trade in various goods. Finds of hoarded coins are also invaluable for the information they reveal about the volume of coins minted by a given state at a given time and the extent to which a state's coinage was distributed geographically. But such archaeological evidence is not without its drawbacks as well. The same "muteness" that frees such evidence from human biases also makes it incapable of telling us who traded the goods, why they were traded, how they were traded, how much they cost, and how many middlemen they went through before reaching their find spots. Furthermore, it is always dangerous to attempt to extrapolate broad conclusions about the economy from a small number of finds, since we can never be sure if those finds are representative of larger phenomena or merely exceptional cases that archaeologists happened to stumble upon.

Some of the most spectacular and informative finds in recent years have been made under the waters of the Mediterranean, Aegean, and Black Seas by what is known as marine (or nautical) archaeology. Ancient shipwrecks containing goods for trade have opened new doors to the study of ancient Greek merchant vessels, manufacturing, and trade. Although the field is relatively new, it has already yielded much new data and promises great things for the future.

13.3 The Debate about the Ancient Greek Economy

As stated above, the ancient Greek economy has been the subject of a long-running debate that continues to this day. Briefly stated, the debate began in the late nineteenth century and revolved around the issue of whether the economy was "primitive" or "modern." These were a poor choice of terms with which to conceptualize the ancient Greek economy and are to a great extent responsible for the intractability of the debate. These terms are clearly normative in character so that essentially the argument was about whether the ancient Greek economy was like our "modern" economy, which was never carefully defined, but apparently assumed to be a free enterprise, capitalistic one with interconnected price-making markets. In addition,

confusion arose over whether the ancient Greek economy was like a modern economy in quantity (scale) or quality (its organizing principles). Lastly, such terms clearly attempt to characterize the ancient Greek economy as a whole and do not distinguish differences among regions or city-states of Greece, time periods, or sectors of the economy (agriculture, banking, long distance trade, etc.).

Seeing extensive trade and use of money in Greece from the fifth century B.C. onward, the modernists extrapolated the existence of a market economy in Classical Greece. On the other hand, seeing traditional Greek social and political values that disdained the productive, impersonal, and industrial nature of modern market economies, the primitivists downplayed the existence of extensive trade and the use of money in the economy. Neither primitivists nor modernists could conceive of the existence of extensive trade and the use of money unless the ancient Greek economy was organized according to market principles. Moreover, neither side in the debate could call activities "economic" unless such activities were productive and aimed at growth.

Historical methods were also a factor in the debate. Traditional ancient historians who relied on philology and archaeology tended to side with the modernist interpretation, whereas historians who employed new methods drawn from sociology and anthropology tended to hold to the primitivist view. For example, Michael Rostovtzeff assembled a wealth of archaeological data to argue that the scale of the ancient Greek economy in the Hellenistic period was so great that it could not be considered primitive. On the other hand, Johannes Hasebroek used sociological methods developed by Max Weber to argue that the ancient Greek citizen was a 'homo politicus' ("political man") and not a 'homo economicus' ("economic man") - he disdained economic activities and subordinated them to traditional political interests.

A turning point in the debate came with the work of Karl Polanyi who drew on anthropological methods to argue that economies need not be organized according to the independent and self-regulating institutions of a market system. He distinguished between "substantivist" and "formalist" economic analysis. The latter, which is typical of economic analysis today, is appropriate only for market economies. Market economies operate independently of non-economic institutions and their most characteristic feature is that prices are set according to an aggregate derived from the impersonal forces of supply and demand among a group of interconnected markets. But material goods may be produced, exchanged, and valued by means other than market institutions. Such means may be tied to non-economic social and political institutions, including gift exchange or state-controlled redistribution and price-setting.

Hence, other tools of analysis, namely "substantivist" economics, must be employed to understand them. Polanyi concluded that ancient Greece did not have a developed market system until the Hellenistic period. Before that time, the economy of ancient Greece did not comprise an independent sphere of institutions, but rather was "embedded" in other social and political institutions. Thus, Polanyi opened the door through which scholars could begin to examine the ancient Greek economy free from the normative parameters originally imposed on the debate. Unfortunately, the grip of the old parameters has been very strong and the debate has never completely freed itself from their influence.

13.4 Agriculture in Ancient Greece

Greek soil has been likened to "stinginess" or which helps explain Greek colonialism and the importance of the cleruchies of Asia Minor in controlling the supply of wheat. The olive tree and grapevine, as well as orchards, were complemented by the cultivation of herbs, vegetables, and oil-producing plants. Husbandry was badly developed due to a lack of available land. Sheep and goats were the most common types of livestock. Woods were heavily exploited, first for domestic use and eventually to build triremes. Bees were kept to produce honey, the only source of sugar known to the ancient Greeks.

13.4.1 : Greek Farms

An impression of barley, symbol of wealth in the city of Metapontum in Magna Graecia (the Greek colonies of southern Italy), circa. 530-510 BCE

During the early time of Greek history, as shown in the Odyssey, Greek agriculture - and diet - was based on cereals (sitos, though usually translated as wheat, could in fact designate any type of cereal grain). In reality, 90% of cereal production was barley] Even if the ancients were aware of the better nutritional value of wheat, the growing of barley was less demanding and more productive. Attempts have been made to calculate Attica grain production in the period, but results have not been

conclusive. It did not take long for demand to outpace production capabilities, as arable land was limited. The "tightness" of the land also explains Greek colonization, and the importance Anatolian cleruchies would have for the Athenian empire in controlling grain provision.

On the other hand, the Greek land was well suited for olive trees, which provided olive oil. The growing of olive trees dates back to early Greek history. Olive plantations are a long-term investment: it takes more than twenty years for the tree to provide fruit, and it only fruits every other year. Grapes also do well in the rocky soil, but demand a lot of care. Grapes have been grown since the Bronze age.

These core crops were augmented by vegetable gardens (cabbage, onion, garlic, lentils, chick pea, beans) and herb gardens (sage, mint, thyme, savory, oregano). Orchards included those of fig, almond, apple, and pear trees. Oil-seed plants such as linseed, sesame, and poppy were also grown.

13.4.2 Animal Husbandry

Animal Husbandry was seen as a sign of power and wealth in the works of Homer, was in fact not well developed in ancient Greece. While the Mycenaean civilization was familiar with the rearing of cattle, the practice was restricted as a result of geographic expansion into less suitable terrain. Goats and sheep quickly became the most common livestock; less difficult to rise and providers of meat, wool, and milk (usually in the form of cheese). Pork and poultry (chicken and geese) were also raised. Oxen were rare and normally used as a work animal; though they were occasionally used as sacrificial, animals (see Hecatomb). Donkeys, mules and their mixes were raised as pack or draught animals.

Horses were raised on the plains of Thessaly and Argolis; it was a luxury animal, signifying aristocracy. The Clouds, Ancient Greek comedy by Aristophanes, illustrates the equestrian snobbery of Athenian aristocrats: Pheidippides, the son of the hero is addicted to race-horses and so ruins his father Strepsiades.

It is likely that most farms practiced some limited animal husbandry; poultry or small animals grazing on waste land or fed kitchen scraps. Combined farm/livestock operations also existed, as well as those specializing in livestock. An inscriptionalso mentions a certain Eubolos of Elateia, in Phocis, the owner of 220 head of cattle and horses and at least 1000 sheep and goats. Flocks of sheep were herded between the valley in winter and the mountains in summer. Taxes existed for the transit or stopover of flocks in cities.

Cows were also sometimes raised, although they were not as common as other farm animals.

13.4.3 Other products

Wood was exploited, primarily for domestic use; homes and wagons were made of wood. The Greek forests located in the highlands were denuded by goats and charcoal production; it was not long before it had to be imported especially for ship production.

Beekeeping provided honey, the only source of sugar known to the Greeks. It also was used in medicines and in the production of mead. The Ancient Greeks did not have access to sugarcane. The Hymettus region of Attica was known for the quality of honey produced there.[4] Wax was also produced, used in the lost wax process to produce bronze statues as well as in medicines.

Bronze was used for farm tools and weaponry.

13.5 Agricultural Property

With the exception of Athens, and a few areas where aerial surveys have permitted analysis of historical land distribution, agricultural property allocation is not well known. Before the 5th century BCE, it is certain that the land belonged to great landowners, such as the Attican Eupatrides. Nevertheless, land use varied regionally; in Attica domains were divided among smaller plots, whereas in Thessaly they had single tenants.

From the 8th century BCE, tensions grew between the great landowners and the peasants, who were finding it more and more difficult to survive. This can probably be explained by population growth brought on by reduced infant mortality, and aggravated by the practice of equally subdividing land amongst several inheritors each generation (attested to by both Homer and Hesiod). In Athens, the crisis was resolved with the arrival of Solon in 594 BCE. He forbade slavery for debt and introduced other measures intended to help the peasants. In the 5th century BCE, the practice of liturgy (?????????? / leitourgia - literally, "public work") placed the responsibility for provision of public services heavily on the shoulders of the rich, and led to a reduction in large scale land ownership. It is estimated that most citizens of hoplite rank owned around 5 hectares of land. In Sparta, the reforms of Lycurgus led to a drastic redistribution of land, with 10 to 18 hectare lots (kleroi) distributed to each

citizen. Elsewhere, tyrants undertook redistributions of land seized from wealthy political enemies.

From the 4th century BCE onwards property starts to become concentrated among few land owners, including in Sparta where according to Aristotle, "the land has passed into the hands of a few". Nevertheless, the aristocratic estates in Greece never achieved the scope of the great Roman latifundia. That's why, during the classical period, the wealthy Alcibiades possessed only 28 hectares (Plato). In all cases, land remains intimately associated with the concept of wealth. The father of Demosthenes possessed 14 talents and for land owned only a home, but he was the exception. When the banker Pasion made his fortune, he hurried to buy land.

Some Greek land was public and/or sacred. Each city possessed such land and it is estimated that in Athens during the classical period these lands represented a tenth of cultivable land. This was an administrative division and the property of the city itself (for example in Attica, it was a deme) or a temple. These lands were leased to individuals.

13.6 Craft Production in Ancient Greece

Woman working with wool, 410-470 BCE, National Archaeological Museum of Athens

Much of the craftsmanship of ancient Greece was part southern west of the domestic sphere. However, the situation gradually changed between the 8th and 4th centuries BC, with the increased commercialization of the Greek economy. Thus, weaving and baking, activities so important to the Western late medieval economy, were done only by women, before the 6th century BCE. After the growth of commerce,

slaves started to be used widely in workshops. Only fine dyed tissues, like those made with Tyrian purple, were created in workshops. On the other hand, working with metal, leather, wood, or clay was a specialized activity that was looked down upon by most Greeks.

The basic workshop was often family-operated. Lysias's shield manufacture employed 350 slaves; Demosthenes' father, a maker of swords, used 32. After the death of Pericles in 429 BC, a new class emerged that of the wealthy owners and managers of workshops. Examples include Cleon and Anytus, noted tannery owners, and Kleophon, whose factory produced lyres.

Non-slave workers were paid by assignment, since the workshops could not guarantee regular work. In Athens, those who worked on state projects were paid one drachma per day, no matter what craft they practiced. The workday generally began at sunrise and ended in the afternoon.

Pottery :The potter's work consisted of selecting the clay, fashioning the vase, drying and painting and baking it, and applying varnish. Part of the production went to domestic usage (dishes, containers, oil lamps) or for commercial purposes, and the rest served religious or artistic functions. Techniques for working with clay have been known since the Bronze Age; the potter's wheel is a very ancient invention. The ancient Greeks did not add any innovations to these processes.

The creation of artistically decorated vases in Greece had strong foreign influences. For instance, the famed black-figure style of Corinthian potters was most likely derived from the Syrian style of metalworking. The heights to which the Greeks brought the art of ceramics is therefore due entirely to their artistic sensibilities and not to technical ingenuity.

Pottery in ancient Greece was most often the work of slaves. Many of the potters of Athens assembled between the agora and the Dipylon, in the Kerameikon. They most often operated as small workshops, consisting of a master, several paid artisans, and slaves.

Metalworking :Deposits of metal ore are common in Greece. Of these, the best known are the silver mines of Laurium. These mines contributed to the development of Athens in the 5th century BC, when the Athenians learned to prospect, treat, and refine the ore. Fortuitously, the composition of the earth below the mines rendered drainage unnecessary, an important provision given that ancient mine drainage

techniques did not allow for excavation below the level of subsoil waters. The passageways and steps of Greek mines were dug out with the same concern for proportion and harmony found in their temples. The work was extremely difficult, due to the tunnels' depth-they were sometimes more than 100 meters (110 yd) deep. The miner, armed with his pick and iron hammer and hunched over in two, labored to extract lead ore. The Laurium mines were worked by a large slave population, originating for the most part from Black Sea regions such as Thrace and Paphlagonia. Weapons, armor tools, and a variety of other goods were created with these metals.

13.7 Taxation System and Currency

Direct taxation was not well-developed in ancient Greece. The "eisphorá" was a tax on the wealth of the very rich, but it was levied only when needed - usually in times of war. Large fortunes were also subject to liturgies which was the support of public works. Liturgies could consist of, for instance, the maintenance of a trireme, a chorus during a theatre festival, or a gymnasium. In some cases, the prestige of the undertaking could attract volunteers (analogous in modern terminology to endowment, sponsorship, or donation). Such was the case for the choragus, who organized and financed choruses for a drama festival. In other instances, like the burden of outfitting and commanding a trireme, the liturgy functioned more like a mandatory donation (what we would today call a one-time tax). In some cities, like Miletus and Teos, heavy taxation was imposed on citizens.

On the other hand, indirect taxes were quite important. Taxes were levied on houses, slaves, herds and flocks, wines, and hay, among other things. The right to collect many of these taxes was often transferred to publicans, or the "telônas". However, this was not true for all cities. Thasos' gold mines and Athens' taxes on business allowed them to eliminate these indirect taxes. Dependent groups such as the Penestae of Thessaly and the Helots of Sparta were taxed by the city-states to which they were subject.

Currency : Coinage probably began in Lydia around 600 BC, and circulated in the cities of Asia Minor under its control.[3] Early electrum coins have been found at the Temple of Diana at Ephesus. The technique of minting coins arrived in mainland Greece around 550 BC, beginning with coastal trading cities like Aegina and Athens. Their use spread, and the city-states quickly secured a monopoly on their creation. The very first coins were made from electrum (an alloy of gold and silver), followed

by pure silver, the most commonly found valuable metal in the region. The mines of the Pangaeon hills allowed the cities of Thrace and Macedon to mint a large quantity of coins. Laurium's silver mines provided the raw materials for the "Athenian owls", the most famous coins of the ancient Greek world. Less-valuable bronze coins appeared at the end of the 5th century.

Fig. Athenian Coins (Left) & Spartan Coins (Right)

Coins played several roles in the Greek world. They provided a medium of exchange, mostly used by city-states to hire mercenaries and compensate citizens. They were also a source of revenue as foreigners had to change their money into the local currency at an exchange rate favorable to the State. They served as a mobile form of metal resources, which explains discoveries of Athenian coins with high levels of silver at great distances from their home city. Finally, the minting of coins lent an air of undeniable prestige to any Greek city or city-state.

13.8 Economic Changes during the Hellenistic Period

In large part owing to the Near Eastern conquests of Alexander the Great, but also because of social and economic changes that had already been occurring during the Classical period, the economy of the Hellenistic period (323-30 B.C.) grew immensely in scale. The Finley model is probably right in general to hold that the essentially consumptive nature of the economy in the traditional Greek homelands changed little during this time. But it is clear that there were significant innovations in some places and sectors on account of the collision and fusion of Greek notions of the economy with those of the newly won lands of the Near East. Thus, we see greatly increased government control over the economy, as evidenced most strikingly in the surviving papyrus records of the Greek Ptolemaic dynasty that ruled Egypt.

A large percentage of the land and, therefore, agriculture, was controlled by the Greek royal dynasties that ran the Hellenistic kingdoms. Peasants whose status lay

somewhere between slave and free not only worked the king's lands, but were also often required to labour on other royal projects. The Ptolemies of Egypt dominated agriculture to such an extent that they instituted an official planting schedule for various crops and even loaned out the tools used by farmers on state-owned lands. Almost all produce from these estates was turned over to the government and redistributed for sale to the population. Some crown lands, however, were assigned to government officials or soldiers and though technically still the property of the state, they often came to be treated as de facto private property.

The Ptolemaic state also involved itself in various manufacturing processes, such as olive oil production. Not only were the olives cultivated on state-controlled lands by peasant labor, but the oil was extracted by contracted labor and sold at the retail level by licensed dealers at fixed prices. However, the state probably had no intention to improve efficiency or to provide better quality olive oil at lower prices to its citizens. The Ptolemies instituted a tax on imported olive oil of 50 percent that was essentially a protective tariff. The goal of the government seems to have been to protect the employees of its state-run business.

Yet for all its interference in the economy, the Ptolemaic government did not assemble a state merchant fleet and instead contracted with private traders to transport grain to and from public granaries. It also left it up to private traders to import the few goods that Egypt needed from abroad, including various metals, timber, horses, and elephants, all of which were essential for the Ptolemies' standing mercenary army and fleet. But although the Ptolemies also exported wheat and papyrus, for the most part, the economy of Egypt was a closed one. Unlike the other Hellenistic kingdoms, Egypt minted coins on a lighter standard than the Attic one universalized by Alexander the Great. Moreover, in 285, the Ptolemies barred the use of foreign coins in Egypt and required them to be turned in to government officials, melted down, and re-minted as Egyptian coinage for a fee. Although Egypt controlled gold mines in Nubia, it did not produce silver and had chronic shortages of silver coins for daily transactions. Thus, many exchanges were performed in kind rather than in cash, even though value was always expressed in cash equivalents.

The Hellenistic period is known for its technological innovation and some new technologies did have an impact on the economy. Archimedes' screw-like pump was used to remove water from mines and to improve irrigation for agriculture. In addition, new varieties of wheat and the increased use of iron ploughs improved yield while

better grape and olive presses facilitated wine and oil production. Unfortunately, some of the most impressive technological innovations of the Hellenistic period, such as Heron's steam engine, were never applied in any significant way. Thus, most production continued to be low tech and labor intensive.

13.9 Conclusion

Thus, we can conclude that the economy of Ancient Greece was very much agrarian in nature. Agriculture & animal husbandry were the mainstay for occupation. Apart from these, woodcutting, mining, etc. were also practiced. Beside this, the craft production was also very matured particularly in the field of pottery & metal working. All of these developments were farther sustained by the presence of efficient agricultural property laws & taxation based on monetary economy.

13.10 Model Questions

1) What are the main sources for constructing the history of Greek agrarian economy?
2) Mention the main debates centering round the economy of Ancient Greece.
3) Write in brief about the agricultural development in Ancient Greece.
4) Write in brief about the craft production & its role in the Ancient Greek economy.
5) How did the currency & taxation system influenced the agrarian economy of Greece ?
6) What were the main changes noticed in Hellenistic period ?

13.11 Suggested Readings

Bresson, Alain, The Making of the Ancient Greek Economy, (New Jersey : Princeton University Press, 2016)

Bury, J.B., A History of Greece to the Death of Alexander the Great, (London : McMilan & Co. Ltd., 1900)

Stobart, J.C., The Glory that was Greece, (London : Sidgwick & Jackson, 1971)

Unit 14 ❑ Urbanization and Trade

Structure

14.0 Objectives

- The objective of the present unit is to study the trade & urbanization scenario in Ancient Greece.
- At the very beginning of the unit, the foundation of overseas Greek colonies will be discussed Next the rise & flourishment of Greek trade & commerce will be analyzed chronologically. Learners will also get a brief idea about the development of Greek city states & their urbanization.

14.1 Introduction

Trade & commerce is a part & parcel of Europe since the birth of the Aegan Civilization in the Minoan Valley, 5000 years ago. Although it received a temporary setback during the transition period, but within a feaw years after the birth of Greek civilization, it received a great boost. It received farther impetus with the foundation of the Greek Colonies in early 800-900 BCE along the coasts of Mediterranean from Asia Minor down to Egypt.

The period from 700-500 BCE saw a significant expansion of trading activity both along the Inland routes and also in the International / trans-Oceanic sphere. It was boosted by increasing money economy & urbanization. However according to historians like JP Bury, trading activities shouldn't be looked only with trade routes & commodities of exchange but with broader maritime activities like ship building, organization of traders, cultures & polito-economic consolidation under powerful Greek City States like Athens & Sparta of this age. Let us discuss this.

14.2 The Foundation of the Greek Colonies : The Primary Impetus to Commercial Activities

In Ancient Greece, a vanquished people would sometimes found a colony, leaving their homes to escape subjection at the hand of a foreign enemy. Sometimes colonies were formed as a sequel to civil disorders, when the losers in internecine battles left to form a new city elsewhere. Again, new settlements needed to be founded sometimes, to get rid of surplus population, and thereby to avoid internal convulsions; and also, as a result of ostracism. However, in most cases colony-founders aimed to establish and facilitate relations of trade with foreign countries and to further the wealth of the mother-city. Colonies were established in Ionia and Thrace as early as the 8th century BCE.

More than thirty Greek city-states had multiple colonies. They became dotted across the Mediterranean world. Among them, the most active colony-founding city was Miletus, of the Ionian League. Spawning ninety colonies stretching throughout the Mediterranean Sea, from the shores of the Black Sea and Anatolia (modern Turkey) in the east, to the southern coast of the Iberian Peninsula in the west, as well as several colonies on the Libyan coast of northern Africa, from the late 9th to the 5th centuries BCE.

The Greek city-states began establishing colonies around 900 - 800 BC, at first at Al Mina on the coast of Syria and at the Greek emporium of Pithekoussai at Ischia in the Bay of Naples, both established about 800 BC by Euboeans.

Two waves of new colonists set out from Greece at the transition between the "Dark Ages" and the start of the Archaic Period - the first in the early 8th century BC and a second burst of the colonizing spirit in the 6th century. Population growth and cramped spaces at home seem an insufficient explanation, while the economical and political dynamics produced by the competitive spirit between the frequently kingless Greek city-states - newly introduced as a concept and striving to expand their spheres of economical influence - better fits as their true incentive. Through this Greek expansion, the use of coins flourished throughout the Mediterranean Basin.

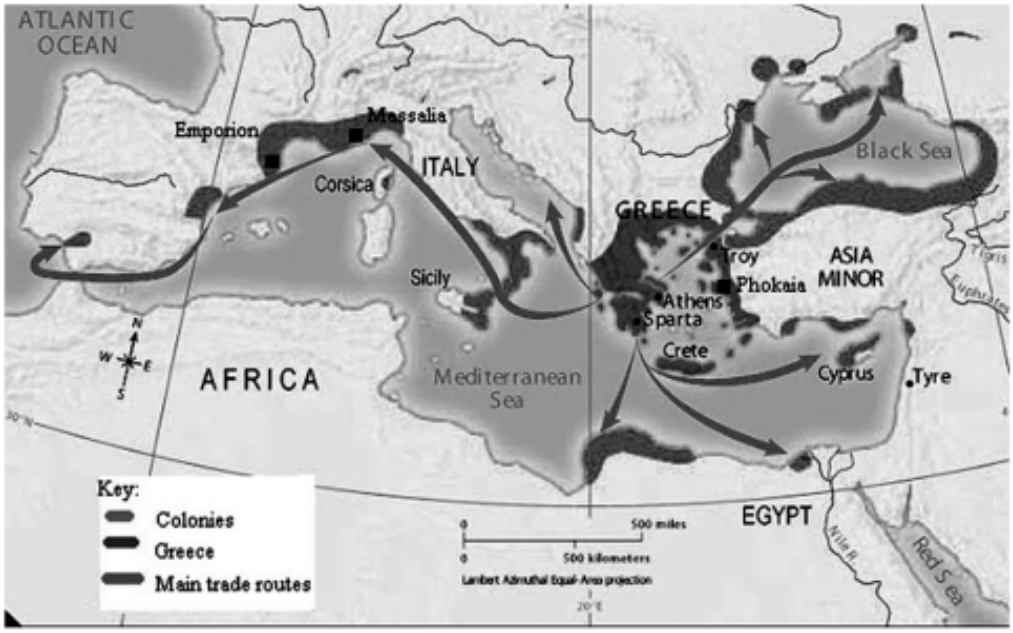


Fig. Establishment of various Greek Colonies

Influential Greek colonies in the western Mediterranean - many of them in today's Italy -included Cyme, Rhegium (Rhegion) (c. 8thcentury BCE), Syracuse by Corinth/ Tenea (c. 734 BC), Naxos (c. 734 BC), Massalia (the later Marseille, France, c. 598 BC) and Agathe (shortly after Massalia) by Phokaia, Elea (Italy) and Emporion (present-day Spain) by Phokaia/Massalia (c. 540 BC and early 6th century), Antipolis (nowadays France) by Achaea, Alalia(Corsica) by Phokaia/Massalia (c. 545 BC) and Cyrene (Cyrenaica, present-day Libya) by Thera (762/61 and 632/31 BC).

The Greeks also colonized modern-day Crimea in the Black Sea. The settlements they established there included the city of Chersonesos, at the site of modern-day Sevastopol. Another area with significant Greek colonies was the coast of ancient Illyria on the Adriatic Sea.

The relation between colony and mother-city, known literally as the metropolis, was viewed as one of mutual affection. Any differences that arose were resolved by peaceful means whenever possible. A colony would usually adopt the constitution of the mother-city, but the new city remained politically independent. The "holy fire" of the metropolis was preserved in a special place to remind people of the common ties. If the colony sent out a fresh colony on its own account, the mother-city was generally consulted, or was at least requested to furnish a leader. Frequently the colonies, declaring their commitment to the various metro-politic alliances formed in the Greek mainland and for religious reasons, would pay tribute in religious centers, like Delphi, Olympia or Delos.

But the growth of trade was the most important outcome of this Greek Colonization, and here too the colonies reacted on the mother-country. By enlarging the borders of the Greek world, they invited and facilitated the extension of Greek trade and promoted the growth of industries. Hitherto the Greeks had been mainly an agricultural and pastoral people; many of them were now becoming industrial. They had to supply their western colonies with oil and wool, with metal and pottery, and they began to enter into serious competition with the Phoenician trader and to drive eastern goods from the market.

The need for food led to the creation of colonies in more fertile areas and a well-established system of maritime trade. As the number of colonies grew, trade became increasingly important for the economy of ancient Greece. Raw materials were produced in the colonies, and traded back to the larger cities on the mainland to be made into finished products. Trade also existed between the Greeks, Near Eastern cities and Egypt.

14.3 The Dependency of the Greek Trade on Water and Development of Shipbuilding

Greek trade moved chiefly along water-ways, and this is illustrated by the neglect of road-making in Greece. There were no paved roads in Greece, even in later times, except the Sacred Road -Ways to popular sanctuaries like that from Athens to Eleusis

and Delphi, or that from the sea coast to Olympia. Yet the Greeks were still timorous navigators, and it was deemed hazardous to sail even in the most familiar waters, except in the late summer. Contemporary Greek poet Hesiod expresses Danger of sea faring voyages & the general fear of the sea in his various verses—

> "For fifty days after the navigation, solstice, till the end of the harvest, is the tide for sailing. Then you will not wreck your ship, nor will the sea wash down your crew, unless Poseidon or Zeus wills their destruction. In that season, winds are steady and Ocean is kind. With mind at rest, launch your ship and stow your freight; but make all speed to return home, and await not the new wine and the rain of the vintage-tide. When the winter approaches, and the terrible South-wind stirs the waves, in fellowship with the heavy autumnal rain of Zeus, and makes the sea cruel."

About this time, however, an important advance was made in sea-craft by the discovery of the anchor. Seafaring states found it needful to build warships for protection against pirates. The usual type of the early Greek warship was the Penteconter or "fifty-oar", a long, narrow galley with twenty-five ship-building benches, on each of which two oarsmen sat. However, this Penteconter hardly came into use in Greece before the eighth century. The Homeric Greeks had only smaller vessels of twenty oars, but we can see in The Pentethe Homeric poems the Penteconter coming within their ken as "a strange and wonderful thing".

The ocean deity, Briareos, called by the name of the Aegean, appears in the Iliad; and he is Aegaeeus, a new racer of the seas, sped by a hundred hands. In the Odyssey, the Phoenicians, who are the kings of sea-craft, have ships of fifty oars. But before the end of the eighth century a new idea revolutionized shipbuilding in Phoenicia. Vessels were built with two rows of benches, one above the other, so that the number of oarsmen and the speed were increased without adding farther bows to the length of the ship. These ships were called "The Brieme". The bireme, however, never became common in Greece, for the Phoenicians had soon improved it into the "trireme," by the superposition of another bank of oars.

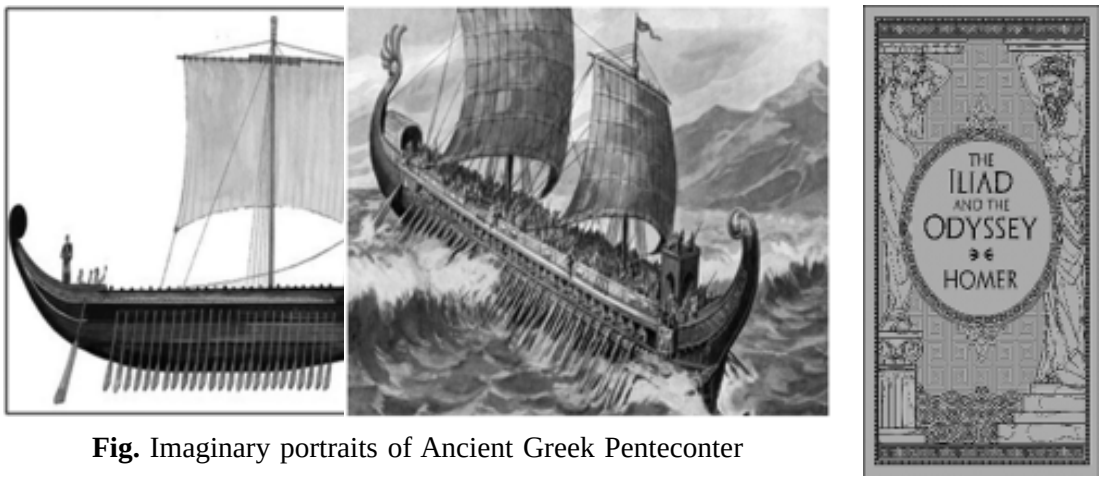


Fig. Imaginary portraits of Ancient Greek Penteconter

It is worthy to mention that whatever naval battles were fought in the seventh century BCE, were fought mainly, we may be sure, with Penteconters. The first

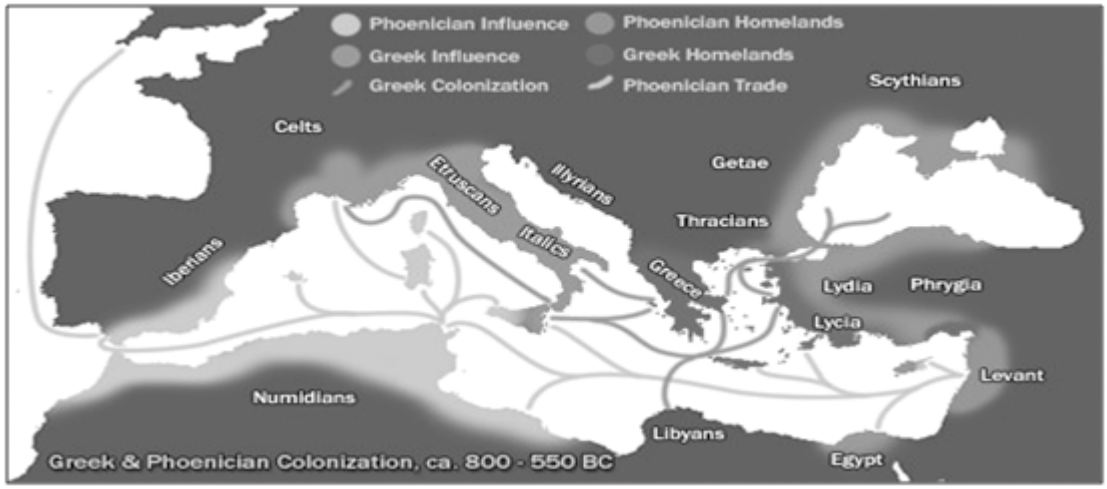


Fig. Commercial Interactions between Greek & Phoenician areas of influence

regular sea-fight between two Greek powers was fought before the middle of the seventh century between the city state of Corinth and her daughter city Corcyra. In the traffic in eastern seas the island city of Aegina, though she had no colonies of her own, took an active part, and became one of the richest mercantile states of Greece. Athens too had ships, but her industries were still on a comparatively small scale, and it was not till a much later period that her trade was sufficient to involve her in serious rivalry with her neighbors. But the most active of all of them, in the field of industry and commerce were the Greeks of Ionia.

14.4 From Local to International Trade

In Greece and the wider Aegean, local, regional, and international trade exchange existed from Minoan and Mycenaean times in the Bronze Age. The presence, in particular, of pottery and precious goods such as gold, copper, and ivory, found far from their place of production, attests to the exchange network which existed between Egypt, Asia Minor, the Greek mainland, and islands such as Crete, Cyprus, and the Cyclades. Trade lessened and perhaps almost disappeared when these civilizations declined, and during the so-called Dark Ages from the 11th to 8th centuries BCE international trade in the Mediterranean was principally carried out by the Phoenicians.

The earliest written sources of Homer and Hesiod attest to the existence of trade (emporia) and merchants (emporoi) from the 8th century BCE, although they often present the activity as unsuitable for the ruling and landed aristocracy. Nevertheless, international trade grew from 750 BCE, and contacts spread across the Mediterranean driven by social and political factors such as population movements, colonization (especially in Magna Graecia), inter-state alliances, the spread of coinage, the gradual standardization of measurements, warfare, and safer seas following the determination to eradicate piracy.

From 600 BCE trade was greatly facilitated by the construction of specialized merchant ships and the diolkos hallway across the Isthmus of Corinth. Special permanent trading places (emporia), where merchants of different nationalities met to trade, sprang up, for example, at Al Mina on the Orontes river (modern Turkey), Ischia-Pithekoussai (off the coast of modern Naples), Naucratis in Egypt, and Gravisca in Etruria. From the 5th century BCE, Athens' port of Piraeus became the most important trading centre in the Mediterranean and gained a reputation as the place to find any type of goods on the market.

Pic. Greek Corinthian Pottery

14.5 The Commodities of Exchange

Trade was a fundamental aspect of the ancient Greek world and following territorial expansion, an increase in population movements, and innovations in transport, goods could be bought, sold, and exchanged in one part of the Mediterranean which had their origin

in a completely different and far distant region. Food, raw materials, and manufactured goods were not only made available to Greeks for the first time but the export of such classics as wine, olives, and pottery helped to spread Greek culture to the wider world.

Goods which were traded within Greece between different city-states &exported outside included:

- cereals
- wine
- olives
- figs
- pulses
- eels
- cheese
- honey
- meat (especially from sheep and goats)
- tools (e.g.: knives)
- perfumes
- fine pottery, especially Attic and Corinthian wares

Fine Greek pottery was also in great demand abroad and examples have been found as far afield as the Atlantic coast of Africa. Other Greek exports included wine, especially from Aegean islands like Mende and Kos, bronzework, olives and olive oil (transported, like wine, in amphorae), emery from Delos, hides from Euboea, marble from Athens and Naxos, and ruddle (a type of waterproofing material for ships) from Keo.

Grapes and olives grow well in Greece, and wine and olive oil became some of their most important exports. The fame and quality of Greek artists also ensured that their finished products were in high demand. Pottery and completed vessels of bronze, silver and gold were among some of the most desirable, while the metal ore was imported in exchange. Intricate woollen textiles were also made in Greece and traded out to Greeks living abroad, as well as foreign peoples.

The goods available at the market places (agorai) of major urban centres which were imported from outside Greece included:

- wheat
- slaves from Egypt
- grain from the Black Sea (especially via Byzantium)
- salt fish from the Black Sea
- wood (especially for shipbuilding) from Macedonia and Thrace
- papyrus
- textiles
- luxury food such as spices (e.g.: pepper)
- glass
- metals such as iron, copper, tin, gold and silver.

Fig. An Egyptian Papyrus

Wheat is difficult to grow in Greece, largely due to the mountainous areas and varied rainfall, and not enough could be produced to keep up with the demands of the people.

Sicily became one of the main areas of import for wheat into Greece. Another one of the main imports into Greece were people, in the form of the slave trade, and this cheap labour allowed the economy to grow even larger

14.6 Trade Incentives and Protections

Maritime loans enabled traders to pay for their cargoes and the loan did not have to be repaid if the ship failed to reach safely its port of destination. To compensate the lender for this risk, interest rates (nautikos tokos) could be from 12.5 to 30% and the ship was often the security on the loan.

The involvement of the state in trade was relatively limited; however, a notable exception was grain. For example, so vital was it to feed Athens' large population and especially valuable in times of drought, trade in wheat was controlled and purchased by a special 'grain buyer' (sitones). From c. 470 BCE the obstruction of the import of grain was prohibited, as was the re-exportation of it; for offenders the punishment was the deathpenalty. Market officials (agoranomoi) ensured the quality of goods on sale in the markets and grain had its own supervisors, the sitophylakes, who regulated that prices and quantities were correct.

Besides taxes on the movement of goods (e.g.: road taxes or, at Chalkedon, a 10% transit charge on Black Sea traffic payable to Athens) and levies on imports and exports at ports, there were also measures taken to protect trade. For example, Athens taxed those citizens who contracted loans on grain cargo which did not deliver to Piraeus or those merchants who failed to unload a certain percentage of their cargo. Special maritime courts were established to tempt traders to choose Athens as their trading partner, and private banks could facilitate currency exchange and safeguard deposits. Similar trading incentives existed on Thasos, a major trading-centre and large exporter of high quality wine.

With the decline of the Greek city-states in the late Classical period, international trade moved elsewhere; nevertheless, many Greek cities would continue to be important trading centers in Hellenistic and Roman times, especially Athens and the free-trade ports of Delos and Rhodes.

The main participants in Greek commerce were the class of traders known as emporoi. The state collected a duty on their cargo. At Piraeus (the main port of Athens), this tax was set initially at 1%, then at 2%. By the end of the 5th century, the tax had been raised to 33 talents (Andocides I, 133-134 BCE). According to Thucycides, in 413, Athens ended the collection of tribute from the Delian League and imposed a 5% duty on all the ports of her empire in the hope (unrealized) of increasing revenues. These duties were never protectionist, but were merely intended to raise money for the public treasury.

The growth of trade in Greece led to the development of financial techniques. Most merchants, lacking sufficient cash assets, resorted to borrowing to finance all or part of their expeditions. A typical loan for a large venture in 4th century BC Athens, was generally a large sum of cash (usually less than 2,000 drachmas), lent for a short time (the length of the voyage, a matter of several weeks or months), at a high rate of interest(often 12% but reaching levels as high as 100%). The terms of the contract were always laid out in writing, differing from loans between friends (eranoi). The lender bore all the risks of the journey, in exchange for which the borrower committed his cargo and his entire fleet, which were precautionarily seized upon their arrival at the port of Piraeus.

Trade in ancient Greece was free: the state controlled only the supply of grain. In Athens, following the first meeting of the new Prytaneis, trade regulations were reviewed, with a specialized committee overseeing the trade in wheat, flour, and bread.

The number of shipwrecks found in the Mediterranean Sea provides valuable evidence of the development of trade in the ancient world. Only two shipwrecks were found that dated from the 8th century BC. However, archeologists have found forty-six shipwrecks dated from the 4th century BC, which would appear to indicate that there occurred a very large increase in the volume of trade between these centuries. Considering that the average ship tonnage also increased in the same period, the total volume of trade increased probably by a factor of 30.

14.7 The Spread of Greek Culture and Political Implications

According to the Metropolitan Museum of Art, ""trading stations played an important role as the furthest outposts of Greek culture. Here, Greek goods, such as pottery, bronze, silver and gold vessels, olive oil, wine, and textiles, were exchanged for luxury items and exotic raw materials that were in turn worked by Greek craftsmen. The Greeks established trading enclaves within existing local communities in the Levant, such as at Al Mina. In the Nile Delta, the port town of Naukratis served as a commercial headquarters for Greek traders in Egypt.

Likewise, well-established maritime trade routes around the Mediterranean basin enabled foreigners to travel to Greece. In the seventh century B.C., contacts with itinerant eastern craftsmen, notably on Crete and Cyprus, inspired Greek artists to work in techniques as diverse as gem cutting, ivory carving, jewelry making, and

metalworking. After the unprecedented military campaign of Alexander the Great (r. 336-323 B.C.), more extensive trade routes were opened across Asia, extending as far as Afghanistan and the Indus River Valley. These new trade routes introduced Greek art to cultures in the East, and also exposed Greek artists to a host of artistic styles and techniques, as well as precious stones. Garnets, emeralds, rubies, and amethysts were incorporated into new types of Hellenistic jewelry, more stunning than ever before. In the ensuing centuries, the Greeks continued to live in these eastern regions, but always maintained contact with the Greek mainland. East Greek artists also emigrated to Etruria, where they settled at Caere, an Etruscan city on the Italian coast.

As a predominant naval force in the latter part of the sixth and fifth centuries B.C., Athens exerted its influence over sea trade. Athenian pottery was widely exported, especially to Etruria and to the colonies in southern Italy, where it inspired local imitations. In the Hellenistic period, Syracuse dominated much of Sicily, and local artistic styles flourished. Particularly ornate sculptural and painted vases were produced at Centuripe. By this time, Syracuse as a cosmopolitan city rivaled any other in the Greek world. It boasted major temples, as well as civic buildings and monuments. In fact, the theater at Syracuse-one of the largest ever built in antiquity-continues to be a celebrated destination for dramatic performances. In 272 B.C., the Romans conquered Magna Graecia, and Sicily came under Roman rule when Syracuse fell to Rome in 212 B.C. As a result, the newly conquered western Greek colonies played an important role as the transmitters of Greek culture to the Romans and the rest of the Italian peninsula.

14.8 The Evolution of Greek Currency and Other By-products of Trade

Trade led to many innovations and events in the history of the Greek people. Among them the most important byproduct probably was the evolution of the monetary currency system.

Coinage probably began in Lydia around 600 BC, and circulated in the cities of Asia Minor under its control. Early electrum coins have been found at the Temple of Diana at Ephesus. The technique of minting coins arrived in mainland Greece around 550 BC, beginning with coastal trading cities like Aegina and Athens. Their use spread, and the city-states quickly secured a monopoly on their creation. The very

first coins were made from electrum (an alloy of gold and silver), followed by pure silver, the most commonly found valuable metal in the region. The mines of the Pangaeon hills allowed the cities of Thrace and Macedon to mint a large quantity of coins. Laurium's silver mines provided the raw materials for the "Athenian owls", the most famous coins of the ancient Greek world. Less-valuable bronze coins appeared at the end of the 5th century.

Coins played several roles in the Greek world. They provided a medium of exchange, mostly used by city-states to hire mercenaries and compensate citizens. They were also a source of revenue, as foreigners had to change their money into the local currency at an exchange rate favorable to the State. They served as a mobile form of metal resources, which explains discoveries of Athenian coins with high levels of silver at great distances from their home city. Finally, the minting of coins lent an air of undeniable prestige to any Greek city or city state.

Banking grew drastically to allow citizens to buy on credit when it was inconvenient to travel with a large amount of wealth. Standard weights and measures were implemented and this greatly helped with trade as well. Even the Greek alphabet came from early interactions with some of the best maritime traders in history, the Phoenicians. It is from this alphabet that our own derives. The importance of maintaining control of the seas was made clear with the development of trade, and great navies were built, one of the largest being that of Athens. Warfare, such as the campaigns of Alexander the Great, opened up trading routes over land and sea, leading to networks that stretched all the way to India.

14.9 Urbanization : the rise of Ancient Greek City States

According to Professoressor Joshua J Mark, "Urbanizationis the process by which rural communities grow to form cities, or urban centers, and, by extension, the growth and expansion of those cities." In case of Greece Urbanization began since the days of Minoan foundation in early 1st millennium BCE (i.e. 1000 BCE). Athens, for example has been a perennial urban center from its birth in antiquity until the present dawn of the 21st century.

14.9.1 The City States

A city-state is a geographic area that has one major central city containing a concentration urban residents. Each city-state does have a suburban and/or rural

fringe, whose population are tied to the central city.

The concentration of urban citizens in a central city is made possible from a commercial agricultural sector that creates sufficient storable food that can be consumed by the urban non-food producing residents. Thus, a city emerges, not simply in conjunction with, but as a direct result of advances in agriculture. Where there is no agriculture, we find only a very thin concentration of population (Bairoch, 1991, p. 1). Urbanization cannot take place without a concentration of population.

Athens, Greece provides one of the first examples of a city-state in the ancient world. Ancient Rome also influenced the urban architecture and urban planning for Europe over the centuries. There is no doubt that the Greco-Roman world exhibited an extremely urbanized way of life.

In addition to technological advances in ancient Greek agriculture, there were several other factors that contributed to the success of urbanization of the Athens city-state:

1) Greece had a written alphabet by 700 B.C.

2) The ancient Greeks invented coined money.

3) Central banks were invented by the ancient Greeks.

4) The city conducted a variety of cultural functions for its citizens.

5) The Agora, as a place for public functions, became the focus of urban life.

Communications were obviously enhanced with the ability of citizens to read and write a common language.

Money is of utmost significance for economic activities in general and for urban life in particular. Coined money is certainly an advantage over the barter system which prevailed in the rest of the ancient world. The use of coins made exchange easier and thus favoured the growth of cities by giving them the additional function of issuing currency.

Classical Greece had a type of city-state in which the cultural functions of the city became important to its citizens. At its inception, the agora was a place where public assemblies gathered. The agora became the focus of urban life because of such cultural functions as the theatre, religion, and city administration.

14.9.2 Size of the City States

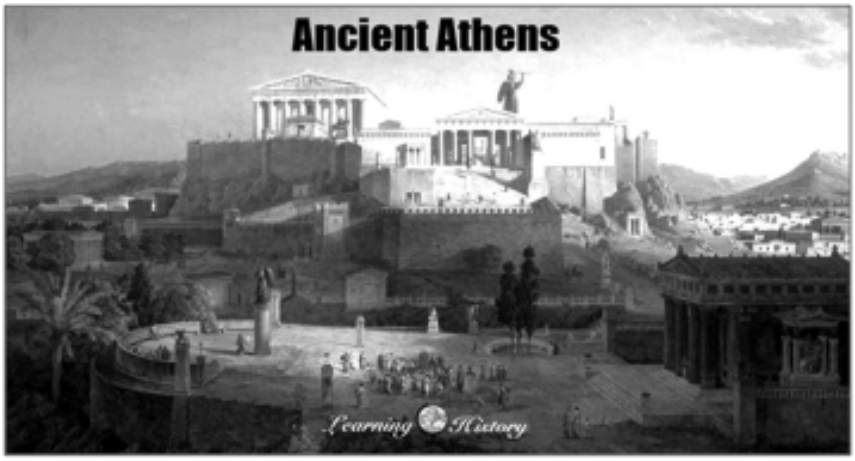


Fig. An Imaginary portrait of Ancient Athens (source : Internet)

Plato states that the ideal republic would have 5,040 citizens, i.e., heads of households. This figure implies an optimum size population of about 20,000 people. He linked his optimum size of city to the need for communications among citizens.

"The city must remain sufficiently small to permit the holding of public meetings with all of the citizens present."

Greek city-states of the ancient world did in fact remain limited in size. Athens (Attiki) was the largest Greek city-state, approaching a population of approximately 100,000 by 500-450 B.C. The other Greek city-states rarely had populations as many as 40,000 people. As a general rule, as soon as a city approached a population of 20,000 to 30,000, it decided to found a new city rather than to continue the original city's development. The ancient Greeks understood the constraints to excessive urban development. These constraints involved the limited productivity of the soils to produce food and the increasingly high cost of transportation to the central part of the city from the hinterland (and vice versa).

14.9.3 The Role of Trade & Commerce

The sale of exported goods from a city-state created wealth for the city-state. Even in ancient times, exports provided capital that multiplied in importance within the exporting city-state. For Athens, it was the export of its manufactured goods, as well as olive oil, that generated the drachmae to import needed grain. The overall

effect was an increase in wealth for Athens and a better standard of living for its citizens.

The urbanization of Athens of ancient times created highly specialized laborers and craftsmen. This division and specialization of labor contributed to the economic success of the city-state.

We do know from the literature, however, that grain imports into Athens were crucial for the economic performance of the ancient city. The municipal assembly of Athens, for example, was required to regularly inscribe on the order of the day the assurance of provisions of wheat. Wheat supplies were as important to Athens as matters dealing with national defense. Athenian law regulated wheat trade so as to protect the interests of its consumers

The city of Athens provided the marketplace for the surrounding district of Attiki. Peasants from the outlying areas came into town to sell their products in exchange for money to pay their taxes, rents and manufactured goods. Retailers also existed in ancient Athens. Artisans and other craftsmen sold their items from their workshops. Some of these items, particularly pottery, became so wel1 known that they were exported to foreign markets.

Overall, the economy of ancient Athens became the forerunner of the medieval economies of Europe several centuries later.

14.10 Conclusion

Thus, trade & commerce received a major impetus in post Aegean Age from 1000 BCE - 300 BCE. Both Internal & transcontinental International trade flourished in this period. New commercial contacts were established among various colonies of Greece. All this led to the economic prosperity of the country, that in turn boosted along the development of money economy & rise of urbanization; vis-a-vis the growth of City States.

14.11 Model Questions

1) How did the 1st phase of Ancient Greek colonization prompted the development of Trade & Commerce?

2) "The Ancient Greek communications and commercial activities was concentrated chiefly on waterways" — Explain this statement.

3) What were the commodities of exchange ?

4) What were the incentives & regulations applied over trade & commerce by the local Greek administrations of the City States ?

5) What was the impact of trade & commerce over Greek Culture 7 politics ?

6) What was the impact of Trade & commerce behind the development of Greek monetary economy ?

7) Describe the growth of Urbanization in Ancient Greece vis-a-vis the rise of City States.

14.12 Suggested Readings

Bresson, Alain, The Making of the Ancient Greek Economy, (New Jersey : Princeton University Press, 2016)

Bury, J.B., A History of Greece to the Death of Alexander the Great, (London : McMilan & Co. Ltd., 1900)

Stobart, J.C., The Glory that was Greece, (London : Sidgwick & Jackson, 1971)

Module VI

Polis in Ancient Greece

Unit 15 ❑ Athens

Structure

15.0 Objectives

- The objective of the present unit is to study the rise of the Athenian city state in Greece. Learners will get a thorough idea about the origin of Athens & the expansion of its hegemony in Greek peninsula
- Two important wars will be also be discussed to portray the political triumph of Athenian city state, viz.
  - The invasion of Emperor Darius & the first Greco-Persian War
  - The Invasion of Emperor Xerxes & the second Greco-Persian War

15.1 Introduction

The history of Greece is incomplete without discussing the rise and fall of the Athenian democracy and the City state of Athens. The city of Athens during the classical period of Ancient Greece (480-323 BCE) was the major urban center or the notable polis (city-state) of Greece, located in Attica, leading the Delian League in the Peloponnesian War against Sparta and the Peloponnesian League. Athenian democracy was established in 508 BC under Cleisthenes.

Athens is considered to be the embodiment of Democracy & Liberty in Ancient Greece. While its counterpart Sparta is identified with the watchwords of Eunomia

(Order) & discipline, Athens is identified by the idea of Eleutheria (Liberty), free speech & free thought.

Thus, describing the achievements of Athenian City state, Historian J.C Stobart writes,

"Rarely in all the world's history was there such an instance of civilization as that of Athens of the 5th century… In one hand a world-conquering power was defied & defeated, a naval empire was built up, while in the other, sculpture, architecture, history & philosophy grew from crude infancy to a height, it has never yet surpassed. And all this under no fostering despot, but in the extreme human limit of liberty, equality & fraternity."

15.2 Geographical Location and the City Overview of Ancient Athens

Athens was in Attica, about 30 stadia from the sea, on the southwest slope of Mount Lycabettus, between the small rivers Cephissus to the west, Ilissos to the south, and the Eridanos to the north, the latter of which flowed through the town. Athens was the stronghold in the midst of the Cephisian plain, five miles from the sea, that devolved the task of working out the unity of Attica. This Cephisian plain, on the south side open to the Saronic Gulf, is enclosed by hills, on the west by Aegaleos, on the north-west by Parnes, on the east by Hymettus, while the gap in the north-east, between Parnes and Hymettus, is filled by the gable-shaped mass of Pentelicus. The river Cephisus flows not far from Athens to westward.

The walled city measured about 1.5 km (0.93 mi) in diameter, although at its peak the city had suburbs extending well beyond these walls. The Acropolis was just south of the centre of this walled area. The city was burnt by Xerxes in 480 BC, but was soon rebuilt under the administration of Themistocles, and was adorned with public buildings by Cimon and especially by Pericles, in whose time (461-429 BC) it reached its greatest splendor. Its beauty was chiefly due to its public buildings, for the private houses were mostly insignificant, and its streets badly laid out. Towards the end of the Peloponnesian War, it contained more than 10,000 houses,[10] which at a rate of 12 inhabitants to a house would give a population of 120,000, though some writers make the inhabitants as many as 180,000. Athens consisted of two distinct parts:

i) The City, properly so called, divided into The Upper City or Acropolis, and

ii) The Lower City, surrounded with walls by Themistocles.

The City Walls : The city was surrounded by defensive walls from the Bronze Age and they were rebuilt and extended over the centuries.In addition the Long Walls

consisted of two parallel walls leading to Piraeus, 40 stadia long (4.5 miles, 7 km), running parallel to each other, with a narrow passage between them and, furthermore, a wall to Phalerum on the east, 35 stadia long (4 miles, 6.5 km). There were therefore three long walls in all; but the name Long Walls seems to have been confined to the two leading to the Piraeus, while the one leading to Phalerum was called the Phalerian Wall. The entire circuit of the walls was 174.5 stadia (nearly 22 miles, 35 km), of which 43 stadia (5.5 miles, 9 km) belonged to the city, 75 stadia (9.5 miles, 15 km) to the long walls, and 56.5 stadia (7 miles, 11 km) to Piraeus, Munichia, and Phalerum.

Fig. Site Map of Athens (Source - J.P. Bury)

The Acropolis (Upper City) : The Acropolis, also called Cecropia from its reputed founder, Cecrops, was a steep rock in the middle of the city, about 50 meters high, 350 meters long, and 150 meters wide; its sides were naturally scarped on all sides except the west end. It was originally surrounded by an ancient Cyclopean wall said to have been built by the Pelasgians. At the time of the Peloponnesian war only the north part of this wall remained, and this portion was still called the Pelasgic Wall; while the south part which had been rebuilt by Cimon, was called the Cimonian Wall. On the west end of the Acropolis, where access is alone practicable, were the magnificent Propylaea, "the Entrances," built by Pericles, before the right wing of which was the small Temple of Athena Nike. The summit of the Acropolis was covered with temples, statues of bronze and marble, and various other works of art. Of the temples, the grandest was the Parthenon, sacred to the "Virgin" goddess Athena; and north of the Parthenon was the magnificent Erechtheion, containing three separate temples, one to Athena Polias, or the "Protectress of the State," the Erechtheion proper, or sanctuary of Erechtheus, and the Pandroseion, or sanctuary of Pandrosos, the daughter of Cecrops.

Between the Parthenon and Erechtheion was the colossal Statue of Athena Promachos, or the "Fighter in the Front," whose helmet and spear was the first object on the Acropolis visible from the sea.

The Agora (Lower City) : The lower city was built in the plain around the Acropolis, but this plain also contained several hills, especially in the southwest part. On the west side the walls embraced the Hill of the Nymphs and the Pnyx, and to the southeast they ran along beside the Ilissos.

Fig. An Imaginary view of Ancient Athens

15.3 The Pre-Greek Origin of Athens : Her deities & the Dorian Invasion

The Athenian boasted themselves to be an pre-Greek aboriginal people of the old stock. As to Historian Thucydides, the Dorian Invaders (Aryans) missed the early establishments of the stony city of Attica when they invaded around 1200 BCE & thus the Athenians raced themselves to descendents of unmixed blood.

God Apollo & Goddess Athena were the main deities of Athens. Apollo was the God of prophecy, music, poetry & Athletics, whereas Athena was the Goddess of strength, boldness, pottery & weaver. Basically, Athena, although a fair grey eyed Goddess was the embodiment of war & battles. She was also a exchequer of wisdom. It is said that Athena had a virgin birth, who sprang out fully loaded with arms from the head of God Zeus. According to Historian J.C. Stobart, the worship of Athena seems singularly pure & civilized & almost entirely free from the concepts of magic & mystery. She is a "civic Goddess" having hardly any connections with the forces of nature.

All these signs made the scholars to suggest that Goddess Athena had pre-Greek origin & is derived from the primitive pantheon belief of the Minoan / Aegean Civilization before the coming of the Dorians (Aryans). Again, the name "Athena" itself doesn't seem to be of "Greek" origin. As to scholars the concept of Goddess Athena was derived from the "refined version" of the Aegean Great Mother, dominating the whole world, who doesn't owe any allegiance to any man in the Earth or in the entire Pantheon. Thus, the very concept of Athena also suggest a primitive pre-Greek origin for the city of Athens.

As a matter of fact, the city of Athens derived its name from the Goddess Athena, who was the most important deity of the Athenian Empire in the entire Greek Pantheon. She was not only given a position of high honor among the Olympian deities but she was also considered as the second most important only to Zeus. Homer called him the "precursor of the Greek Champion" in Troy.

In fact, quiet a fair amount of traces of Minoan Athens survives even to these days. We still see remains of pre-historic palaces & mansions among the rocks of Athenian Acropolis & at Tyrins & Mycenae. While, remains of Mycenaean Tombs &bronze age relics were found along the slope Areopagus.

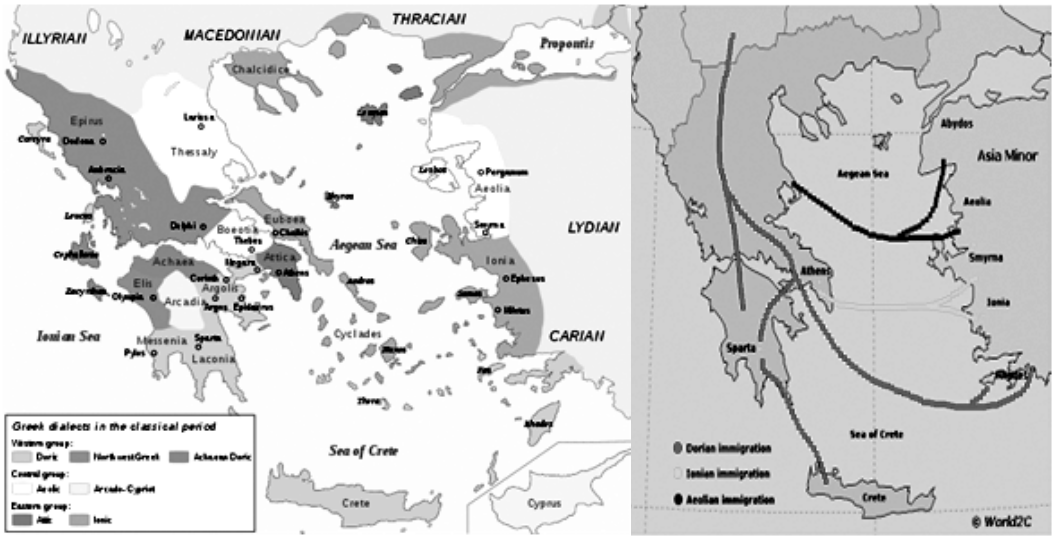


Fig. The linguistic distribution & the immigration of the Dorrians in Greece

However, it's not likely that the Athens of the pre-Greek Mycenaean Age enjoyed a position that it would achieve in the following the Greek period. It was basically a village outpost with its inhabitants mainly indulging in agriculture. Although there was an Athenian contingent present in the legendary war of Troy serving for the Achaean belligerents, under one king called Maneastheus, but it's role was rather a humble one.

During the Mycenaean period the founding father of the Athenian City was considered to be one legendary King named Theseus. It is believe that it was he who made Attica a city state instead of a conglomeration of villages. He is estimated to belong during the 11th century BCE. Later with the beginning of the actual Dorian (Aryan) invasion many Mycenaeans under King Melanthus being displaced by the invaders took refuge in Athens & founded the pre-Greek Neleid dynasty. It is said Melantheus' successor King Codrus (1070 BCE) saved Athens from the Dorian invasion at the cost of his own life. Historians believed that to escape the Dorian conquest King Codrus had dissolved the Athenian kingship & turned it into an Oligarchy (i.e. ruled by aristocracy).

The Dorian invasion is a concept devised by historians of Ancient Greece to explain the replacement of pre-classical dialects and traditions in southern Greece by the ones that prevailed in Classical Greece. Latter they were named Dorian by the ancient Greek writers, after the Dorians, the historical population that spoke them.

Greek legend asserts that the Dorians took possession of the Peloponnesus in an event called the Return of the Heracleid. Nineteenth-century Classical scholars saw in the legend a possibly real event they termed the Dorian invasion. The meaning of the concept has changed several times, as historians, philologists and archaeologists used it in attempts to explain the cultural discontinuities expressed in the data of their fields. The pattern of arrival of Dorian culture on certain islands in the Mediterranean and there mass immigration can never be compared with that of an actual invasion.

Despite nearly 200 years of investigation, the historicity of a mass migration of Dorians into Greece is yet debated, and the origin of the Dorians remains unknown.

It is believed that the Mycenaean civilization collapsed around 1100 B.C.E and the collapse was attributed to the Dorian Invasion. According to this theory, a group of Greek speaking men from the North invaded the Peloponnese peninsula and destroyed the Mycenean civilization. As per the Greek tradition, this movement was the return of the sons of Heracles, who were the founders of three Dorian (from the city of Doris in central Greece) tribes.

The early descriptions of the Dorians came from Herodotus, who himself was from a Dorian colony and wrote that the Dorian women wore a particular kind of dress which was fastened with pins. Thucydides dated the Dorian invasion to 80 years after the Trojan war and wrote that the Dorians held the Peloponnese implying military activity.

While classical historians put the origins of Dorians near Thessaloniki, 20th century historians moved them far North-East to the Ural region or to the doorway of Central Asia and gave them blue eyes and blonde hair. Thus, the similarity of the Dorrian invasion / migration to the Aryan invasion/migration theory which states that war like Aryans from Central Asia invaded ancient India around 1500 - 1200 B.C.E is remarkable. That's why many early Historians associated the Dorrians with the Aryan race.

Archaeologically the period is of too obscure. It is evident that the Dorrian invasion might have affected the Western part of Attica, but Eastern Attica was chiefly left unhurt. It is also true that during this period Athens became a chief centre of refuge for those who were escaping the Dorrian invasion. It was evident from the arrival & conglomeration of different cultures across Greece like Cretan, Corinthian, Delphian etc. in the particular region.

15.4 Early History of Greek Athens

With the beginning of classical Greek period, Athens slowly started to proceed towards its glorious era since 7th century BCE. By the late 7th century, the ruling wealthy aristocracy became a clique of oppressive landowners.

In this period the first major Athenian statesman who emerged out of obscurity was a man called Solon (630-560 BCE). He is called the precursor of Athenian democracy. However, the troubles, which Solon had to face, were chiefly related to agrarian disputes that related to boundary confusion or livestock breeding. In this issue Solon enacted a series of laws & regulations which are said to be the first of its kind. The only export, which was permitted, was that of Olive oil. Some of these wooden tablets of law still survived (even after the twin burning of Athens by the Persians), bearing names of Solon and latter of his successor Dracon. The Athenian populaces at that time were not city dwellers but still chiefly agricultural folks, like shepherds of the hill or the farmers of the plain & the fishermen of the coast. So it's clear that even by 7th century BCE Attica was still not a city state of true nature but somewhat a bigger village settlement or a town.

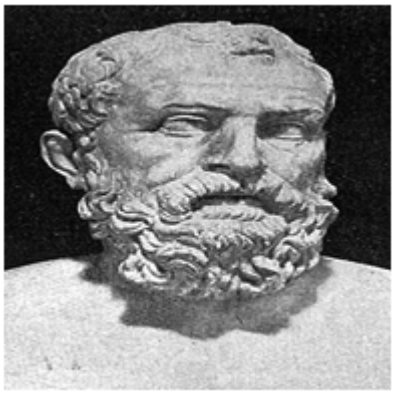


Fig. A bust of Solon from Naples Museum

Solon was the inventor of the Athenian Assembly, the Old Council & the Jury courts. Many Athenian Orators & Legislators used to quote from the laws prepared by Solon. Two hundred years latter the Athenian authors would symbolize him a s the Father of their Constitutional theories. Solon worked a great deal to fix the existing class dispute & to bring about a social & economic equilibrium among the masses of Athens. He was opposed to the exploitation by the land holding elites &

prohibited the loans on the security of the person, a custom that led to the actual enslavement of poor peoples who failed to repay back any loan. Solon is said to have learnt his legislative skills in Egypt.

Solon's successor statesman Pisistratus I (died 527 BCE) gave Athens the real shape of a city state. During his time great encouragement was given in one hand to the development of art & literature & in the other to the development of huge architectural marvels & commercial activities. Thus, now the way to foreign expansion became open for Athens. Finally in 507 BCE Cleisthenes made Athens a republic with distinct democratic tendencies, thus giving the final blow to the establishment of Oligarchy, although Athenian aristocrats still hold some power.

15.5 The Rise of the Athenian Empire and Athenian Colonization

By the end of the 6th century BCE, the primary focus of the Athenian state shifted to the vigorous expansion of its commercial influence across the sea. The Athenian trade moved chiefly along water-ways, and this is illustrated by the neglect of road-making in Greece. The shipbuilding industry in Athens was greatly motivated. About this time, however, an important advance was made in sea-craft by the discovery of the anchor. Seafaring states found it needful to build warships for protection against pirates. The usual type of the early Greek warship was the Penteconter or "fifty-oar", a long, narrow galley with twenty-five ship-building benches, on each of which two oarsmen sat.

The major impetus was received by the rising sea faring commercial population of Athens that mainly resided near the seacoast. As to JC Stobart ~

"These are the restless eager brains which were beginning to think and to find their bearings out in the big world outside Attica"

Thus began the wave of Athenian colonization, i.e. setting up its small commercial centresacross the Greek coast. During the main colonizing period (8th and 7th centuries BC), many Greek City states sent out settlers and established the Apoikeias -daughter colonies of the mother polis, completely separate entities with their own citizenship. Athens, however, especially in the 5th and 4th centuries, normally formed Cleruchies, in which settlers kept their Athenian citizenship. One spur to colonization was the safeguarding of the grain fleets from the Black Sea - hence a line of Athenian outposts

were set up from the Hellespont and the Gallipoli Peninsula through Samos, the Thracian Chersonese, Skyros and Salamis.

The Athenian (aka Delian) league, later the Athenian Empire, controlled through its fleet the islands and coasts of the Aegean. Consequently, Athenian ships went back and forth all the time and Athenian colonists wanted to retain their citizenship and travel back to Athens at will. If an Athenian had to give up his citizenship, he probably wouldn't settle in a colony. While other Greek cities were sending colonies out as far as Marseilles and the Black Sea, neither Sparta nor Athens participated much because they both still had plentiful land nearby to exploit and send their surplus population to. Even when Athens started to need more food than it could produce, it simply imported grain with its fleet.

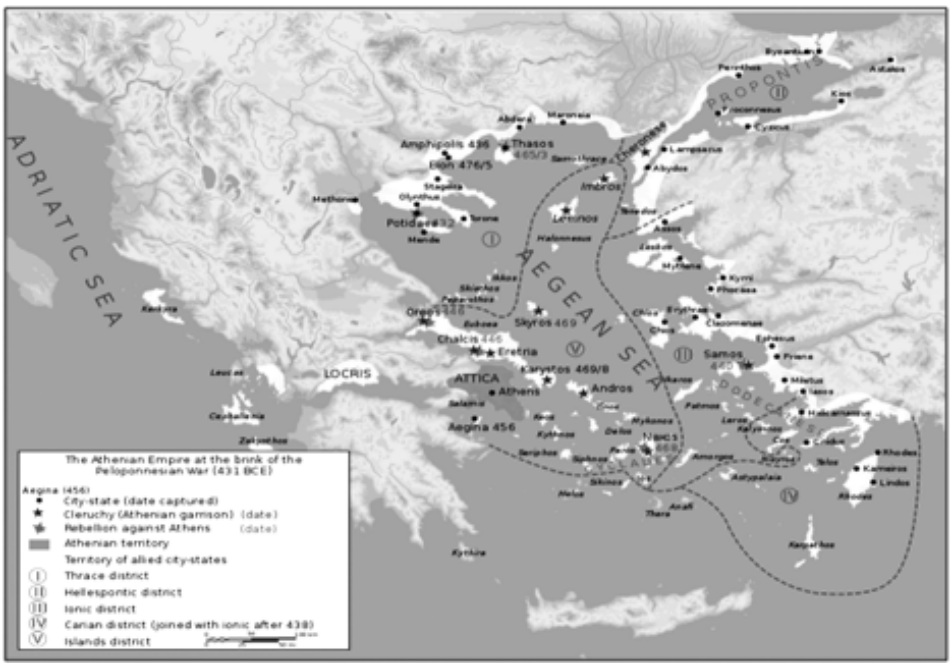


Fig. The Athenian Colonies (circa 5th century BCE)

Many early colonies were compulsory; any family with more than two sons had to send at least one (and colonists had to stay in the colonies), because population pressure was a main motive. But Athens' 5th century colonies were voluntary - an opportunity more than an obligation. One 5th century colony limited colonists to the bottom two (of four) classes of Athens. By the 4th century, it looks like the upper classes- including the highest and richest - could go.

Sources for study of Athenian colonies include popular contemporary historians like Herodotus, Thucydides, Xenophon (the least useful) and the orations of Demosthenes and his counterparts (since they reflect current conflicts - including that with Phillip of Macedon). Later writers are reliable: Diodorus (Augustan period), Plutarch (2nd century AD) and medieval commentaries on ancient texts. But the major sources are inscriptions, especially Attic inscriptions, foundation decrees, 5th century "regulations" (for areas of suppressed rebellions where the role of the newly settled cleruchs versus the older inhabitants were set forth)

Athens' colonization pace starts off slowly. The Pisistratid tyrants - 560-510 - sent out 2 colonies, probably to protect the Hellespont: at Sigeum, near Troy, and on the Chersonese. In the 5th century BCE, Cleruchies were established on Euboea, in the Black sea area, in Italy & in the Aegean, with perhaps 10,000 Athenians living abroad, from as few s 500 at a place to Thurii, which was too big for Athenians alone to colonize so Athens sent out other Greek volunteers. Similarly, Amphipolis in Thrace included many settlers from Athenian allies, whom Athens was unable to control, since Athenians were in the minority. The most famous of the cleruchies were Mytilene (Thuc 3) and Melos (Thuc 5), but the fall of the Athenian Empire in 404 caused most Athenian colonies to be abandoned.

Some 1,117 individuals are attested as residents in Athenian colonies (about 600 from the 4th century), many of them Athenians with demotics, many foreigners, many others with local place names. Over 90% are mal, probably not a true index of the actual population because most inscriptions involve citizen matters and therefore mainly refer to males. The later the time, the greater the proportion of females names (about 25%), as fewer names come from political documents and more from epitaphs and private dedications in temples. Some famous cleruchs include Herodotus (Thurii), Harmodius and Aristogeiton (if not himself, at least his son) and Euripides (Salamis) - all 5th century; 4th century had Plato (Aegina) and Epicurus (Samos). Colonial Institutions replicate those of Athens on a smaller scale: archon as chief magistrate and tear dating. There were no military officers; generals and cavalry commanders were sent out from Attica, since colonies could not wage war on their own. Assemblies probably consisted of all citizens who showed up. The number in the Council is unknown but probably smaller than the 500 in Athens. There was no demo political structure, but tribal divisions had their own assemblies and cults. Local decrees were almost all merely honorific rather than policy-making, since that was probably handled by Athens.

Colonies were outposts of Athens, often used to hold land. An attack on an Athenian cleruchy was an attack on Athens itself. Since no court cases are attested in the colonies, it may well be that litigants in the 5th and 4th centuries went back to Athens for trial. The calendars of no different Greek cities varied and could be tampered with for cultic or political purposes, since it was based on a lunar year, which periodically had to be brought into synchronization with the solar year by intercalation. There is, however, no evidence for independent calendar fiddling in the Athenian colonies (except perhaps one Samian decree with elaborate calendar equations to other places.) Probably the basic year was established in Attica, but there may have been some form of local option, especially since you could not always count on getting word from Athens about changes.

15.6 The First Persian War and the Triumph of Athens

Although we would discuss the Greco-Persian War in a separate chapter latter, but some things related to Athens needed to be discussed here.

As the Athenian sea commerce along with its colonization drive continued across the Aegan Sea, the Athenians were in constant touch with their kinsmen in the Ionian settlements in Asia Minor (present Turkey). But by the beginning of 6th century BCE these regions in the border of Asia came under the influence of the great Persian Empire from the East. By 540 BCE most of the Ionian cities came under the formal domination of the Persian satraps of Asia. Soon, at the close of the 6th century BCE the Ionian Greek settlers revolted against this Persian domination. Accordingly, their mother city Athens along with Eretria responded positively & immediately send supporting naval fleets to help the Ionian rebels. It was only a mere raid. Up to this, it was ok. But the Athenian belligerents made a drastic mistake by burning the Persian regional capital of Sardis in Asia Minor (near modern city of Slahili, Turkey) in 498 BCE.

The news of burning the provincial capital reached like a wild fire to the Persian Capital of Persepolis in Iran. At that time Darius I, the great Persian Emperor was the seating monarch of Persepolis. He was extremely enraged at the news & immediately ordered for retaliation. Thus, set forth the Greco-Persian tension that would lead to some of the largest military conflicts in the entire Ancient world.

By 495 BCE, the Persian forces had recaptured all the Ionian settlements of the Greeks along the coast of Asia Minor. But Darius I was not happy only with this. He

had to take the revenge of the burning of his capital. And that revenge can only fulfilled by destroying the mother city of the Ionian rebels i.e. Athens.

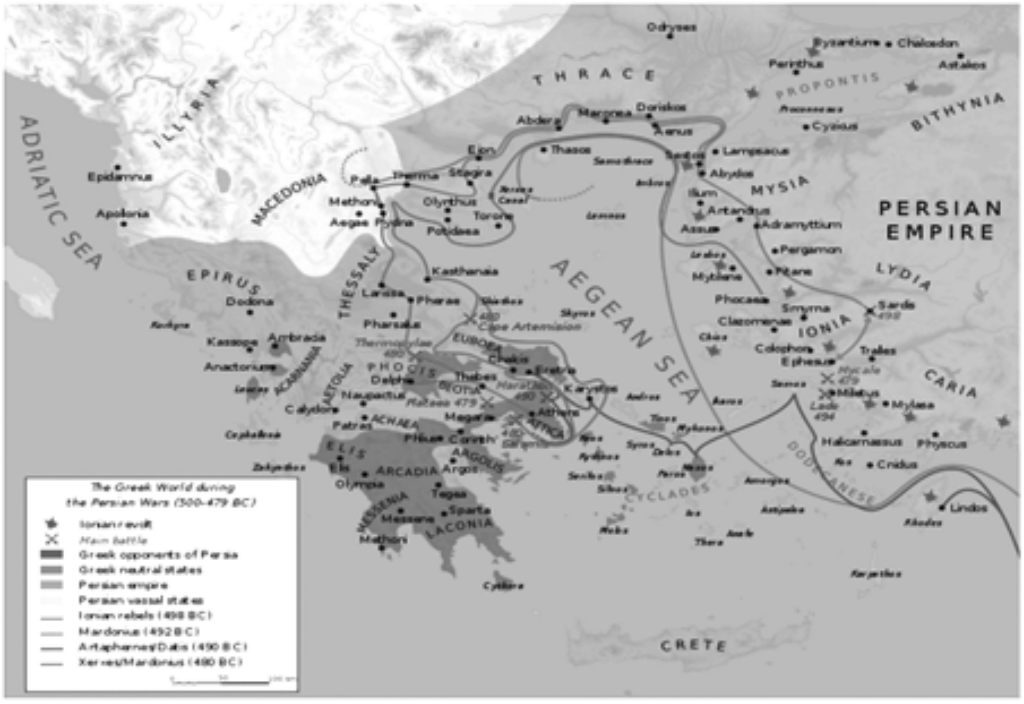


Fig. The Greco - Persian Conflict .

This led to the glorious naval expedition of the Persians under Emperor Darius I to the Athenian homeland in 492 BCE. This was the first Persian Invasion of Greece or the first Greco-Persian War, which ultimately culminated with the Persian defeat at the famous Battle of Marathon in 490 BCE. (The details of the war & campaign would be dealt separately in the next chapter).

At the end, this was the triumph of the Athenian hoplite. However its not a victory of full democracy. Since the hoplite itself comes from the class of aristocrats who could afford a full suit of armour. But it was truly an Athenian victory. Alone, Athens had defeated one of the greatest powers of the Asian world. It is noteworthy to mention that the Greek "warrior city" of Sparta had stayed aloof from this conflict giving some astrological excuses & that she was busy celebrating a mere festival. Athens, now by the virtue of this achievement, stepped up among the front-rank position of the Greek powers, if not in the same level but at least second only to Sparta.

15.7 The Triumph of Democracy and the Second Persian War

In the meanwhile, an Athenian democrat named Themistocles came to the forefront. He proposed to turn the entire focus of the Athenian military into building up his Naval force. Phoenician Navy was one of the main important arms of the Persian command. So in order to counter them, one has to develop its naval power. Themistocles proposal was supported by majority of Athenian statesman. It was one of the turning point of Athenian history, as a result of which Athens got the most powerful navy in the Greek waters.

Fig. The Great Persian Empire

In the course of history it is this Athenian navy, under the able strategy of Themistocles that would defeat the Greatest Persian Naval fleet of about 1000 ships in the great Battle of Salamis that would eventually seal the fate of the Second Persian Invasion of Greece under Darius' son & successor Emperor Xerxes I in September 480 BCE. The victory at Salamis pushed the position of Athens even higher than that of Sparta among the Greek powers. For Salamis had outshone even Marathon.

But above all, it was the policies of Themistocles & the democracy that emerged victorious. The Athenian aristocracy & their hoplite knights can no longer control the policies of the state. From now on it was the conservative politicians & statesmen like

Themistocles, of the Athenian Old Council (the Assembly), who would control & supervise the same.

This was how Athens became a democratic city state in its true nature. Democracy advanced in various stages. Firstly, the poors were made eligible for magistracies, if not the general-ship, which was still reserved for the aristocrats. However, the power of these Generals & the aristocracy as a whole was reduced. The magistrates & Councilors of the Assembly were no longer chosen from reputed aristocratic families, but were ordinary men of merit chosen by the common populace. The Athenian Assembly became actually sovereign over administration within the terms of the Constitution.

In the course of history, Athens was defeated in the Peloponnesian Wars. By mid century, however, the northern Greek kingdom of Macedon was becoming dominant in Athenian affairs. In 338 BCE, the armies of Philip II defeated Athens at the Battle of Chaeronea, & captured Athens.

15.8 Conclusion

This was briefly the glorious history of the rise & fall of the Athenian City State. The period from the end of the Persian Wars to the Macedonian conquest marked the zenith of Athens as a center of literature, philosophy (see Greek philosophy) and the arts (see Greek theatre). Some of the most important figures of Western cultural and intellectual history lived in Athens during this period: the dramatists Aeschylus, Aristophanes, Euripides and Sophocles, the philosophers Aristotle, Plato, and Socrates, the historians Herodotus, Thucydides and Xenophon, the poet Simonides and the sculptor Phidias. The leading statesman of this period was Pericles, who used the tribute paid by the members of the Delian League to build the Parthenon and other great monuments of classical Athens. The city became, in Pericles's words, an education for Hellas (usually quoted as "the school of Hellas [Greece]".

15.9 Model Questions

1. Describe the Geographical Location & the City Overview of Ancient Athens.
2. Why it is said that Athenian origin can be traced back well from the pre-Greek Mycenaean past ?
3. What was the Dorian Invasion ? What was it's impact over Athens ?

4. Who was Solon ? What was his role in building up of the Athenian Democracy ?
5. Describe the Early rise of Athenian power & the Colonization of the Ionian region.
6. How did Athens got into Conflict with the Great Persian Empire of Darius I & what was its end results ?
7. "It's not Marathon but Salamis that resulted in the actual triumph of the Athenian Democracy in it's true sense". - Analyze this statement with proper reference ?

15.10 Suggested Readings

Bury, J.B., A History of Greece to the Death of Alexander the Great, (London : McMilan & Co. Ltd., 1900)

Green, Peter, The Greco-Persian Wars, (London : University of California Press, 1996)

Stobart, J.C., The Glory that was Greece, (London : Sidgwick & Jackson, 1971)

Unit 16 ❑ Sparta

Structure

16.0 Objectives

- The objective of the present unit is to study rise & fall of the Spartan City State in Greece. Students will get a thorough idea about the origip of Sparta in the background of the Dorian Invasion.
- The foundation of Peloponnesian League will also be discussed.
- The unit will also help to understand a brief picture of the Spartan economy & lifestyle including that of the non-Spartan Helot population prevailing at that time.

16.1 Introduction

> "The Ancient city of Sparta was the leader & the symbol of the Dorrian heroics in Greece"
>
> ~ J.C. Stobart

Indeed, the history of Greece is incomplete without discussing the rise & fall of the kingdom of Sparta. Sparta is identified as the embodiment of Eunomia (Order) & discipline, while its counterpart Athens is identified by the idea of Eleutheria (Liberty), free speech & free thought. In fact, the most important part of Classical Greek history centered round the long duel between Athens & Sparta. As all the literary sources along with the contemporary historians originated in Athens, naturally what we get is a biased historical conception against Sparta. An image of Oligarchy, anti-democratic & strictly militaristic is generally portrayed for Sparta, opposed to that of Liberty & equality practiced in the case of Athens. Yet, all those writers, be it Herodotus or Aristotle showed an inbuilt admiration for Sparta.

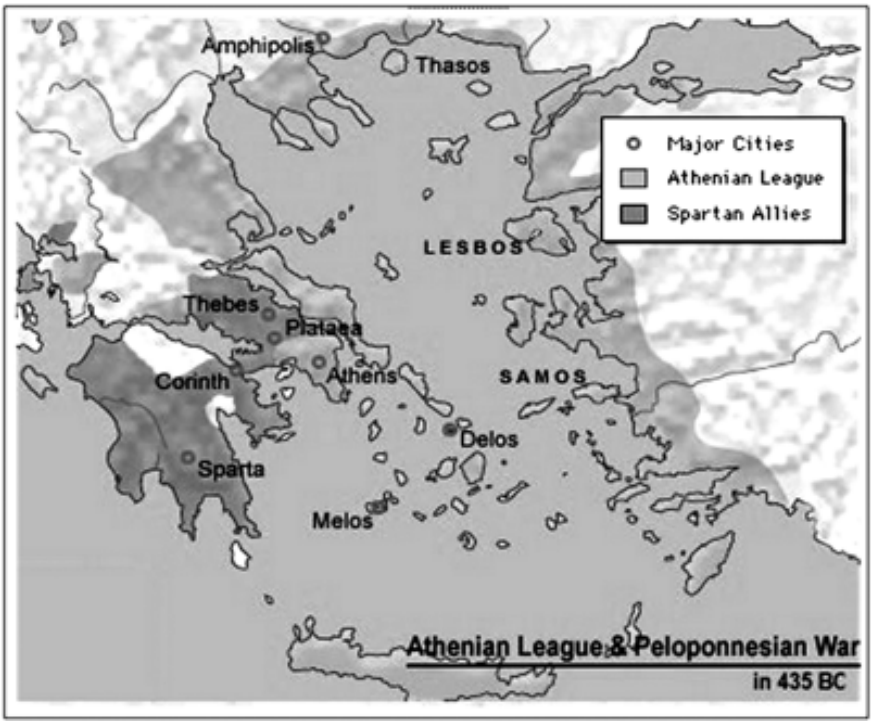


Fig. Location of Sparta & its area of influence in the Greek map (circa 430 BCE)

Sparta was indeed the antithesis of Athens. Each is complement to the other. Without Sparta Greece would lack one of its most remarkable figure in the realms of politics & heroic warfare. The resting pillars of Sparta stand on a strictly militaristic discipline. Weak children were exterminated soon after their birth while military education was compulsory for every Spartan citizen right from their childhood be it for male or female. Although unlike rest of Greece Sparta was devoid of any outstanding

contribution in the field of art & literature, but yet it offered the most stable & strong government in the entire history of Greece. It offered one of the finest army in Greece. Truly, Sparta was a military city state.

As in the words of the famous Spartan King Leonidas, shortly before he marched to face the Persian army in the Battle of Thermopylae ~

"For Athens & other Greek cities, those men who are fighting for them are either sculptor, cobbler or a farmer in their real life.

But for all Spartans, what is your occupation? ~~ None but a Soldier!"

16.2 The Origin of Sparta and the Dorian Invasion

Tradition describes how, some sixty years after the Trojan War, a Dorian migration from the north took place and eventually led to the rise of classical Sparta. This tradition is, however, contradictory and was written down at a time long after the events they supposedly describe. Hence skeptics like Karl Julius Beloch have denied that any such event occurred. Chadwick has argued, on the basis of slight regional variations that he detected in Linear B, that the Dorians had previously lived in the Dorian regions as an oppressed majority, speaking the regional dialect, and emerged when they overthrew their masters.

Archeologically, Sparta itself begins to show signs of settlement only around 1000 BC, some 200 years after the collapse of Mycenaean civilization. Of the four villages that made up the Spartan Polis, Forrest suggests that the two closest to the Acropolis were the originals, and the two more far-flung settlements were of later foundation. The dual kingship may originate in the fusion of the first two villages. One of the effects of the Mycenaean collapse had been a sharp drop in population. Following that, there was a significant recovery, and this growth in population is likely to have been more marked in Sparta, as it was situated in the most fertile part of the plain.

In antiquity, the city-state was known as Lacedaemon. While the name Sparta referred to its main settlement on the banks of the Eurotas River in Laconia, in south-eastern Peloponnese. Around 650 BC, it rose to become the dominant military land-power in ancient Greece.

Between the 8th and 7th centuries BC the Spartans experienced a period of lawlessness and civil strife, later testified by both Herodotus and Thucydides. As a result, they carried out a series of political and social reforms of their own society

which they later attributed to a semi-mythical lawgiver, Lycurgus. These reforms mark the beginning of the history of Classical Sparta

16.3 The Location of Sparta

Sparta is located in the region of Laconia, in the south-eastern Peloponnese. Ancient Sparta was built on the banks of the Eurotas River, the main river of Laconia, which provided it with a source of fresh water. The valley of the Eurotas is a natural fortress, bounded to the west by Mt. Taygetus (2,407 m) and to the east by Mt. Parnon (1,935 m).

Fig. Location of Sparta &it's Laconia

To the north, Laconia is separated from Arcadia by hilly uplands reaching 1000 m in altitude. These natural defenses worked to Sparta's advantage and contributed to Sparta never having been sacked. Though landlocked, Sparta had a harbor, Gytheio, on the Laconian Gulf.

The city of Sparta was the only un-walled city among the main metropolises of Greece. Planted on the banks of River Eurotas, under Mt. Taygetus, it consists of an establishment of Knights encircled by the settlements of slaves.

16.4 The Expansion of the Spartan Kingdom

It is during the reign of King Charillos, that most ancient sources place the life of Lycurgus. Indeed, the Spartans ascribed their subsequent success to Lycurgus, who instituted his reforms at a time when Sparta was weakened by internal dissent and lacked the stability of a united and well-organized community. There are reasons to doubt whether he ever existed, as his name derives from the word for "wolf" which was associated with Apollo, hence Lycurgus could be simply a personification of the god.

J. F. Lazenby suggests, that the dual monarchy may date from this period as a result of a fusion of the four villages of Sparta which had, up until then, formed two factions of the villages of Pitana-Mesoa against the villages of Limnai-Konoura. According to this view, the Kings, who tradition says ruled before this time, were either totally mythical or at best factional chieftains.Lazenby further hypothesizes that other reforms such as the introduction of the Ephors were later innovations that were attributed to Lycurgus.

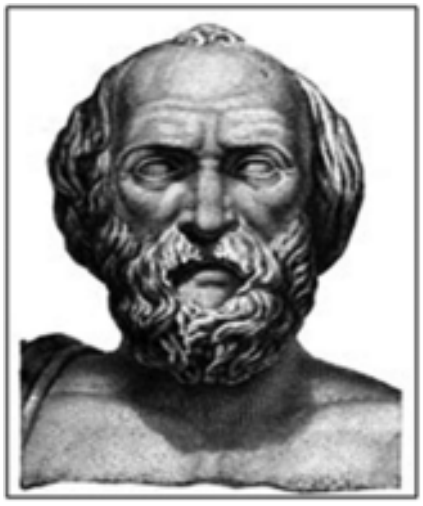


Fig. Lycurgas, the legendary Law-giver of Sparta

The Dorians seem to have set about expanding the frontiers of Spartan territory almost before they had established their own state. They fought against the Argive Dorians to the east and southeast, and also the Arcadian Achaeans to the northwest. The evidence suggests that Sparta, relatively inaccessible because of the topography of the plain of Sparta, was secure from early on: it was never fortified.

Sparta shared the plain with Amyklai which lay to the south and was one of the

few places to survive from Mycaenean times and was likely to be its most formidable neighbor. Hence the tradition that Sparta, under its kings Archelaos and Charillos moved north to secure the upper Eurotas valley is plausible. Pharis and Geronthrae were then taken and, though the traditions are a little contradictory, also Amyklai which probably fell in about 750 BCE. It is probable that the inhabitants of Geronthrae were driven out while those of Amyklai were simply subjugated to Sparta. Pausanias portrays this as a Dorian versus Achaean conflict. The archaeological record, however, throws doubt on such a cultural distinction.

Tyrtaeus, tells us that the war to conquer the Messenians, their neighbors on the west, led by Theopompus, lasted 19 years and was fought in the time of the fathers of our fathers. If this phrase is to be taken literally, it would mean that the war occurred around the end of the 8th century BC or the beginning of the 7th. The historicity of the Second Messenian War was long doubted, as neither Herodotus nor Thucydides mentions a second war. However, in the opinion of Kennell, a fragment of Tyrtaeus (published in 1990) gives us some confidence that it really occurred (probably in the later 7th century). It was as a result of this second war, according to fairly late sources, that the Messenians were reduced to the semi slave status of helots.

Whether Sparta dominated the regions to its east at the time is less settled. According to Herodotus the Argives' territory once included the whole of Cynuria (the east coast of the Peloponnese) and the island of Cythera.. Cynuria's low population - apparent in the archaeological record - does suggest that the zone was contested by the two powers.

In the Second Messenian War, Sparta established itself as a local power in Peloponnesus and the rest of Greece. During the following centuries, Sparta's reputation as a land-fighting force was unequaled

16.5 Establishment of the Peloponnesian League : the Rise and fall of the Spartan Power

The Peloponnesian League was an alliance in the Peloponnesus from the 6th to the 4th centuries BCE, dominated by Sparta. It is known mainly for being one of the two rivals in the Peloponnesian War (431-404 BC), against the Delian League, which was dominated by Athens.

By the end of the 7th century BC Sparta had become the most powerful city-state in the Peloponnese and was the political and military hegemon over nearly all of the

Peloponnese, with the only challenge to the city being Argos, the next most powerful city-state. Sparta acquired two powerful allies, Corinth and Elis (also city-states), by ridding Corinth of tyranny, and helping Elis secure control of the Olympic Games. Sparta continued the aggressive use of a combination of foreign policy and military intervention to gain other allies. Sparta suffered an embarrassing loss to the Greek city of Tegea in a frontier war and eventually offered them a permanent defensive alliance; this was the turning point for Spartan foreign policy. Many other states in the central and provincial northern Peloponnese joined the league, which eventually included all Peloponnesian states except Argos and Achaea.

The league was organized with Sparta as the hegemon, and was controlled by the council of allies, which was composed of two bodies: the assembly of Spartan and the Congress of Allies. Each allied state had one vote in the Congress, regardless of that state's size or geopolitical power. No tribute was paid except in times of war, when one third of the military of a state could be requested. Only Sparta could call a Congress of the League. All alliances were made with Sparta only, so if they so wished, member states had to form separate alliances with each other. And although each state had one vote, League resolutions were not binding on Sparta. Thus, the Peloponnesian League was not an "alliance" in the strictest sense of the word (nor was it wholly Peloponnesian for the entirety of its existence). The league provided protection and security to its members. It was a conservative alliance, which supported Oligarchies and opposed tyrannies and democracies.

Early in the 6th century BC, the Spartan kings Leon and Agasicles made a vigorous attack on Tegea, the most powerful of the Arcadian cities. For some time, Sparta had no success against Tegea and suffered a notable defeat at the Battle of the Fetters. For Historian W.G. Forrest this marked a change in Spartan policy, from enslavement to a policy of building an alliance that led to the creation of the Peloponnesian League. Forrest, hesitantly attributes this change to Ephor Chilon. In building its alliance, Sparta gained two ends, protection of its conquest of Mesene and a free hand against Argos. The Battle of the Champions won about 546 BC (that is at the time that the Lydian Empire fell before Cyrus of Persia) made the Spartans masters of the Cynuria, the borderland between Laconia and Argolis.

In 494 BC, King Cleomenes I, launched what was intended to be a final settling of accounts with the city of Argos - an invasion, with the capture of the city itself, as the objective. Argos did not fall but her losses in the Battle of Sepeia would cripple Argos militarily, and lead to deep civil strife for some time to come. Sparta had come

to be acknowledged as the leading state of Hellas and the champion of Hellenism. Croesus of Lydiahad formed an alliance with it. Scythian envoys sought its aid to stem the invasion of Darius; to Sparta. The Greeks of Asia Minor appealed to withstand the Persian advance and to aid the Ionian Revolt; Plataea asked for Sparta's protection; Megara acknowledged its supremacy; and at the time of the Persian invasion under Xerxes no state questioned Sparta's right to lead the Greek forces on land or at sea.

At the end of the 6th century BC, Sparta made its first intervention north of the Isthmus when it aided in overthrowing the Athenian tyrant Hippias in 510 BC.[31] Dissension in Athens followed with conflict between Kleisthenes and Isagoras. King Cleomenes turned up in Attica with a small body of troops to back the more conservative Isagoras, whom Cleomenes successfully installed in power. The Athenians, however, soon tired of the foreign king, and Cleomenes found himself expelled by the Athenians.

Cleomenes then proposed an expedition of the entire Peloponnesian League, with himself and his co-King Demaratos in command and the aim of setting up Isagoras as tyrant of Athens. The specific aims of the expedition were kept secret. The secrecy proved disastrous and as dissension broke out the real aims became clearer. First, the Corinthians departed. Then a row broke out between Cleomenes and Demaratos with Demaratos too, deciding to go home. As a result of this fiasco the Spartans decided in future not to send out an army with both Kings at its head. It also seems to have

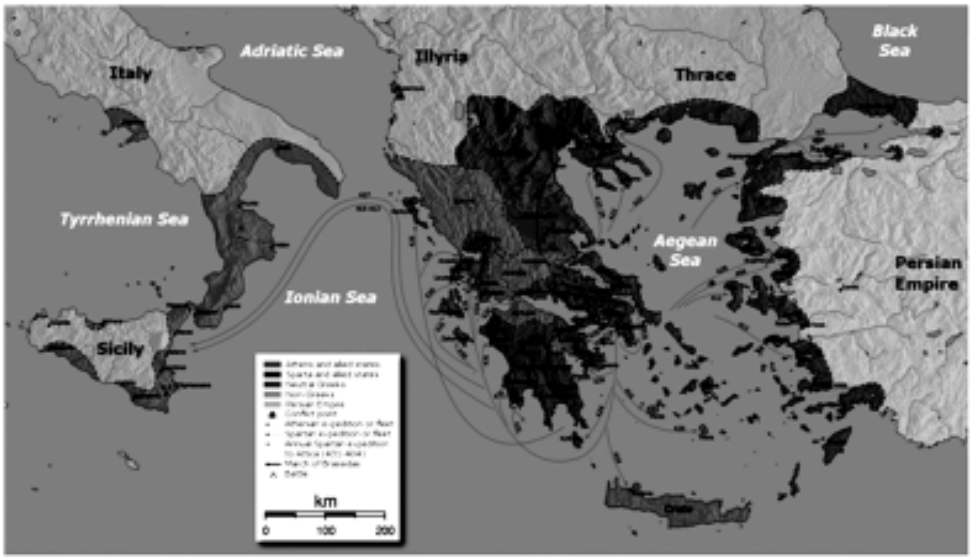


Fig. The Peloponnesian League under Sparta (Blue) &
Delian League under Athens (Red)

changed the nature of the Peloponnesian League. From that time, major decisions were discussed. Sparta was still in charge, but it now had to rally its allies in support of its decisions.

After the Persian Wars the League was expanded into the Hellenic League and included Athens and other states. The Hellenic League was led by Pausanias and, after he was recalled, by Cimon of Athens. Sparta withdrew from the Hellenic League, reforming the Peloponnesian League with its original allies. The Hellenic League then turned into the Athenian-led Delian League. This might have been caused by Sparta and its allies' unease over Athenian efforts to increase their power. The two Leagues eventually came into conflict with each other in the Peloponnesian War. Under Spartan leadership, the League defeated Athens and its allies in 404 BC.

However, latter, following the disastrous Spartan defeat by Thebes at the Battle of Leuktra in 371 BC, Elis and the Arcadian states seized the opportunity to throw off the yoke of Spartan hegemony; the Arcadians formed themselves into their own league to preserve their independence. The size of the Peloponnesian League was then further reduced by the Theban liberation of Messenia from Spartan control in 369 BC. The states of the North-eastern Peloponnese, including Corinth, Sicyon and Epidauros, adhered to their Spartan allegiance, but as the war continued in the 360s BC, many joined the Thebans or took a neutral position, though Elis and some of the Arcadian states realigned themselves with Sparta.

At last, in 338 BC, the Peloponnesian League was disbanded when Philip II of Macedon, father of Alexander the Great, formed the League of Corinth after defeating Thebes and Athens, incorporating all the Peloponnesian states except Sparta.

16.6 The Spartan Economy

Any regular citizen Sparta was barred by law from trade or manufacture, which consequently rested in the hands of the Council. This lucrative monopoly, in a fertile territory with a good harbor, ensured the loyalty of the Council. Despite the prohibition on menial labor or trade, there is evidence of Spartan sculptors, and Spartans were certainly poets, magistrates, ambassadors, and governors as well as soldiers.

Allegedly, Spartans were prohibited from possessing gold and silver coins, and according to legends, Spartan currency consisted of iron bars to discourage hoarding. It was not until the 260s or 250s BC that Sparta began to mint its own coins. Though the conspicuous display of wealth appears to have been discouraged, this did not

preclude the production of very fine decorated bronze, ivory and wooden works of art as well as exquisite jewellery, attested in archaeology.

Allegedly as part of the Lycurgan Reforms in the mid-8th century BC, a massive land reform had divided property into 9,000 equal portions. Each citizen received one estate, a kleros, which was expected to provide his living. The land was worked by helots who retained half the yield. From the other half, the Spartan was expected to pay his mess (syssitia) fees and the agoge fees for his children. However, we know nothing of matters of wealth such as how land was bought, sold, and inherited, or whether daughters received dowries. However, from early on there were marked differences of wealth within the state, and these became more serious after the law of Epitadeus some time after the Peloponnesian War, which removed the legal prohibition on the gift or bequest of land. By the mid-5th century, land had become concentrated in the hands of a tiny elite, and the notion that all Spartan citizens were equals had become an empty pretence. By Aristotle's day, (384-322 BC) citizenship had been reduced from 9,000 to less than 1,000, then further decreased to 700 at the accession of Agis IV in 244 BC. Attempts were made to remedy this by imposing legal penalties upon bachelors, but this could not reverse the trend.

16.7 : The Spartan Government : Democracy, Oligarchy or a Limited Monarchy?

Politically all the Greek City states rested upon a dual structure of government, viz -

i) The Assembly (the Larger House)

ii) The Council (the smaller House)

In democracies such as Athens, the Assembly was composed of a wide representation across the population and possessed the actual control of the government, while the Council possessed only a limited subordinate powers. In the Oligarchies, on the other hand, the actual seat of power rested in the hands of the Council, which was consisted of a very handful of esteem noble citizens of the state. It's like a modern Communist party, where although every member held an equal position in the General Body / General Assembly of the party, but the real power rested in the hands of the Central Standing Committee, which is composed of the handful of the top 10-12 chosen Party-men.

Sparta contained both these elements ~

i) The General Assembly of all the Spartan warriors, called the "Spartiate", where every member enjoyed equal rights & privileges. Although, it represented only a handful of total population of Laconia.

ii) The all-powerful Council / Senate, called "Gerousia" which was composed of the "chosen" thirty Elders.

However, although Sparta appeared to look like a typical Oligarchy of the Classical Greece, but most of the contemporary authors like Aristotle, Thucydides, etc. refused to accept it as an Oligarchy of the true sense. Firstly, because in general, in other Oligarchies of Greece, the Council members were not generally elected directly but were chosen based on their nobility & wealth, either from the Assembly or indirectly. Its quiet similar to our Rajyasabha members of India who are not directly elected by the people, but are indirectly selected by the elected representatives of other Houses. But in case of Sparta, although the Council or Gerousia was more powerful than the Assembly, but its members or "Gerontes" were directly elected from the general populace which was very unique from the other Oligarchies.

In addition, the second reason is that, despite the presence of both the Assembly & the Council, Sparta had also developed an executive magistracy, led by the King, which share almost equal power in directing the State policy in caparison to the Council or Senate. In fact, Sparta had a recognizable kingship power since the early days of Dorrian Invasion. They had two parallel descending Kingship family, both of whom is believed to be descending from a common ancestry of the Heraclid Family. Probably it is because two different bands of Dorrian Invaders had settled in the Laconian valley in two separate times, each under its own king.

The military leadership was by far the most auspicious duty attached to the Magistracy's office. And its leadership is hereditary in nature.

However, the King's power is also limited after a certain extent. Beyond the leading of the army in battles & deciding certain foreign affairs, the Spartan king had few rights & duties. Apart from these he enjoyed two ex-officio titles & reserved two seats out of the thirty in the Spartan Council or Gerousia. He had certain other legal jurisdictional power over some unimportant matters related to religion & the King &Queen used to represent the state in Religious festivals & sacrifices. His position appear to be quiet similar to our Afghan Lodi Sultanate of Delhi (1451-1526 CE)

where the Sultan is only treated as first among equals. One fine example can be given of King Leonides during the Second Greco Persian War. Leonidas was desperately eager to join the fight against the Persian Invaders with the other belligerent Greek allies & personally lead the campaign with the Spartan army. But despite the King's willingness the Senate refused to grant permission to join the war (primarily). Thus, Leonidas was forced to leave the bulk of the Spartan army & instead march forward only with the handful of his 300 bodyguards to face the Invading Persian Land Army under Emperor Xerxes to protect the Pass of Thermopylae (480 BCE).

Fig. An Imaginary representation of the Spartan Senate or "Gerousia"

Although Spartans were conservative by religion, but they were not superstitious in nature, nor were they too much ritualistic. Thus they much prefers to fight under the orders of a descendent of Heracles, rather than solely believing in General's luck.

Thus, Aristotle placed the Spartan system of Government in a class by itself & called it as a "Permanent hereditary Generalship".

16.8 The Non-Spartan Helot Population

The Spartans were a minority of the Lakonian population. The largest class of inhabitants were the helots (in Classical Greek Heílôtes).

The helots were originally free Greeks from the areas of Messenia and Lakonia whom the Spartans had defeated in battle and subsequently enslaved. In contrast to populations conquered by other Greek cities (e.g. the Athenian treatment of Melos),

the male population was not exterminated and the women and children turned into chattel slaves. Instead, the helots were given a subordinate position in society more comparable to serfs in medieval Europe than chattel slaves in the rest of Greece.

Helots did not have voting or political rights. The Spartan poet Tyrtaios refers to Helots being allowed to marry and retaining 50% of the fruits of their labor. They also seem to have been allowed to practice religious rites and, according to Thucydides, own a limited amount of personal property. Initially Helots couldn't be freed but during the middle Hellenistic period period, some 6,000 helots accumulated enough wealth to buy their freedom, for example, in 227 BC.

In other Greek city-states, free citizens were part-time soldiers who, when not at war, carried on other trades. Since Spartan men were full-time soldiers, they were not available to carry out manual labor. The helots were used as unskilled serfs, tilling Spartan land. Helot women were often used as wet nurses. Helots also travelled with the Spartan army as non-combatant serfs. At the last stand of the Battle of Thermopylae, the Greek dead included not just the legendary three hundred Spartan soldiers but also several hundred Thespian and Theban troops and a number of helots.

Relations between the helots and their Spartan masters were sometimes strained. There was at least one helot revolt (c. 465-460 BC), and Thucydides remarked that "Spartan policy is always mainly governed by the necessity of taking precautions against the helots." On the other hand, the Spartans trusted their helots enough in 479 BC to take a force of 35,000 with them to Plataea, something they could not have risked if they feared the helots would attack them or run away. Slave revolts occurred elsewhere in the Greek world, and in 413 BC 20,000 Athenian slaves ran away to join the Spartan forces occupying Attica. What made Sparta's relations with her slave population unique was that the helots, precisely because they enjoyed privileges such as family and property, retained their identity as a conquered people (the Messenians) and also had effective kinship groups that could be used to organize rebellion. Plutarch also states that Spartans treated the Helots "harshly and cruelly". They compelled them to drink pure wine (which was considered dangerous - wine usually being cut with water) "...and to lead them in that condition into their public halls, that the children might see what a sight a drunken man is; they made them to dance low dances, and sing ridiculous songs..." during syssitia (obligatory banquets).

As the Spartiate population declined and the helot population continued to grow, the imbalance of power caused increasing tension.

16.9 Life in Sparta

Sparta was above all a militarist state, and emphasis on military fitness began virtually at birth. Shortly after birth, a mother would bathe her child in wine to see whether the child was strong. If the child survived he/she was brought before the Gerousia by the child's father. The Gerousia then decided whether it was to be reared or not. It is commonly stated that if they considered it "puny and deformed", the baby was exterminated. This was, in effect, a primitive form of eugenics. Sparta is often viewed as being unique in this regard, however, anthropologist Laila Williamson notes that "Infanticide has been practiced on every continent and by people on every level of cultural complexity, from hunter gatherers to high civilizations. Rather than being an exception, then, it has been the rule.There is controversy about the matter in Sparta, since excavations in the chasm only uncovered adult remains, likely belonging to criminals.

Education : When male Spartans began military training at age seven, they would enter the agoge system. The agoge was designed to encourage discipline and physical toughness and to 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." In addition they were trained to survive in times of privation, even if it meant stealing. 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. Less information is available about the education of Spartan girls, but they seem to have gone through a fairly extensive formal educational cycle, broadly similar to that of the boys but with less emphasis on military training. In this respect, classical Sparta was unique in ancient Greece. In no other city-state did women receive any kind of formal education.

At age 20, the Spartan citizen began his membership in one of the syssitia (dining messes or clubs), composed of about fifteen members each, of which every citizen was required to be a member. Here each group learned how to bond and rely on one another. The Spartans were not eligible for election for public office until the age of 30. Only native Spartans were considered full citizens and were obliged to undergo the training as prescribed by law, as well as participate in and contribute financially to one of the syssitia.

Sparta is thought to be the first city to practice athletic nudity, and some scholars claim that it was also the first to formalize pederasty. According to these sources, the Spartans believed that the love of an older, accomplished aristocrat for an adolescent was essential to his formation as a free citizen. However, other scholars question this interpretation. Xenophon explicitly denies it, but not Plutarch.

Spartan men remained in the active reserve until age 60. Men were encouraged to marry at age 20 but could not live with their families until they left their active military service at age 30. They called themselves "homoioi" (equals), pointing to their common lifestyle and the discipline of the phalanx, which demanded that no soldier be superior to his comrades.

Fig. A Spartan Hoplon

Thucydides reports that when a Spartan man went to war, his wife (or another woman of some significance) would customarily present him with his hoplon (shield). At that time, they would say: "With this, or upon this, a true Spartans could only return to Sparta either victorious (with their shield in hand) or dead (carried upon it)." Unfortunately, poignant as this image may be, it is almost certainly propaganda. Spartans buried their battle dead on or near the battlefield. Corpses were not generally brought back. Nevertheless, it is fair to say that it was less of a disgrace for a soldier to lose his helmet, breastplate or greaves than his hoplon, since the former were designed to protect one man, whereas the hoplon also protected the man on his left. Thus, the shield was symbolic of the individual soldier's subordination to his unit, his integral part in its success, and his solemn responsibility to his comrades in arms - messmates and friends, often close blood relations.

16.10 Conclusion

Thus Sparta was a truly militaristic state. All throughout its history, it is stone-studied with heroic battles. Sparta in this sense is almost an anti-thesis of Athens. However, due to its peculiar form of power structure, Sparta offered the most stable form of government in the entire history of Greece, with the record of almost no successful rebellion within its area of dominance.

16.11 Model Questions

1) Describe the origin of Sparta ?
2) Describe the expansion of Sparta in the preliminary phase.
3) How did the formation of the Peloponnesian League boosted the political expansion of the Spartan Kingdom ?
4) How did the Spartan Supremacy came to an end ?
5) Describe in brief the Spartan economy ?
6) What do you mean by "Gerousia" ? Analyze the peculiar distribution of power in the Spartan city state.
7) Who were Helots ? What was their role & position in Spartan demographics?
8) Describe in brief the militaristic life in Sparta.

16.12 Suggested Readings

Bury, J.B., A History of Greece to the Death of Alexander the Great, (London : McMilan & Co. Ltd., 1900)

Forrest, William George, A History of Sparta, (London : Bristol Classical Paperbacks, 1995)

Green, Peter, The Greco-Persian Wars, (London : University of California Press, 1996)

Stobart, J.C., The Glory that was Greece, (London : Sidgwick & Jackson, 1971)

Unit 17 ❑ Wars in Hellenic World Greco-Persian War and Peloponnesian War

Structure

17.0 Objectives

- The objective of this unit is to study in detail the great Greco-Persian Wars
- Learners will get a thorough idea about the origin and background of the two great Persian wars, viz.
  - The invasion of Emperor Darius & the first Greco-Persian War
  - The Invasion of Emperor Xerxes & the second Greco-Persian War
- Other important aspects including the choice of battlefields & a comparative tactical superiority of the both sides will also be discussed, chronologically.

- Lastly, the impact & the causes of the final battle outcome will also be analyzed.

17.1 Introduction

The most fascinating & notable period in Ancient History of Greece was the great war with Persia. Now the mighty Persian Empire, ranked among the largest and most magnificent empires of the World. During the 3rd to 4th Century BC the Persian power was at its height. Defeating one Asian power after another, they established a large Empire stretching from Greece & Egypt in the West to Indus valley in the East and from Scythia & Caucasia in the North to Arabian peninsula in the South.

But just when they were about to deal the same with their last remaining competitor, Greece, something 'abnormal' began to happen. In a series of battles that followed, the Persians were time & again defeated by the Greeks. Greece, for the Persians seems to be as invincible, as Russia remained for the Europeans (be it German or French) for centuries. As a matter of fact it is more astonishing to note that the Persians were not only defeated by the Greeks in their mother country, but latter also deep into Asia itself (eg. Issus & Gaugamela) in the hands of Alexander of Macedon! So what happened to the Persians?

Fig. The Great Empire of Persia under Emperor Darius I (Capital - Persepolis)

Now there might be probably no books on Ancient history which didn't record this incidents of Greco-Persian battles. However many of the scholars like Charles

Hignett focused on the "success of the Europeans" over the "defeat of the Asians".But is this only due to the superiority of the Greeks? And how cum the Persians, with so large an Empire and with about 10 times larger manpower & economy be defeated by a weaker power like Greece?

To analyze the causes of the Persian failure, in the following section we will compare the two major Greco Persian Land battles which occurred consecutively during the twoo successive Persian Invasion to Greece, the first under Emperor Darius the Great (Darius I) & the second under his son Emperor Xerxes I. It will cover ~ Battle of Marathon (490 BCE) &Battle of Plataea (479 BCE). The sole Greco-Persian Naval battle i.e. the Battle of Salamis (480 BCE) would be discussed separately. In terms of significance, none of these three was less important. Defeat in Marathon battle altogether sealed the fate of the 1st Persian invasion to Greece under the initiative of Emperor Darias I. While in Plataea the undefeated land army of Xerxes I, when defeated, not only forced to withdraw from Europe, but also put an end to the chapter of Persia's direct expedition to Greece. While the defeat of the huge Persian navy under General Artemesium in the hand of a small Greek fleet, checked the fate of the Persian Conquest of Greece under Xerxes I.

Let us discuss them separately.

17.2 Background and a Brief Description

The Persian Wars refers to the conflict between Greece and Persia in the 5th century BCE which involved two invasions by the latter in 490 and 480 BCE. Several of the most famous and significant battles in history were fought during the Wars, these were at Marathon, Thermopylae, Salamis, and Plataea, all of which would become legendary. The Greeks were, ultimately, victorious and their civilization preserved. If they had been defeated then the western world may not have inherited from them such lasting cultural contributions as democracy, classical architecture and sculpture, theatre, and the Olympic Games.

17.2.1 Origin

Persia, under the rule of Darius (r. 522-486 BCE), was already expanding into mainland Europe and had subjugated Ionia, Thrace, and Macedonia by the beginning of the 5th century BCE. Next in king Darius' sights were Athens and the rest of Greece. Just why Greece was coveted by Persia is unclear. Wealth and resources seem an unlikely motive; other more plausible suggestions include the need to increase the

prestige of the king at home or to quell once and for all a collection of potentially troublesome rebel states on the western border of the empire. The Ionian rebellion, the offering of earth and water in submission to the Persian satrap in 508 BCE, and the attack by Athens and Eretria on the city of Sardis in 499 BCE had not been forgotten either.

Fig. The Greco-Persian Wars

Whatever the exact motives, in 491 BCE Darius once again sent envoys to call for the Greeks' submission to Persian rule. The Greeks sent a no-nonsense reply by executing the envoys, and Athens and Sparta promised to form an alliance for the defence of Greece. Darius' response to this diplomatic outrage was to launch a naval force of 600 ships and 25,000 men to attack the Cyclades and Euboea, leaving the Persians just one step away from the rest of Greece.

17.2.2 Marathon

Darius did not lead the invasion of mainland Greece in person but put his general Datis in charge of his cosmopolitan army. Second-in-command was Artaphernes, Darius' nephew, who perhaps led the 2,000-strong Persian cavalry. The total strength of the Persian army was perhaps 90,000 men. The Greeks were led by either Miltiades or Callimachus and they commanded a total force of only between 10,000 and 20,000, probably nearer the lower figure. The long-range assault tactics of the Persian archers was to come up against the heavy infantry of Greek hoplites with their large round shields, spears and swords, and organised in a solid line or phalanx where each man's

shield protected both himself and his neighbour in a wall of bronze. When the two armies clashed on the plain of Marathon in September 490 BCE, the Persian tactic of rapidly firing vast numbers of arrows into the enemy must have been an awesome sight but the lightness of the arrows meant that they were largely ineffective against the bronze-armoured hoplites. At close quarters the Greeks thinned their centre and extended their flanks to envelop the enemy lines. This and their longer spears, heavier swords, better armour, and rigid discipline of the phalanx formation meant that the Greek hoplites won a great victory against the odds. According to tradition 6,400 Persians were dead, for only 192 Greeks. Victory dedications and statues were erected and, for the Greeks, the Battle of Marathon quickly became the stuff of legend. Meanwhile, the Persian fleet fled back to Asia but they would be back, and next time, in even bigger numbers.

17.2.3 Second Persian Invasion (Battles of Thermopylae, Salamis and Plataea)

Within a decade, King Xerxes continued his predecessor Darius' vision, and in 480 BCE he gathered a huge invasion force to attack Greece again, this time via the pass at Thermopylae on the east coast. In August 480 BCE a small band of Greeks led by Spartan King Leonidas held the pass for three days but were killed to a man. At the same time, the Greek fleet managed to hold off the Persians at the indecisive naval battle at Artemision. Together, these battles bought Greece time and allowed for its cities to steel themselves for the bigger challenges yet to come.

The defeat at Thermopylae, though glorious, allowed the Persians to make in-roads into Greece. Consequently, many states now turned over to the Persians and Athens itself was sacked. In response, a Greek army led by Leonidas' brother Kleombrotos began to build a defensive wall near Corinth but winter halted the land campaign. The next vital engagement was going to be at sea.

In September 480 BCE at Salamis in the Saronic Gulf, the Greeks once more faced a larger enemy force. The exact numbers are much disputed but a figure of 500 Persian ships against a Greek fleet of 300 seems the most likely estimate. The hoplites had won at Marathon, now it was the turn of the trireme to take centre stage, the fast and manoeuvrable Greek warship powered by three banks of oars and armed with a bronze ram. The Persians also had triremes but the Greeks had an ace up their sleeve, the great Athenian general Themistocles. He, with 20 years of experience and the confidence from his leadership at Artemision, employed a bold plan to entice the Persian fleet into the narrow straits of Salamis and hit the enemy fleet so hard it had nowhere to retreat to.

Themistocles won a great victory and the remaining Persian ships retreated to Asia Minor. The cryptic oracle of Apollo at Delphi had been proved right: 'only a wooden wall will keep you safe' and the wooden triremes of the Greeks had done their job. But still, this was not the end. There would be one more battle, the largest ever yet seen in Greece, and it would decide her fate for centuries to follow.

After Salamis Xerxes returned home to his palace at Sousa but he left the gifted general Mardonius in charge of the invasion, which was still very much on. The Persian position remained strong despite the naval defeat - they still controlled much of Greece and their large land army was intact. After a series of political negotiations, it became clear that the Persians would not gain victory on land through diplomacy and the two opposing armies met at Plataea in Boeotia in August 479 BCE.

The Greeks fielded the largest hoplite army ever seen which came from some 30 city-states and numbered around 110,000. The Persians possessed a similar number of troops, perhaps slightly more but, again, there are no exact figures agreed upon by scholars. Although cavalry and archers played their part, it was, once again, the superiority of the hoplite and phalanx, which won the Greeks the battle. Finally, they had ended Xerxes' ambitions in Greece.

Let us now compare them separately in each criterias :

17.3 The Choice of the Battlefield

The choice of the battlefield had the greatest impact in all these Greco-Persian battles. As, we will see, in all the 3 cases the Persians were the ones to decide it, the choice lay in their hands.

Now the large cavalry, particularly the mighty Scythian & Bactrian horses, formed the main strength of the Persian land army against the Greek hoplites or phalanx formation. The fact that Greeks lacked horses, made the cavalry even more effective against them. But for the suitable exploitation of the cavalry, an ideal Geographical topography is necessary, i.e. an undisturbed flat land.

Coming to the tactics, for the full utilization of the cavalry power, the Persians relied over their Enveloping Crescent tactics (see fig). Time & again this formidable tactics proved blessing.

For the Persians in their various campaigns. However, this too obviously demanded an ideal Geographical terrain. But in the following battles as we shall see, the Persians, owing to their own miscalculation & overconfidence chose such battlefields which

were utterly unsuitable for their cavalry maneuver and subsequently ill fitted for implementation of the Crescent strategy.

Now we are not sure that why and who for the Persians chose the Marathon plains as their offensive. To Herodotus, it was probably old Hippiaswho suggested this, since it had an easy access to Athens by the way of Hymettus-Pentele gap. Accordingly, on 1st August, the Persian fleet composing of about 200 triremes landed on the Sochoina beach beside horn of Cynosura in the Marathon plains. Called as a plain, actually the Marathon was a thin coastal gap, locked between the Stavrokoraki Hills & Beotian Sea, with its widest part stretching not more than 1.5 miles. This Geography made the Marathon field impossible for the Persian envelop operation. Also the strip was blocked at its 2 ends by vast marshes, unsuitable for cavalry operation - the Great marsh in the North & the Brexisa Marsh in the South.

Eventually, on 2nd August, 10,000 Athenian hoplites under General Callimachus arrived in the North of Brexisa marsh. Now Callimachus realized that in order to tackle the Persian Crescent envelop, he had to prevent the enemy cavalry from fanning out & subsequently to outflank him. So he deliberately thinned out the centre & made a wide front of 1,250 infantryman, covering the whole Marathon strip. However the task was not a very difficult one, since the Marathon was only 1.5 miles wide and the Athenian could still maintain 4 ranks in their column. Now on the night before 12th August, Datis, the Persian commander in chief, left for another mission, leaving Atrapharnes, the 2nd in command, to face the Greeks with his remaining army. He placed his army in the plains of river Charadra, with the Great marsh behind. But Pritchett rightly warns that "no army should have drawn with its back to the river or other bodies like marshes." Bt Atrapharnes had no other option left, since it was the only widest area of the plain. Thus from the very beginning the Persians were in a highly disadvantageous position in Marathon.

Similarly, in July 479 BC the Persian supreme commander, Mardonias had to face a combined Greek army of Peloponnese & Athens. Now he knew the mountainous regions of Attica was no good for his cavalry maneuver. So he wisely withdrew from Attica and destroying all behind, took refuge in the plains North of river Asopus. The Northern plains of Asopus, giving a wider front, was a good cavalry country and with a friendly city like Thebes in the rear, the Persian chances of winning their a battle was even higher. South of Asopas was the territory of Plataea. Dissected by 3 roads, it was covered with uneven highlands - the extension of the Cithaeron Mts. Obviously, that can never be a good cavalry country.

Now, to Hignett, Mardonias' objective was not to took shelter in Northern Asopas.

He must do something to tempt the Greeks to cross the Asopas River, where he could easily beat them. Accordingly, Mardonias deliberately send some unsuccessful cavalry attack to the Greeks in the Cithaeron Mts. This in turn injected some false confidence in his opponents, who thereby falling into trap, chased the Persians North-West via the Gyophtokastro Pass. The Greek stationed themselves in Asopas Ridge area, opposite to the Persian front North of the river. But now the Greeks settled their idly. Pausanias had well realized the Persian motive. Moreover, he had an idle terrain for infantry maneuver & here no Persian cavalry attack could be implemented. Thus he had no intension to cross the river. So, if either of them crossed the river he ran the risk of losing all tactical advantage - a perfect deadlock position.

But in this psychological duel, Pausanias was in advantage, in the sense that he was comparatively less in a hurry. But for Mardonias the pressure was intense. Now, unlike Xerxes, he had no fleet to return to Asia. His only line of communication was through land from Anatolia via Ionia & Thrace. A successful revolt in Ionia might broke his entire supply line. If that happens, Mardonias' slightest chance of getting back out of Europe alive, would shrank to a vanishing pt. Moreover, his composite army was made of citizen militias from different nationalities, who could not be kept idle for an indefinite period of time. All these, mounted immense pressure on Mardonias and he urgently needs a quick land victory.

Thus after 11 days of silent duel, as Green observed, Mardonias patience like Hitler, became exhausted. He might be in short of ration. But he was even shorter of time. So he deliberately send a detached unit of rough cavalry who successfully captured the Dryoscephelia Pass & looted enemy caravans. Pausanias, in turn, fearing a rupture of communication line from the rear, withdrew to the Cithaeron foothills. He made a new defense line stretching from Plataea in the West to modern Kriekouki in the East, with th Island as the pivotal pt. By this time Mardonias had lost all his foresight & believed that the Greeks were in full flight. He became so overconfident, that disregarding all the dangers, he ordered his whole army of 50,000 to cross the Asopas & charge a general engagement. As told earlier, this ground was even higher, consist of abrupt ridges & full of potholes. Forget about the Crescent formation. Even effective cavalry maneover is out of question here. Thus the Persians likewise in Marathon were even in a greater disadvantage in Battlefield of Plataea.

As a matter of fact, we see likewise in Marathon in Plataea too the Persian having a huge cavalry superiority (6:1), were in trouble, only due to wrong choice of battlefield.

17.4 The Consequence of Battle : Greek Millitary Superiority or Persian Tactical Setback?:

By now, it had been pretty clear, which side is going to win in the long run. The upcoming battle is only a reflection of that. However more to it, like a sprinkling of salt on the wound, the opposing Greek army could well utilize the Persian disadvantage, at least to some extent.

In Marathon, the Persian commander in chief Atrapharnes realized that due to the lack of space, the Crescent formation is not possible. So he had no other option left than a direct frontal assault. Thus, he with his best troops, the Iranian guardsmen stood in the Centre. While in the wings he placed the less reliable Ionian levies and other Asian allies. In the front were the archers. Callimachus, the Greek commander, realizing Atrapharnes' strategy, put the best hoplites in the left and right wings. He thought that if his wings could knock out their Persian counterpart, then they could easily wheel about to reinforce their weakened centre. Accordingly on 12th August, the two armies approached each other. As the Greeks came within 150 yards of the enemy, to get through the murderous hail of arrows., they ran speedily and charged the Persians. As expected, the Persian centre gave the best fight and 2 Athenian generals Thermistocles and Aristeides were killed here. Atrapharnes broke the Greek centre and advanced southwards. But in the wings the Greek defeated the Persians and as feared, many of them, while retreating fell in the Great Marsh and their death toll rose to 6400. Having done with the wings, the Greeks caught back Atrapharnes near the Great Mound. (see fig). Thus the Battle ended with a Greek victory.

Unlike Mrathon, Greek position in Plataea was in utter disgraceful one. We find due to their own fault, the Greek centre and the Left were piled up together in the Eastern part of the Island. While the Spartans in the rt were cut up far East in the modern Kriekouki leaving a dangerous gap in the centre. An enemy could easily break through here and attack any of the wings from the rear. But far from exploiting the Greek disadvantage, the Persians were even in more trouble. Since in the highlands no unified troop movement is possible, the Persian right and left wings attacked the Greek left and right respectively, like detached bands. While the most important Persian centre under Atrabazus was still struggling to get over the hilly grounds, more than a mile back in Gargaphian spring. Now since no enveloping action is possible, the Persian cavalry engaged in a direct frontal assault, coming by squadrons after squadrons. Despite of this, as Herodotus mentioned, "they fought courageously and gave a tough battle." In the right, the Persian ally Greek task forces under Thebes

swept over the Athenians and Plataeans and killing 600 of them, broke the line. Meanwhile, in the left the Persian mounted archers along with foot archers were causing large casualties to the Spartans. But before they could achieve, something happened to the Persians, which we will discuss in the next section.

17.5 Disappearance of the Leader : Breaking of the Persian Discipline

Now, as Fuller said, the Persian warfare at that time was still at its heroic age. All the discipline and courage encircled around a single leader. Thus, in a battle, the supreme Persian leader, be it the commander in chief (like Mardonias) or the Emperor himself (like Darias), not only formed the brain of the army but also its moral dynamo. Bt this in turn brought over-dependence on a single leadership. The moment when this leader dissaperd or is slained, the whole line of Persian discipline (in whatever situation it is) breaks down like a matchbox. If the enemy could exploit this, he would eventually get a decisive victory, like Alexander in Issus.

In Plataea, in the far left of the Persians, the Immortals or corps d' elite under Mardonias, despite of prudent difficulties were in a good position. In right, th Greek task forces were almost successful in breaking the Athenian left. They had a few casualties and had 90% of their troops still in fighting spirit. Bt suddenly, Mardonias was killed by the Spartans. As the supreme leader fell, a general panic spread among the Persians, and the discipline of the whole Persian left collapsed. When the news reached the Greek mercenaries, forecasting the battle to be lost, they too retreated. Atrabazus, who was still struggling his way back in the Ridges, watching Mardonias die, too escaped out panic-stricken, thus ending all offensive against the Greeks. Battle of Plataea was over.

This example in a vague way found in Marathon too. We find, as Atrapharnes, the Persian leader, broke through the Greek centre and advanced forward, the Persians in the wings eventually found themselves leaderless and out of indecision fell back through the Great Marsh.

When such is the disciplinary framework of the Persian army in general, then it is solely the responsibility of the leader to maintain a good moral strength. Because, if this pivot of moral strength is lost, then the whole battle for the Persians is lost. But Darias is no such example. At Issus, as Alexander broke through the line of Cardaces, he turned left to engage Darias in the centre. But Darias had no courage to face Alexander. So

instead of drawing the left of his Greek mercinaries, he turned his chariot and fled in panic just what he did in Gaugemela. Seeing him the whole Persian left and the rear disembarked and retreated in fear. When this news of the leader reached the Right, the cavalry too withdrew. It was only the Greek mercineries who, despite the leader's absence were maintaining a good discipline and giving a tough battle. But the breaking lines of their Persian fellows left them unprotected from behind. The greek army utilizes this. They whirled round and attacked them from behind, slaughtering them into pieces. With this the Battle of Gaugamela came to an end.

Here came Alexander's ability of the decisive exploitation of the battle situation. Simmilar tactics was used by Bairam Khan in 2nd Battle of Panipat. Bairam Khan realized, that the sole moral strength of the entire opposing Indo-Afagan army was their King Himu. So he deliberately ordered his archers to target Himu. Thus when Himu fell, the entire Indo-Afagan army collapsed. Again if we compare the Battle of Hydasphes we find that when the Macedonians were going to have a brilliant victory, the Indian army was similarly filled with chaos and despair. But despite being wounded, King Porus unlike Darias, refused to abandon the field as long as any of its army squadron was fighting. This gave a moral strength to the Indians and they gave a tough battle.

However this disciplinary structure, was in sharp contrast with the Greek way of warfare. The Greeks unlike Persians or Indians had no such over dependence on the 1st line of leadership. Rather their leadership was divided into numbers of succeeding substitutes. Thus in Marathon, even when Commander Callimachus was killed, the Greek hoplites could still maintain a good order and successfully carry out the battle.

17.6 Battle of Salamis

The Battle of Salamis was fought in September 480 BC during the Persian Wars (499-449 BC). One of the great naval battles in history, Salamis saw the out-numbered Greeks best a larger Persian fleet. The campaign had witnessed the Greeks pushed south and Athens captured. Regrouping, the Greeks were able to lure the Persian fleet into the narrow waters around Salamis which negated their numerical advantage. In the resulting battle, the Greeks badly defeated the enemy and forced them to flee. Unable to supply their army by sea, the Persians were forced to retreat north.

Persian Invasion

Invading Greece in the summer of 480 BC, Persian troops led by Xerxes I were opposed by an alliance of Greek city-states. Pushing south into Greece, the Persians

were supported offshore by a large fleet. In August, the Persian army met Greek troops at the pass of Thermopylae while their ships encountered the allied fleet in the Straits of Artemisium. Despite a heroic stand, the Greeks were defeated at the Battle of Thermopylae forcing the fleet to retreat south to aid in the evacuation of Athens. Assisting in this effort, the fleet then moved to ports on Salamis.

Athens Falls

Advancing through Boeotia and Attica, Xerxes attacked and burned those cities that offered resistance before occupying Athens. In an effort to continue resistance, the Greek army established a new fortified position on the Isthmus of Corinth with the goal of defending the Peloponnesus. While a strong position, it could be easily outflanked if the Persians embarked their troops and crossed the waters of the Saronic Gulf. To prevent this, some of the allied leaders argued in favor of moving the fleet to the isthmus. Despite this threat, the Athenian leader Themistocles argued for remaining at Salamis.

Frustrations at Salamis

Offensively-minded, Themistocles understood that the smaller Greek fleet could negate the Persian advantage in numbers by fighting in the confined waters around the island. As the Athenian navy formed the larger component of the allied fleet, he was able to successfully lobby for remaining. Needing to deal with the Greek fleet before pressing on, Xerxes initially sought to avoid fighting in the narrow waters around the island.

A Greek Trick

Aware of discord among the Greeks, Xerxes began moving troops towards the isthmus with the hope that the Peloponnesian contingents would desert Themistocles in order to defend their homelands. This too failed and the Greek fleet remained in place. To promote the belief that the allies were fragmenting, Themistocles began a ruse by sending a servant to Xerxes claiming that Athenians had been wronged and wished to switch sides. He also stated that the Peloponnesians intended to depart that night. Believing this information, Xerxes directed his fleet to block the Straits of Salamis and those of Megara to the west.

Moving to Battle

While an Egyptian force moved to cover the Megara channel, the bulk of the Persian fleet took up stations near the Straits of Salamis. In addition, a small infantry

force was moved to the island of Psyttaleia. Placing his throne on the slopes of Mount Aigaleos, Xerxes prepared to watch the coming battle. While the night passed without incident, the following morning a group of Corinthian triremes was spotted moving northwest away from the straits.

Fleets & Commanders

Greeks

- Themistocles
- Eurybiades
- 366-378 ships

Persians

- Xerxes
- Artemisia
- Ariabignes
- 600-800 ships

Fighting Begins

Believing that the allied fleet was breaking up, the Persians began moving towards the straits with the Phoenicians on the right, the Ionian Greeks on the left, and other forces in the center. Formed in three ranks, the Persian fleet's formation began to disintegrate as it entered the confined waters of the straits. Opposing them, the allied fleet was deployed with the Athenians on the left, the Spartans on the right, and other allied ships in the center. As the Persians approached, the Greeks slowly backed their triremes, luring the enemy into the tight waters and buying time until the morning wind and tide (Map).

Greeks Victorious

Turning, the Greeks quickly moved to the attack. Driven back, the first line of Persian triremes was pushed into the second and third lines causing them to foul and for the organization to further break down. In addition, the beginning of a rising swell led the top-heavy Persian ships to have difficulty maneuvering. On the Greek left, the Persian admiral Ariabignes was killed early in the fighting leaving the Phoenicians largely leaderless. As the fighting raged, the Phoenicians were the first to break and flee. Exploiting this gap, the Athenians turned the Persian flank.

In the center, a group of Greek ships managed to push through the Persian lines cutting their fleet in two. The situation for the Persians worsened through the day with the Ionian Greeks being the last to flee. Badly beaten, the Persian fleet retreated towards Phalerum with the Greeks in pursuit. In the retreat, Queen Artemisia of Halicarnassus rammed a friendly ship in an effort to escape. Watching from afar, Xerxes believed that she had sunk a Greek vessel and allegedly commented, "My men have become women, and my women men.

Result :

Losses for the Battle of Salamis are not known with certainty, however, it is estimated that the Greeks lost around 40 ships while the Persians lost around 200. With the naval battle won, Greek marines crossed and eliminated the Persian troops on Psyttaleia. His fleet largely shattered, Xerxes ordered it north to guard the Hellespont.

As the fleet was necessary for the supply of his army, the Persian leader also was forced to retreat with the bulk of his forces. Intending to finish the conquest of Greece the following year, he left a sizable army in the region under the command of Mardonius. A key turning point of the Persian Wars, the triumph of Salamis was built upon the following year when the Greeks defeated Mardonius at the Battle of Plataea.

17.7 The Aftermath

In addition to victory at Plataea, at the roughly contemporary Battle of Mycale in Ionia, the Greek fleet led by Leotychides landed an army which wiped out the Persian garrison there and killed the commander Tigranes. The Ionian states were sworn back into the Hellenic Alliance and the Delian League established to ward off any future Persian attacks. Further, the Chersonnese controlling the Black Sea and Byzantium controlling the Bosphorus were both retaken. Persia would remain a threat with odd skirmishes and battles occurring across the Aegean over the next 30 years but mainland Greece had survived its greatest danger. In c. 449 BCE a peace was finally signed, sometimes referred to as the Peace of Callias, between the two opposing civilizations.

While the Greeks were euphoric in victory, the Persian Empire was not dealt a death blow by its defeat. Indeed, Xerxes' sacking of Athens was probably enough to allow him to present himself as a returning hero but, as with other wars, there are no

written records by the Persians and so their view of the conflict can only be speculated. Whatever, the Persian Empire continued to thrive for another 100 years. For Greece, however, the victory not only guaranteed her freedom from foreign rule but also permitted, soon after, an astonishingly rich period of artistic and cultural endeavor, which would lay the cultural foundations of all future Western civilizations.

17.8 Causes of the Persian Debacle : A Brief Overview

A. Wrong choice of the battlefield : The Persians due to their own miscalculation & overconfidence, time & again chosed a battlefield which were unsuitable for cavalry maneuver, the main weapon against the Greek hoplites.

B. Over reliance on a single leader : The Persians were over depended on a single leader. Thus when the leader vanished, the entire moral of the army broke down & they were forced to retire.

C. Effective utilization of the Persian disadvantage : Lastly, it will be mere unjust to overlook the Greek tactics, primary being the effective utilization of the Persian disadvantage. Thus in Marathon the Greeks well realizing that the Persian wings were helpless without their envelop tactics, put the greatest pressure on the same. While in Issus Alexander exploited the discipline structure of the Persians, centering round a single leader.

17.9 Conclusion

Thus from our above discussion, it is enough to conclude that the Persians themselves had led the death nails over their own coffins. The failure in the 3 battles was solely due to their own miscalculation, overconfidence & above all inadequate foresight. The wrong choice of thebattlefield and the over reliance on a single leader were the 2 most drastic defects made by the Persians. On the contrary, the only achievement of the Greeks was the proper utilization of some of these enemy loopholes, at the right time & in the right place.

17.10 Model Questions

1) Descibe the origine of the Greco-Persian war ?

2) Why did Xerxes invaded Greece ?

3) Write a short note on the following factors in Geco -Persian war :

a) Choice of battlefield

b) Battle stategy and conduct

c) Role of the Leader

4) How did Salamis seal the fate of second Persian Invasion ?

17.12 Suggested Readings

Cawkwell, George The Greek Wars : The failure of Persia (New York : Oxford University Press, 2005)

Fuller, J.F.C. The Generalship of Alexander the Great (London : Eyre & Spottiswoode Publishers, 1958)

Green, Peter Year of Salamis [480-479 BC] (California : University of California Press, 1970)

Hignett, Charles Xerxes' Invasion of Greece (London : Oxford University Press, 1963)

Unit 18 ❑ Hellenic Literature and Philosophy

Structure

18.0 Objectives

● The objective of this unit is to study the development of Hellenic Literature and Philosophy At the very beginning learners will get a rough idea about the early Epic phase of Greek literature including that of Homer & Hesoid.

● Next, classical phase of Greek literature will also be discussed including that of,

- Socrates
- Plato and
- Aristotle

● Lastly, a brief discussion about the arguments of various historians will also be studied.

18.1 Introduction

Ancient Greek Literature and philosophy arose in the 6th century BCE and continued throughout the Hellenistic period and the period in which Ancient Greece was part of the Roman Empire. It dealt with a wide variety of subjects, including political philosophy, ethics, metaphysics, ontology, logic, biology, rhetoric, and aesthetics.

Many historians and scholars today concede that Greek literature and philosophy have influenced much of Western culture since its inception. Alfred North Whitehead once noted: "The safest general characterization of the European philosophical tradition is that it consists of a series of footnotes to Plato." Clear, unbroken lines of influence lead from ancient Greek and Hellenistic philosophers to Early Islamic philosophy, the European Renaissance and the Age of Enlightenment.

Subsequent philosophic tradition was so influenced by Socrates (as presented by Plato) that it is conventional to refer to philosophy developed prior to Socrates as pre-Socratic philosophy. The periods following this until the wars of Alexander the Great are those of "classical Greek" and "Hellenistic" philosophy.

While the Greek Literature on the other hand, has influenced not only its Roman neighbours to the west but also countless generations across the European continent. Greek writers are responsible for the introduction of such genres as poetry, tragedy, comedy, and western philosophy to the world. These Greeks authors were born not only on the soil of their native Greece but also in Asia Minor(Ionia), the islands of the Aegean, Sicily, and southern Italy.

18.2 The Origin of Greek Literature

The Greeks were a passionate people, and this zeal can be seen in their literature. They had a rich history of both war and peace, leaving an indelible imprint on the culture and people. Author and historian Edith Hamilton believed that the spirit of life abounds throughout Greek history.

> "The Greeks were keenly aware, terribly aware, of life's uncertainty and the imminence of death. Over and over again they emphasize the brevity and the failure of all human endeavor, the swift passing of all that is beautiful and joyful….Joy and sorrow, exultation and tragedy, stand hand in hand in Greek literature, but there is no contradiction involved thereby."
>
> Edith Hamilton (Article - "The Greek Way")

According to Professor Donald L Wasson, in order to fully understand and appreciate Greek literature one must divide the oral epics from the tragedies and comedies as well as the histories from the philosophies. Greek literature can also be divided into distinct periods: Archaic, Classical, and Hellenistic. The literature of the Archaic era mostly centered on myth; part history and part folklore. Homer's epics of the Iliad and the Odyssey and Hesiod's Theogony are significant examples of this period. Literary Greece begins with Homer. Since writing had not yet arrived in Greece, much of what was created in this period was communicated orally, only to be put in written form years later.

The Classical era (4th and 5th centuries BCE) centered on the tragedies of such writers as Sophocles and his Oedipus Rex, Euripides's Hippolytus, and the comedies of Aristophanes. Lastly, the final period, the Hellenistic era, saw Greek poetry, prose, and culture expand across the Mediterranean influencing such Roman writers as Horace, Ovid, and Virgil. Unfortunately, with only a few exceptions, much of what was created during the Archaic and Classical period remains only in fragments.

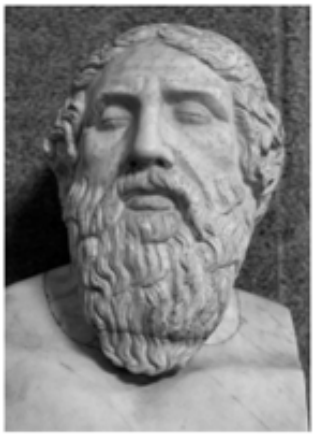
18.3 The Phase of Epic Poetry : Homer and Hesoid

At the beginning of Greek literature stand the two monumental works of legendary poet Homer, the Iliad and the Odyssey. The figure of Homer is shrouded in mystery. Although the works as they now stand are credited to him, it is certain that their roots reach far back before his time. It is generally accepted that the poems were composed at some point around the late eighth or early seventh century BC.

During this Archaic period, the poets' works were spoken - an outcome of an oral tradition - delivered at festivals. Homer's epic the Iliad centered on the last days of the Trojan War, a war initiated by the love of a beautiful woman, Helen. It brought an array of heroes such as Achilles, Hector, and Paris to generations of Greek youth. It was a poem of contrasts:gods and mortals, divine and human, war and peace. Alexander the Great slept with a copy of the book under his pillow and even believed he was related to Achilles.

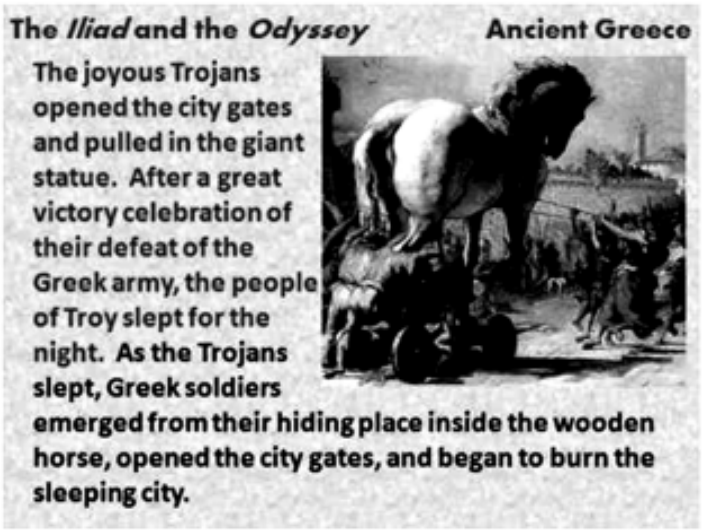
Homer's second work, the Odyssey, revolved around the ten-year "odyssey" of the Trojan War hero Odysseus and his attempt to return home. While most classicists and historians accept that Homer actually lived, there are some who propose his epics are the result of more than one author. Whether his or not, Homer's works would one day greatly influence the Roman author Virgil and his Aeneid. After Homer, lyric poetry - poetry to be sung - came into its own.

There were many others who "wrote" during this period, among them were Aesop, Hesiod, and Sappho. The noted storyteller Aesop may or may not be the great fabulist of the ancient world. Professor and classicist D. L. Ashilman in his introduction to the book Aesop's Fables, wrote, "Aesop may not be a historical figure but rather a name that refers to a group of ancient storytellers." Convention claims that he was born a slave around 620 BCE in Asia Minor. After he received his freedom, he traveled throughout Greece collecting stories, including The Mischievous Dog, The Lion and the Mouse, and The Monkey as King. These stories often ended (not always happily) with a moral such as honesty is the best policy, look before you leap, heaven helps those who help themselves, and once bitten, twice shy. Written down years after his death, Aesop's fables were among the first printed works in vernacular English.



Homer

The other great poet of the pre-classical period was Hesiod. Unlike Homer, Hesiod refers to himself in his poetry. Nonetheless, nothing is known about him from any external source. He was a native of Boeotia in central Greece, and is thought to have lived and worked around 700 BC. Hesiod's two extant poems are Works and Days and Theogony. Works and Days is a faithful depiction of the poverty-stricken country life he knew so well, and it sets forth principles and rules for farmers. Theogony is a systematic account of creation and of the gods. It vividly describes the ages of mankind, beginning with a long-past Golden Age.



The Trojan Horse Episode of Iliad

The writings of Homer and Hesiod were held in extremely high regard throughout antiquity and were viewed by many ancient authors as the foundational texts behind ancient Greek religion Homer told the story of a heroic past, which Hesiod bracketed with a creation narrative and an account of the practical realities of contemporary daily life.

18.4 Lyric Poetry

The term Lyric poetry is derived from the fact that it was originally sung by individuals or a chorus accompanied by the instrument called the lyre. Despite the name, however, the lyric poetry in this general meaning was divided in four genres, two of which were not accompanied by cithara, but by flute. These two latter genres were elegiac poetry and iambic poetry. Both were written in the Ionic dialect. Elegiac poems were written in elegiac couplets and iambic poems were written in iambic trimeter. The first of the lyric poets was probably Archilochus of Paros, 7th century BC, the most important iambic poet. Only fragments remain of his work, as is the case with most of the poets. The few remnants suggest that he was an embittered adventurer who led a very turbulent life.

One of the few female lyric poets of the period was Sappho, often called the tenth Muse. Born on the Aegean island of Lesbos, her poems were hymns to the gods and influenced such Romans poets as Horace, Catullus, and Ovid. Much of her poetry remains in fragments or quoted in the works of others.

18.5 Literature in Classical period

Oral recitation of poetry, as well as lyric poetry, morphed into drama. The purpose of drama was to not only entertain but also to educate the Greek citizen, to explore a problem. Plays were performed in outdoor theaters and were usually part of a religious festival. Along with a chorus of singers to explain the action, there were actors, often three, who wore masks.Of the known Greek tragedians, there are only three for whom there are complete plays: Aeschylus, Sophocles, and Euripides. Oddly, these are considered among the great tragic writers of the world.

> "The great tragic artists of the world are four, and three of them are Greek. It is in tragedy that the pre-eminence of the Greeks can be seen most clearly. Except for Shakespeare, the great three, Aeschylus, Sophocles, and Euripides stand alone. Tragedy is an achievement peculiarly Greek. They were the first to perceive it and they lifted it to its supreme height."
>
> Poet Hamilton (Ref. Donald L Wasson)

Aeschylus (c. 525 - c. 456 BCE) was the earliest of the three. Born in Eleusis around 525/4 BCE, he fought at the Battle of Marathon against the Persian invaders. His first play was performed in 499 BCE. His surviving works include Persians, Seven Against Thebes, Suppliants(a play that beat out Sophocles in a competition), Prometheus Bound, Oresteia. Part of the Oresteia trilogy, his most famous work was probably Agamemnon, a play centering on the return of the Trojan War commander to his wife Clytemnestra, who would eventually kill him.

Sophocles (c. 496 - c. 406 BCE) was the second of the great tragic playwrights. Of his 120 plays performed in competition, only 20 were victorious, losing far too many to Aeschylus. Only three of his seven surviving plays are complete. His most famous work, part of a trilogy, is Oedipus Rex or Oedipus the King, a play written 16 years after first of the three, Antigone, a play about Oedipus' daughter. The third in the series was Oedipus at Colonus, relaying the final days of the blinded king. The tragedy of Oedipus centered on a prophecy that foretold of a man who would kill the king (his father) and marry the queen (his mother). Unknowingly, that man was Oedipus. However, the tragedy of the play is not that he killed his father and married his mother but that he found out about it; it was an exploration of the tragic character of a now blinded hero.

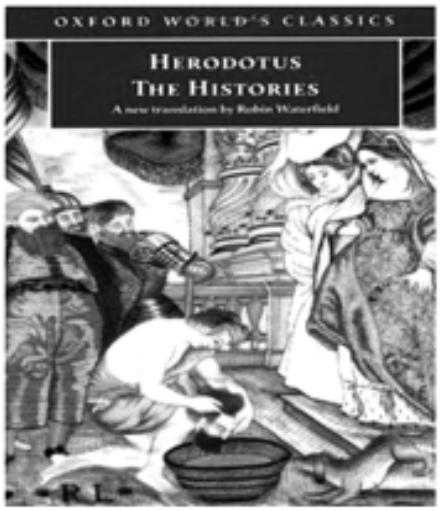
The third great author of Greek tragedy was Euripides, an Athenian (c. 484 - 407 BCE). Unfortunately, his plays - often based on myth - were not very successful at

the competitions; his critics often believe he was bitter about these losses. He was the author of 90 plays, among which are Hippolytus, Trojan Women, and Orestes. Euripides was known for introducing a second act to his plays, which were concerned with kings and rulers as well as disputes and dilemmas. He died shortly after traveling to Macedon where he was to write a play about the king's coronation. His play Medea speaks of a bitter woman who took revenge against her lover by killing her children.

Another playwright of the era was the Athenian author of Greek comedy, Aristophanes (c. 450? - c. 386 BCE). Author of Old Comedy, his plays were satires of public persons and affairs as well as candid political criticisms. Eleven of Aristophanes' plays have survived along with 32 titles and fragments of others. His plays include Knights, Lysistrata, Women at the Thesmorphoria, The Frogs, and Clouds, a play that ridiculed the philosopher Socrates as a corrupt teacher of rhetoric. His actors often wore grotesque masks and told obscene jokes. Many of his plays had a moral or social lesson, poking fun at the literary and social life of Athens.

18.6 Works of Historiography

Two notable historians who lived during the Classical Era were Herodotus of Halicarnassus and Thucydides. Herodotus is commonly called "The Father of History. His book The Histories is among the oldest works of prose literature in existence. Thucydides' book History of the Peloponnesian War greatly influenced later writers and historians, including the author of the book of Acts of the Apostles and the Byzantine Era historian Procopius of Caesarea.



A Translation work of Herodotus' Historica

A third historian of ancient Greece, Xenophon of Athens, began his Hellenica where Thucydides ended his work about 411 BC and carried his history to 362 BC. Xenophon's most famous work is his book The Anabasis, a detailed, first-hand account of his participation in a Greek mercenary army that tried to help the Persian Cyrus expel his brother from the throne. Xenophon also wrote three works in praise of the philosopher Socrates: The Apology of Socrates to the Jury, The Symposium, and Memorabilia. Although both Xenophon and Plato knew Socrates, their accounts are very different. Many comparisons have been made between the account of the military historian and the account of the poet-philosopher.

Both Herodotus (484 - 425 BCE) and Thucydides (460 - 400 BCE) wrote around the time of the Peloponnesian Wars. Although little is known of his early life, Herodotus wrote on both the wars between Athens and neighboring Sparta as well as the Persian Wars. During his lifetime, his home of Halicarnassus in western Asia Minor was under Persian control. Although he is often criticized for factual errors, his accounts relied on earlier works and documents. His narratives demonstrate an understanding of the human experience and unlike previous writers, he did not judge. He traveled extensively, even to Egypt.

His contemporary, Thucydides, was the author, although incomplete, of a History of the Peloponnesian War. Part of his history was written as it happened and looked at both long-range and short-range causes of the war. His massive unfinished work would be completed by latter Greek authors like Xenophon and Cratippus.

18.7 Classical Greek Philosophy

"Philosophy as we understand it is a Greek creation."

Martin Litchfield West

Ancient Greek philosophy arose in the 6th century BCE and continued throughout the Hellenistic period and the period in which Ancient Greece was part of the Roman Empire. It dealt with a wide variety of subjects, including political philosophy, ethics, metaphysics, ontology, logic, biology, rhetoric, and aesthetics.

Many philosophers today concede that Greek philosophy has influenced much of Western culture since its inception. Alfred North Whitehead once noted, "The safest general characterization of the European philosophical tradition is that it consists of a series of footnotes to Plato." Clear, unbroken lines of influence lead from ancient Greek and Hellenistic philosophers to Early Islamic philosophy, the European Renaissance and the Age of Enlightenment.

Some claim that Greek philosophy, in turn, was influenced by the older wisdom literature and mythological cosmogonies of the ancient Near East. Martin Litchfield West gives qualified assent to this view, stating, "contact with oriental cosmology and theology helped to liberate the early Greek philosophers' imagination; it certainly gave them many suggestive ideas.

Let us discuss some of the Greatest philosophers of Ancient Greece.

18.7.1 Socrates

Socrates (470 - 399 BC) was a classical Greek (Athenian) philosopher credited as one of the founders of Western philosophy, and as being the first moral philosopher, of the Western ethical tradition of thought. An enigmatic figure, he made no writings and is known chiefly through the accounts of classical writers writing after his lifetime, particularly his students Plato and Xenophon. Other sources include the contemporaneous Antisthenes, Aristippus, and Aeschines of Sphettos. Aristophanes, a playwright, is the only major source to have written during his lifetime, though a fragment of Ion of Chios' Travel Journal provides important information about his youth.

Socrates

Plato's dialogues are among the most comprehensive accounts of Socrates to survive from antiquity, though it is unclear the degree to which Socrates himself is "hidden behind his best disciple". Through his portrayal in Plato's dialogues, Socrates has become renowned for his contribution to the fields of ethics and epistemology. It is this Platonic Socrates who lends his name to the concepts of Socratic irony and the Socratic method, or elenchus.

Socrates exerted a strong influence on philosophers in later antiquity and in the modern era. Depictions of Socrates in art, literature and popular culture have made

him one of the most widely known figures in the Western philosophical tradition.

Socrates is known for creating the Socratic irony and the Socratic method (elenchus). He is best recognized for inventing the teaching practice of pedagogy, wherein a teacher questions a student in a manner that draws out the correct response. Socrates has had a profound influence on Western philosophy, along with his students Plato and Aristotle.

Socratic Methods : Perhaps his most important contribution to Western thought is his dialectic method of inquiry, known as the Socratic method or method of "elenchus", which he largely applied to the examination of key moral concepts such as the Good and Justice. It was first described by Plato in the Socratic Dialogues. To solve a problem, it would be broken down into a series of questions, the answers to which gradually distill the answer a person would seek. The development and practice of this method is one of Socrates' most enduring contributions and is a key factor in earning his mantle as the father of political philosophy, ethics or moral philosophy, and as a figurehead of all the central themes in Western philosophy. The Socratic Method has often been considered as a defining element of American legal education. To illustrate the use of the Socratic Method, a series of questions are posed to help a person or group to determine their underlying beliefs and the extent of their knowledge. The Socratic method is a negative method of hypothesis elimination, in that better hypotheses, are found by steadily identifying and eliminating those that lead to contradictions. It was designed to force one to examine one's own beliefs and the validity of such beliefs.

Some of Athens' controversial and anti-democratic tyrants were contemporary or posthumous students of Socrates including Alcibiades and Critias. Critias's cousin Plato would go on to found the Academy in 385 BC, which gained so much renowned that "Academy" became the standard word for educational institutions in later European languages such as English, French, and Italian. Plato's protégé, another important figure of the Classical era, Aristotle went on to tutor Alexander the Great and also to found his own school in 335 BC-the Lyceum-whose name also now means an educational institution.

While "Socrates dealt with moral matters and took no notice at all of nature in general", in his Dialogues, Plato would emphasize mathematics with metaphysical overtones mirroring that of Pythagoras-the former who would dominate Western thought well into the Renaissance. Aristotle himself was as much of a philosopher as he was a scientist with extensive work in the fields of biology and physics.

While some of the later contributions of Socrates to Hellenistic Era culture and philosophy as well as the Roman Era have been lost to time, his teachings began a resurgence in both medieval Europe and the Islamic Middle East alongside those of Aristotle and Stoicism.

Socrates influence grew in Western Europe during the fourteenth century as Plato's dialogues were made available in Latin by Marsilio Ficino and Xenophon's Socratic writings were translated by Basilios Bessarion. Voltaire even went so far as to write a satirical play about the trial of Socrates. To this day, different versions of the Socratic method are still used in classroom and law school discourse to expose underlying issues in both the subject and the speaker.

18.7.2 Plato

Plato was born to an aristocratic family in Athens. His father, Ariston, was believed to have descended from the early kings of Athens. Perictione, his mother, was distantly related to the 6th century BC lawmaker Solon. When Plato was a child, his father died, and his mother married Pyrilampes, who was an associate of the statesman Pericles.Along with his teacher, Socrates, and his most famous student, Aristotle, Plato laid the very foundations of Western philosophy and science. In addition to being a foundational figure for Western science, philosophy, and mathematics, Plato has also often been cited as one of the founders of Western religion and spirituality, particularly Christianity.

Plato's influence on Christian thought is often thought to be mediated by his major influence on Saint Augustine of Hippo, one of the most important philosophers and theologians in the history of Christianity. Plato was the innovator of the dialogue and dialectic forms in philosophy, which originate with him. Plato appears to have been the founder of Western political philosophy, with his Republic, and Laws among other dialogues, providing some of the earliest extant treatments of political questions from a philosophical perspective. Plato's own most decisive philosophical influences are usually thought to have been Socrates, Heraclitus, and Pythagoras, although few of his predecessors' works remain extant and much of what we know about these figures today derives from Plato himself.

He was not the first thinker or writer to whom the word "philosopher" should be applied. But he was so self-conscious about how philosophy should be conceived, and what its scope and ambitions properly are, and he so transformed the intellectual currents with which he grappled, that the subject of philosophy, as it is often conceived - a rigorous and systematic examination of ethical, political & metaphysical issues, can

be called his invention. Few other authors in the history of Western philosophy approximate him in depth and range.

This influence is perhaps best represented by Plato's most famous dialogue, Republic. Professor Forrest E. Baird writes, "There are few books in Western civilization that have had the impact of Plato's Republic - aside from the Bible, perhaps none" (Ancient Philosophy, 68). Karl Popper, among others) has denounced Republic as a treatise on fascism. It was also praised as an eloquent and elevating work by scholars such as Bloom and Cornford. The dialogue begins with a consideration of what Justice means and goes on to develop the ideal, perfect State. Throughout the piece, Plato's ideas of Truth, Beauty, Goodness, and Justice are developed as they were explored by Socrates and his interlocutors.

While the work has traditionally been understood as Plato's attempt to outline his model for the perfectly just and efficient society, an important point is often overlooked: The character of Socrates very clearly states that they are creating this "city" as a means to better understand the function of the perfect "soul". The society which the men discuss, then, is not intended to reflect an actual physical political-social entity but rather to serve symbolically as a means by which a reader may recognize strengths and weaknesses in his or her own constitution. The young poet and playwright Aristocles was always present in crafting the mature works of the philosopher Plato and, in all the dialogues, a reader is expected to consider the work as carefully as one would a poem. Unlike his famous student Aristotle, Plato never clearly spells out the meaning of a dialogue for a reader. Thereader is supposed to confront the truths which the dialogue presents individually. It is this combination of artistic talent with philosophical abstractions which has assured Plato's enduring value.

While Aristotle disagreed with Plato's Theory of Forms and many other aspects of his philosophy, he was profoundly affected by his teacher; most notably in his insistence on a right way of living and a proper way to pursue one's path in life (as outlined most clearly in Aristotle's Nichomachean Ethics). Aristotle would go on to tutor Alexander the Great and, in so doing, would help spread the philosophy Plato had created to the known world. Plato died at the age of 80 in 348/7 BC, and leadership of the Academy passed to his nephew Speusippus. Tradition holds that the Academy endured for nearly 1,000 years as a beacon of higher learning until it was closed by the Christian Emperor Justinian in 529 AD in an effort to suppress the heresy of pagan thought. Ancient sources, however, establish that the Academy was

severely damaged in the First Mithridatic War in 88 BC and almost completely destroyed in the Roman Emperor Sulla's sack of Athens in 86 BC.

Plato's Academy was a wooded garden located near to one of his homes and not a "university" as one would picture such an institution today, and so the area underwent many changes both before, after Plato's school was established there, and seems to have been a center of learning for centuries. The Roman writer Cicero claims that Plato was not even the first to have a school in the gardens of Academia, but that Democritus (c. 460 BC) was the original founder and leader of a philosophical school in the locale. It is also established that Simplicius was the head of a school in the gardens, which was still known as the Academy, as late as 560 CE. Even so, in the present day, the site is known as Plato's Academy, reflecting the importance of the philosopher's influence and respect for his legacy.

18.7.3 Aristotle

Aristotle was born in Stagira in 384 BC, on the peninsula of Chalkidiki in Macedonia, Greece (hence his nickname "the Stagirite"). His father was Nichomachus, court physician to Amyntas III of Macedonia (the father of Philip II of Macedon and grandfather of Alexander the Great), and he was no doubt introduced to Greek medicine and biology at an early age. In 367 BC, after his father's death, he was sent to Athens and became first a pupil then a teacher at Plato's Academy. He remained there for 20 years, until Plato's death in 347 BC, and gained a particular reputation in rhetoric.

An imaginary portrait of Aristotle with his pupil Alexander

Aristotle is one of the greatest thinkers in politics, psychology, and ethics. Along with his teacher Plato, he is considered the "Father of Western Philosophy".

Teaching Alexander the Great gave Aristotle many opportunities and an abundance of supplies. He established a library in the Lyceum which aided in the production of many of his hundreds of books. The fact that Aristotle was a pupil of Plato contributed to his former views of Platonism, but, following Plato's death, Aristotle immersed himself in empirical studies and shifted from Platonism to empiricism. He believed all peoples' concepts and all of their knowledge was ultimately based on perception. Aristotle's views on natural sciences represent the groundwork underlying many of his works.

Aristotle's views on physical science profoundly shaped medieval scholarship. His influence extended into the Renaissance and was not replaced systematically until the Enlightenment and theories such as classical mechanics. Some of Aristotle's zoological observations were not confirmed or refuted until the 19th century. His works contain the earliest known formal study of logic, which was incorporated in the late 19th century into modern formal logic.

In metaphysics, Aristotelianism profoundly influenced Judeo-Islamic philosophical and theological thought during the Middle Ages and continues to influence Christian theology, especially the scholastic tradition of the Catholic Church. Aristotle was well known among medieval Muslim intellectuals and revered as "The First Teacher".

His ethics, though always influential, gained renewed interest with the modern advent of virtue ethics. All aspects of Aristotle's philosophy continue to be the object of active academic study today. Though Aristotle wrote many elegant treatises and dialogues - Cicero described his literary style as "a river of gold" - it is thought that only around a third of his original output has survived.

18.8 Conclusion

Thus, we find that Greek literature and philosophy had reached an excellent level of expertise in the Classical period. So much so that scholars like Plato or Aristotle were talking about the scientific creations of the Earth some 2500 years ago. Virtually all of Western literature has been influenced by Ancient Greek literature. Its influence is so ubiquitous that virtually every major artist, from William Shakespeare to James Joyce is in its debt. In addition to modern literature, its influence has been felt in other

ways. The foundations of Sigmund Freud's psychoanalysis originate in the Oedipus complex, which is based on Sophocles' tragedy.

18.9 Model Questions

1) What was the earliest evidence of Greek Literature ?
2) How did Homer contributed to the birth of Greek Literary tradition ?
3) Describe in brief about the development of Greek literary tradition in the Classical Period?
4) Name two ancient Greek Historians. What was their contribution?
5) Write short notes on any two Greek Historians.
6) What was Socratic Method ?
7) What was the basic point of difference between Socrates and Plato ?

18.10 Suggested Readings

Bury, J.B., A History of Greece to the Death of Alexander the Great, (London : McMilan & Co. Ltd., 1900)

Dihle, Albrecht, A History of Greek Literature: From Homer to the Hellenistic Period, (London : Routledge, 1994)

Stobart, J.C., The Glory that was Greece, (London : Sidgwick & Jackson, 1971)

Unit 19 ❑ Greek Sports and Olympic

Structure

19.0 Objectives

- The objective of the present unit is to study the development of Greek sport culture and Olympics. Learners will get a brief idea about the origins of Greek athletics & the importance of Sports in Greek religion
- Various events and aspects of Ancient Olympic tradition will also be covered up
- Lastly, the contribution of the Greek sports in the development of Greek sculpture, art & architecture will also be discussed.

19.1 Introduction

> "There was no divorce between intellect & muscle among the Ancient Greece. Each was a necessary part for the qualities of a perfect man "
>
> ~ Historian J.C. Stobart

In fact, Ancient Greeks had a huge obsession for physical activity. Physical activity was not necessarily only in the sense to fight battles or to perform occupational works, but also in the sense of indulging in sports & games. Thus, the Classical period in Greece witnessed the rise of a major impetus in the culture of Athletics.

The Homeric Greeks frequently entertain themselves by engaging in sports and games. Funeral games in particular combine funerary rites, religion, and athletic pursuits with displays of martial prowess.

19.2 The Origin of Athletics in Ancient Greece and Homer's Iliad

The images of Boxers & Bull fighters of Knossos (Create) prove that Athletics was already somewhat popular among the pre-Aryan Mycenaean Greeks and Cretans, long before the coming of the Dorrian invaders. Chariot races were also a feature of Mycanean Greeks. We know that chariot racing dates back to at least the twelfth century BC, as Mycenaean vase-paintings from the Late Helladic III period clearly show. However, the major impetus and elaborations of sports came only with the coming of Dorians and Ionians. They developed the concept of what became popular as "manly sports".

With them athletics got connected with religious significance, particularly in connection to the funerals and ancestor worship. It's not only considered as an act of mere obsession or time pass, but it began to be attached with the symbol of respect and honor.

We first got the literary reference of Sports from the legendary Iliad written by Homer. Here, it mentions that the funereal of the mystic hero Patroclus was honored with the performance of a number of sports in his Tomb. The funeral games organized in honor of Patroclus include a number of sports with a distinctly military flavor. The program was an elaborate one. The major games along with their prizes which were mentioned, is given below in a chart.

Serial No.	**Name of the Game**	**1st Prize**	**2nd Prize**
1.	Chariot Race	A blameless woman & a tripod with handles	A broodmare
2.	Boxing match	A six year old mule	A two-handled cup
3.	Wrestling match	A large tripod of a value of 12 oxen	A clever woman/4 oxen
4.	Foot race	A handsome silver punch-bowl of Sidonian make	A fat Ox
5.	Duel	The armor of Sarpedon	X
6.	Weight lifting	A lump of natural Iron	X
7.	Archery	Ten double Axes	Ten single Axes
8.	Javelin throwing	A ornamental cauldron of 1 ox value	A Javelin

In the Iliad, the Greeks also organized wrestling and boxing matches. Both of these were staples of the ancient Greek sports repertoire. In boxing, both competitors wrapped their hands in leather straps and fought until one gave up or was knocked senseless. Wrestling, pale, focused on grappling; victory was given to the competitor who managed to throw his opponent to the ground. Not mentioned by Homer is pankration, sometimes referred to as an ancient Greek "martial art": competitors were allowed to kick, punch, grapple, and throw their opponent until one surrendered or could not continue; only biting was not allowed.

A Greek tripod, depicting a duel

Horses were important to the aristocracy and so it shouldn't surprise us that chariot races were also a feature of Patroclus' funeral games

During the games for Patroclus, Achilles issues a challenge for two men to fight each other in single combat. The winner would be awarded the spear, armor, and helmet of the Lycian hero Sarpedon, who had been slain by Patroclus. The winner would be the first man to draw blood from his opponent. Telamonian Ajax and Diomedes accept the challenge and after a short battle, Diomedes almost manages to cut Ajax' throat, at which point the crowd cries out for the combatants to stop. It is possible that ritualized single combat of the kind described in the Iliad was a common feature during the Archaic period, especially considering how popular the motif of dueling combatants is on Attic and Corinthian pottery of the seventh and sixth centuries BC.

Athletics were an important part of the cultural life of Ancient Greeks. Buildings were created for the sole use of athletics including stadiums, palaestra, and gymnasiums.

Starting in the Archaic Period, Panhellenic Games, including the Olympic Games, begin taking place each year. These games gave people from all over Greece the chance to gain fame for their athletic prowess. Athletics in Greece became one of the most commonly depicted scenes of everyday life in their art.

19.3 Sports and Religion

It is important to mention that unlike the pre-Dorrian Mycenaeans, the Classical Greek athletics from the very beginning were a part of the religion. They were undertaken in a serious devotional spirit , to honor some God or a legendary hero like Hercules.

We have seen how in Hoer's Iliad sports were associated with religious rituals like observing funeral pyre or ancestor worship. The athletic organization during the Funeral of legendary hero Patroclus serves as a good example for this. Most of the Greek Gods and Goddesses excelled in sports and athletics. The Supreme Greek God Zeus and Goddess Apollo were believed to be the all time winners of Wrestling and other races and also possessing a beautiful trained "sports-manly body".

The Olympic games too, although it first started in the memory of two local legendary heroes namely Oenomas & Pelops, but latter it was completely organized in the honor of God Zeus. While in the other hand, Goddess Apollo was considered to defeat God Hermes in Chariot Racing & Goddess Ares in boxing. In fact, in Olympia itself, there stands a row of idols dedicated to God Zeus, in honor of whom "the Greatest show on Earth" was used to be organized.

Greeks gathered every four years in Olympia to honor Zeus through sports, sacrifices and hymns. Athletes at the ancient Olympics believed their training honored the gods, and victory was a sign of favor from a deity. As contests like wrestling, boxing, and horse racing were added to the Olympic roster, they supplemented devotional sacrifices, hymns, and ceremonies.

"The idea was that you were training to please Zeus. But part of the festival would be to visit the temple, visit the cult statues, making offerings, celebrating and seeing your family," said David Gilman Romano, a professor of Greek archaeology at the University of Arizona.

It's a matter of fact that the combination of Greek sport and worship finally led the Roman Emperor Theodosius I, a Christian, to ban the Olympics in 393 A.D.

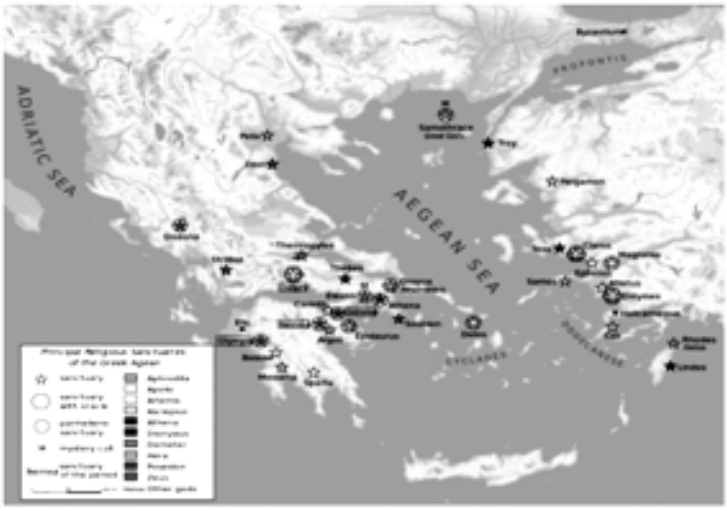
An imaginary portrait of the Statue of God Zeus in Olympia

(The Statue of Zeus at Olympia was a giant seated figure, about 13 m (43 ft) tall, made by the Greek sculptor Phidias around 435 BC at the sanctuary of Olympia, Greece, and erected in the Temple of Zeus there. the statue was lost and destroyed during the 5th century AD; details of its form are known only from ancient Greek descriptions and representations on coins.)

The four great games of ancient Greece-the Olympian, the Pythian, the Isthmian, and the Nemean-were all associated with the worship of the gods. The Olympian games were held in honor of Zeus, ruler of the sky, whose worship was centered on Mount Olympus, also the site of his marriage to Hera. The Pythian games were held at Delphi, the site of Apollo's oracle, and were said to have been established by the god as compensation for his killing of the great serpent Python. The Pythian games eventually came to include both physical and intellectual competitions, including musical, literary, and dramatic events. The stadium at Delphi was also the site of religious rituals.

The Isthmian games, held on the Isthmus of Corinth every second year, included poetic and musical competitions as well as athletic events. According to one legend, the Isthmian games were initiated by the Greek hero Theseus, who slew the Minotaur. Theseus was fabled to be the son of Poseidon, and the Isthmian games were dedicated

to this god. The legendary origins of the Nemean games are traced to an event in which an army led by Polynices, a son of Oedipus, slew a serpent that had killed the infant Opheltes (Snake Man). The Nemean games, held in honor of Zeus, also included poetry and music competitions in addition to athletic contests.



Location of Olympia

19.4 The Olympic Games

The modern Olympic Games or Olympics are leading international sporting events featuring summer and winter sports competitions in which thousands of athletes from around the world participate in a variety of competitions. The Olympic Games are considered the world's foremost sports competition with more than 200 nations participating and is sometimes referred as "the Greatest show on Earth". The Olympic Games are held every four years, Their creation was inspired by the ancient Olympic Games, which were held in Olympia, Greece, from the 8th century BC to the 4th century AD. The Ancient Olympic Games were religious and athletic festivals held every four years at the sanctuary of Zeus in Olympia, Greece.

Origin : The traditional date of founding the festival is considered to be 776 BCE. From this era all the ancient Greek dates were subsequently calculated. However, the actual foundation date was of little significance in terms of Athletics. The real importance of the Games arouses much latter. It coincided with the rise of the Spartan hegemony in the Greek Peloponnese. Although, the games were not organized in

Spartan territory, but it was undoubtedly from Spartan support that their importance rose up. It first started in the memory of two local legendary heroes namely Oenomas & Pelops, but latter it was completely organized in the honor of God Zeus.

Events : At first it was only consisted of a foot race. But latter many events were added to it latter & the duration was extended up to five days. The ancient Olympic Games were initially a one-day event until 684 BC, when they were extended to three days. In the 5th century B.C., the Games were extended again to cover five days.The most important events were of the following ~

i) **Short foot race :** It was the pre-eminent test of speed, covering the Olympia track from one end to the other (200m foot race).

ii) **Double course :** ranging between 7 and 24 stades

iii) **Long Foot race :** covering the Olympia track from one end to the other twice (400m foot race)

iv) **Wrestling :** This was highly valued as a form of military exercise without weapons. It ended only when one of the contestants admitted defeat.

v) **Pentathlon :** It was a combination of five games consisting of five feats, long jumping, foot race, quoits throwing & Javelin throwing

vi) **Boxing :** Boxers wrapped straps (himantes) around their hands to strengthen their wrists and steady their fingers. Initially, these straps were soft but, as time progressed, boxers started using hard leather straps, often causing disfigurement of their opponent's face.

vii) **Discus Throwing :** The discus was originally made of stone and later of iron, lead or bronze. The technique was very similar to today's freestyle discus throw.

viii) **Pancration :** This was a primitive form of martial art combining wrestling and boxing, and was considered to be one of the toughest sports. Greeks believed that it was founded by Theseus when he defeated the fierce Minotaur in the labyrinth.

ix) **Horse chariot race :** These included horse races and chariot races and took place in the Hippodrome, a wide, flat, open space.

x) **Hoplite Race :** This include a foot race for soldiers dressed in full armor.

Beside this, there were other special events for various other contests. E.g. The mule race, the trotting race, etc. The events were strictly restricted for men & boys. Women of all ages were forbidden to participate here.

Organization and Participation : Sacrifice and rituals accompanied every stages of proceedings. Long before the organization of the event, ambassadors went from cities to cities, proclaiming the declaration of a Sacred Truce, in duration of the Olympic Games. All people who could prove their Greek nationality were invited and could participate. The judges were chosen from the citizens of the City-State of Elis, whose duty was not only to supervise the results but also to manage the contest. They received a ten months course of instruction beforehand the duties were dispatched to their offices.

All the competitors had to undergrew a strict examination before their formal qualification. They also had to take an oath before the altar of Zeus that they would compete fairly without any cheatings and that they had been in training for the previous ten months.

The only prize was a crown of a wild Olive cut from a certain tree of a special sanctity. The victor's name and country (City State) would be duly proclaimed before the assembled audience. However, the highest honor awaits him on his return. He was welcomed with a Grand procession into the city. He would be granted a life time immunity from any governmental taxation and other privileges. In Athens he would enjoy free meals in the Presidential House for all of his lifetime.

Chariot races were always the object of ambition and an opportunity to show one's wealth and extravagance. The tyrants of Syracuse competed in large numbers, but it's always the Athenian competitors who won the race.

Politics surrounding the Game : Power in ancient Greece became centered around the city-state in the 8th century BC. The city-state was a population center organized into a self-contained political entity. These city-states often lived in close proximity to each other, which created competition for limited resources. Though conflict between the city-states was ubiquitous, it was also in their self-interest to engage in trade, military alliances and cultural interaction. The city-states had a dichotomous relationship with each other: on one hand, they relied on their neighbors for political and military alliances, while on the other they competed fiercely with those same neighbors for vital resources. The Olympic Games were established in this political context and

served as a venue for representatives of the city-states to peacefully compete against each other.

Ancient Olympia & it's Stadium

In the first 200 years of the games' existence, they only had regional religious importance. Only Greeks in proximity to the mountain competed in these early games. This is evidenced by the dominance of Peloponnesian athletes in the victors' rolls. The spread of Greek colonies in the 5th and 6th centuries BC is repeatedly linked to successful Olympic athletes. For example, Pausanias recounts that Cyrene was founded c. 630 BC by settlers from Thera with Spartan support. The support Sparta gave was primarily the loan of three-time Olympic champion Chionis. The appeal of settling with an Olympic champion helped to populate the colonies and maintain cultural and political ties with the city-states near Olympia. Thus, Hellenic culture and the games spread while the primacy of Olympia persisted.

The games faced a serious challenge during the Peloponnesian War, which primarily pitted Athens against Sparta, but, in reality, touched nearly every Hellenic city-state. The Olympics were used during this time to announce alliances and offer sacrifices to the gods for victory.

During the Olympic Games, a truce, or ekecheiria was observed. Three runners, known as spondophoroi, were sent from Elis to the participant cities at each set of games to announce the beginning of the truce.During this period, armies were forbidden from entering Olympia; and legal disputes, and the use of the death penalty, were forbidden. The truce - primarily designed to allow athletes and visitors to travel safely to the games - was, for the most part, observed in reality. Thucydides wrote of a situation when the Spartans were forbidden from attending the games, and the violators of the truce were fined 2,000 Greek currency for assaulting the city of Lepreum

during the period of the ekecheiria. The Spartans disputed the fine and claimed that the truce had not yet taken hold.

While a martial truce was observed by all participating city-states, no such reprieve from conflict existed in the political arena. The Olympic Games evolved the most influential athletic and cultural stage in ancient Greece, and arguably in the ancient world.

19.5 Other Sports

For the other formal sports other than Olympics, the historical evidence was scanty. Certain history can be reconstructed in some detail from the descriptions left by some Ancient writers & vase paintings.

Mention may be made of some sculptural works found from the ruins of a broken wall in Athens, in 1922. It belongs to the late 6th century BCE. One of them depicts a sport scene which can be traced to the modern day sport of Football. While another shows something like that of a Hockey. Although, here the game seemed to be played single-handedly, not in teams & the players were seemed to be waiting at the sides for their turn to play.

19.6 Prevalence of a Sport Apathy

It is worthy to mention that along with the rise of immense popularity for athletics there also emerged a counter trend of anti-atheism in the minds of certain Greek philosophers, at the same time. They started viewing sports and games as an act of useless consumerism.

The outspoken Greek statesman cum writer Euripides had a violent hatred against athletes. In his drama "Autolycus" he wrote :

" It is an utter foolishness for the Greeks to make great gathering in order to see useless creatures like those (athletes)… What good does a man do to his city by winning a prize for wrestling, or quoits-heaving ? Will they fight the enemy with quoits ? Will they drive the enemy out of their country without spears only by kicking ?...what would he do when he would have to face the sword of steel ?

Garlands of leaves should be for the wise & good, for the just & sober statesmen who guide their cities best, or for the man who with his strength & politics could avert evil deeds, & keep battles & civil strife away."

19.7 Contribution to Sculpture and Architecture

Athleticism however gave one thing to the Greeks is certain i.e. Sculpture & architecture. Athletics were an important part of the cultural life of Ancient Greeks. Depictions of boxing and bull-leaping can be found back to the Bronze Age. Buildings were created for the sole use of athletics including stadiums, palaestra, and gymnasiums. Starting in the Archaic Period, Panhellenic Games, including the Olympic Games, begin taking place each year. These games gave people from all over Greece the chance to gain fame for their athletic prowess. Athletics in Greece became one of the most commonly depicted scenes of everyday life in their art.

Architecture : As the site of the Olympic Games, the architecture of Olympia is heavily influenced by the theme of athletics. The temple of Zeus, for example, is decorated with a frieze containing the 12 labors of Heracles, who is believed to be the founder of the Olympic Games, and a pediment depicting the myth of Pelops, another origin tale of the Olympics.

The Stadium at Olympia

The main site of where the Olympic Games took place was the Stadium at Olympia which is located to the east of the sanctuary of Zeus. The physical landmarks of the Stadium are 212.54 meters long and 30-34 meters wide, and it served mainly for running races that determined the fastest person in the world. The track was made of hard-packed clay to serve as traction for the people competing in the running events.

The site of Nemea displays both the practical and ceremonial use of athletic architecture in the early Hellenistic monumentalization of Pan-Hellenic sanctuaries. The bath house of Nemean Baths contains a western room with basin baths and an eastern plunge bath. The western basin room is common of 4th century baths throughout

Greece and was likely place where visiting athletes could wash themselves during their stay. The eastern plunge bath however, is one of only 4 others in Greece, all of which have been found at Pan-Hellenic ritual sites. Though its exact function is unknown, its public nature suggests that it may have had a ritual component in the athletic games or ceremonies. Nemea also housed a stadium, where athletes would participate in games, specifically the stadion (running event).

Sculpture : It was from the athletics that the contemporary Greek Sculptors drew their subject. Nowhere could the sculptors get such an opportunity to get a vivid sight of the stripped bodies of the athletes during exercises or during sports. Thus, some of the best anatomical & physical appearances of the Greek Athletes were shown among the sculptures of this time. The nude male figure was a favorite theme of the 5th century art. An extraordinary level perfection in sculpting of male figures was reached by the Greek sculptors like Myron & Polyclitus during 5th - 6th century BCE. Myron's famous "Discobulus" was one of the best known athletic statues of Greece. Although its original image had disappeared but several Roman copies of it had yet survived. The Discobulus statue depicts an Greek Athlete who was posing with his heavy disk & preparing to throw. Just as he was preparing to throw, he was going to turn right about the pivot of his right foot. The muscles, the biological organs, etc physical anatomy was very skillfully sculpted. Among the other statues mention could be made of the "Doryophorus" statue of Myron, the "Apoxyomenus" statue of Lysippos (the court sculptor of Alexander the Great) & also of the bronze charioteer discovered by French archaeologists at the Temple of Delphi. It is worthy to mention here that in classical Greece to be naked or to strip one's body in public was nothing to be ashamed of. Rather it was seen as a sign of glory to show ones "manly" physics in public, especially during sports or games.

A Discobulus in the National Roman Museum in Palazzo

19.8 Conclusion

Thus in Ancient Greece sports & athletics was an important part & parcel of the lifestyle. It was not only seen as a culture of esteem glory but athletics was also associated with Religious offerings & ceremonial prayers & celebrations of the Greeks. The Olympics was the greatest sports of all time for which all the politically contending powers of Greece came for a temporary mutual peace & understanding. Sports not only facilitated the exchange of culture, religion & building of body fitness but it also contributed immensely in the development of art & architecture in Ancient Classical Greece.

19.9 Model Questions

1) How did Athletics originate in Greece ?
2) What was the earliest literary reference of sports or games found in Classical Greece?
3) What was the role of Religion in Greek sports ? Analyze with example
4) Where was Olympics organized. Write a short description of the Ancient Olympics.
5) What were the major events organized in Olympics ?
6) How did Olympics influence politics?
7) Was there any counter trend against sports and athletics among the contemporary Greek philosophers ? Explain with an example.
8) How did Ancient Greek sports contributed in the development of Architecture & Sculpture in Ancient Greece ?

19.10 Suggested Readings

Bury, J.B., A History of Greece to the Death of Alexander the Great, (London : McMilan & Co. Ltd., 1900)

Golden, Mark, Sport and Society in Ancient Greece, (London : Cambridge University Press, 1998)

Stobart, J.C., The Glory that was Greece, (London : Sidgwick & Jackson, 1971)

Unit 20 ❑ The Rise of Macedon and Hellenistic Culture

Structure

20.0 Objectives

- The objective of the present unit is to study the rise and expansion of Macedonia in the history of Greece.
- The unit will help the learners to understand the origin & background paving the way for the rise of the Macedonian state under King Phillip II
- The early confrontation with Athens and subsequently the final expansion of the Macedonian supremacy all across the Greek Peninsula will also be discussed systematically.

20.1 Introduction

By the end of 4th century BCE, there already began a transitional phase in the history of Ancient Greece. While in one hand we will be witnessing the decline of older traditional Greek city states, like that of Athens or Sparta, in the other hand this temporary vacuums would soon be filled up by new rising powers which were so

long been in the shadowy periphery of the Greek world. The new commercial republic of Rhodes, the state of Caria under Maussollus, the state of Thessaly under Jason, Cyprus under Evagorus and above all the Kingdom of Macedonia under King Phillip, were some of the new rising powers, which deserve special mention.

"New powers on the fringe of Hellenic circle, are now stepping into the light & taking their places in the torch race of civilization." J.C. Stobart

However, in sphere of culture and intellectual progress these new states far more lagged behind than the older city states like Athens. What they cashed in to build up their powers, was basically developing an efficient military structure and accumulating a large amount of wealth to sustain their war economy. As to Stobart, many of these new powers were "half barbarians". They were either monarchies or simple tribal confederacies. What generally happened is that the leaders who aroused like Philip, Alexander, Jason, etc, were themselves sufficiently endowed with intellectual capabilities, which in sheer contrast was lacking among their masses. These leaders in turn, then utilize those intellectual capacity, to tame & build up the latent force of the large uncivilized warrior mass of their state & then utilize these latent force for their political gain.

One such rising power was the state of Macedonia in the far Northern Greece. In course of time, we'll find that it was Macedonia who became victorious in subjugating all the other Hellenistic powers & eventually became the master of whole Greece. Let us discuss this.

20.2 Rise of the New and the Fall of the Old : the Decline of the Older Order

By 4th century BCE, after about 500 years, the older city states like that of Athens, Sparta, Thebes, Delphi, etc. were suffering from financial exhaustion & had already entered a phase of economic recession. While interestingly, the newer rising powers were much more economically wealthier. It's not that the they have a viable financial model or economic growth rate, but somehow the rulers of these kingdoms managed to accumulate wealth in their hand by hook or by crook. E.g. The main strength of Macedonian finance was its absolute control over the large gold mines of Northern Greece. While in the other hand, prince Evagorus of Cyprus had a large stalk of personal wealth himself, other emerging powers like Phocians & Thessaly simply managed to accumulate wealth by plundering and looting from the others, using their military strength. The old powers were thus left behind the race by the forces of circumstances.

However, as to scholars like Stobart & Bury, the most serious problem that the older city states were facing was the drastic decline of their population. Since, 5th century BCE, we find that the population of some of the well known Greek city states were declining significantly. The Spartiate race of Lacedaemonians was becoming almost extinct. And by the time of Battle of Leuctra (371 BCE), we find the evidence of not more than 1500 regular Spartan population that existed at that time. In a lesser degree, this story is similar almost in all over the older Hellenistic world.

This trend is manifested in their defense system too. For we find after 4th century BCE, due to lack of home recruitment, most of the regular Greek city states had to rely on replacing their citizen militias by paid mercenaries recruited from outside. These foreign soldiers might be professional but they lacked any attachment with the mother country and hence posed a serious problem for loyalty & patriotism, which was an ardent need in the battlefields.

Various factors including economic recession, destructive wars, outbreak of epidemics and diseases, etc were responsible for this drastic decline of population. However, in the long run, the ultimate outcome of this was that it made political decline inevitable.

20.3 The Background of the Macedonian Rise

Although the Kingdom of Macedonia, which was located in the northern area of Ancient Greece, ended up being one of the most prominent and influential kingdoms in all of Ancient Greece, it wasn't always this way. It began as a small city-state that sprung up in a world where the city-states of Athens and Sparta dominated. It was completely surrounded by other small city-states including Epirus, which was on its western border, Paeonia, which was at its northern border, Thrace, which was located to Macedonia's east, and Thessaly, which was on its southern border.

In the aftermath of the Peloponnesian War, Sparta rose as a hegemonic power in classical Greece. Sparta's dominance was challenged by many Greek city-states who had traditionally been independent during the Corinthian War of 395-387 BCE. Sparta prevailed in the conflict, but only because Persia intervened on their behalf, demonstrating the fragility with which Sparta held its power over the other Greek city-states. In the next decade, the Thebans revolted against Sparta, successfully liberating their city-state, and later defeating the Spartans at the Battle of Leuctra (371 BCE). Theban general Epaminondas then led an invasion of the Peloponnesus in 370 BCE, invaded Messenia, and liberated the helots, permanently crippling Sparta.

These series of events allowed the Thebans to replace Spartan hegemonic power with their own. For the next nine years, Epaminondas and Theban general Pelopidas further extended Theban power and influence via a series of campaigns throughout Greece, bringing almost every city-state in Greece into the conflict. These years of war ultimately left Greece war-weary and depleted, and during Epaminondas's fourth invasion of the Peloponnesus in 362 BCE, Epaminondas was killed at the Battle of Mantinea. Although Thebes emerged victorious, their losses were heavy, and the Thebans returned to a defensive policy, allowing Athens to reclaim its position at the center of the Greek political system for the first time since the Peloponnesian War. The Athenians' second confederacy would be Macedon's main rivals for control of the lands of the north Aegean.

20.4 The Accession of King Philip II

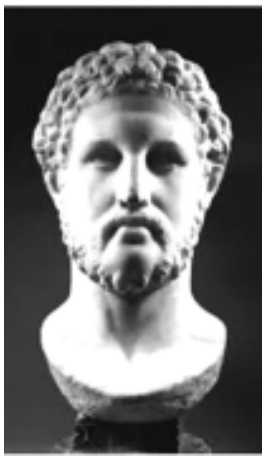
At the opening of 4th century BCE, Macedon was still largely uncivilized. It was ruled by a monarchy surrounded by an aristocracy of Knights, still on the Homeric model. Macedonia was occasionally raided by Barbarians from the farther West. It would be long till Phillip could finally defeat them in succeeding battles. However, by this time, the kings of Macedon on their part, were already engaging in education & personally gathering knowledge about mainland Greek politics, administration & philosophy. King Archelaus in particular invited high-ranking Greek scholars like Euripides & Agathon from mainland Greece. So, already there had started a trend among the Macedonian royal family to slowly engage and accommodate themselves in the mainstream Greek politics and Greek Diaspora as a whole. However, a lot of path was still left to travel.

In 360 BC, the Macedonian army under Perdiccas III had been defeated in battle by the Dardanian tribe of Illyria; Perdiccas and 4,000 troops had been killed. The Illyrians prepared to invade Macedon; meanwhile, the Paionians were ravaging Macedonian territory, the Thracians were preparing to invade in support of the pretender Pausanias, as were the Athenians, in support of a different pretender, Argeus. In short, Macedon was in another of its periodic crises

The nominal heir of Perdiccas, his son Amyntas IV, was at this time still an infant. Philip, the sole surviving son of Amyntas III, was the obvious candidate to rule Macedon and was acclaimed by the army, probably as king. It is also possible that he was initially acclaimed as regent for his nephew Amyntas IV, and later usurped the throne, although if so, he did not harm Amyntas. Either way, Philip II

became king by 359 BC, and began energetically attempting to save Macedon from destruction.

While Philip was young, he was held hostage in Thebes, and received a military and diplomatic education from Epaminondas. By 364 BCE, Philip returned to Macedon, and the skills he learned while in Thebes, coupled with his expansionist vision of Macedonian greatness, brought him early successes when he ascended to the throne in 359 BCE. When he assumed the throne, the eastern regions of Macedonia had been sacked and invaded by the Paionians, and the Thracians and the Athenians had landed a contingent on the coast at Methoni. Philip pushed the Paionians and Thracians back, promising them tributes, and defeated the 3,000 Athenian hoplites at Methoni. In the interim between conflicts, Philip focused on strengthening his army and his overall position domestically, introducing the phalanx infantry corps and arming them with long spears, called sarissas.



King Phillip II

Reconstruction of the Army : Philip's first priorities were to reconstruct the Macedonian army, and restore the morale of both the army and the people. He held a series of assemblies with the Macedonian people, and "exhorting them with eloquent speeches to be men, he built up their morale". He exhaustively re-trained his men with new tactics and equipment. In particular, he instigated the use of the phalanx formation by the Macedonian foot-soldiery, and equipped the troops with 6-metre long pikes (the sarissa), in contrast to the 2-3-metre spear (doru) used by Greek hoplites.

Diplomacy : At the same time, Philip engaged in a flurry of diplomatic activity. He bribed Berisades, son of the Thracian king Cotys, to withdraw Thracian support for Pausanias, and thereby prevented the Thracian invasion. Similarly, he bought off the Paionians with gifts in exchange for their withdrawal from Macedon. Philip may also have concluded a treaty with the victorious Dardanian king Bardylis, possibly surrendering large parts of Macedon in exchange for peace. Although no evidence remains of such a treaty, the fact that Illyrians did not follow up their victory despite Macedon's weakness is suggestive that some agreement was reached. Philip also married Bardylis's daughter (or niece), which may have formed part of the treaty. At any rate, Philip's diplomacy gave Macedon some breathing space and time for recovery.

20.5 Early Confrontation with Athens

Now, the sole objective for King Phillip was the expansion of his territory. But in which direction? Expansion towards the fallow lands of West, infested by barbarian warlords is difficult & unprofitable. Similar is the case for North. Towards the South lies some powerful Greek city states. It still requires more resources to confront the numerous city states of South. However, towards the East, lay the important yet militarily weaker cities of Chalcidian Peninsula, leading to the gold mines of Mt. Pangaeus, protected by yet another weaker city of Amphipolis. Next lies the decrepit kingdom of Thrace & then the way was clear to the Black Sea & doorway to Asia.

So expanding towards the East seems apparently the real profitable direction for the Macedonians. But there is a problem. Now this was the life line of Athens' food supply & the main artery of the sea-borne traffic between Athens & its Beotian allies in the coast of Asia Minor. So a conflict with this great power became inevitable.

The statesman who led the anti-Macedonian party at Athens was called Demosthenes.

Battle of Methone : Philip realized that the sole intention of the Athenian support for Argeus was to recover Amphipolis, which they hoped to do by placing Argeus on the throne. Philip therefore withdrew the Macedonian garrison from Amphipolis and declared it autonomous, to undermine the purpose of Athenian support for Argeus.

The Athenian expedition, led by Mantias, still landed at Methone on the Macedonian coast, with 3,000 mercenary troops. Mantias now declined to leave Methone, so Argeus instead led the troops to the ancient Macedonian capital of Aegae, hoping that the populace would declare him king. However, the people of Aegae showed no interest in doing so, and Argeus therefore marched back to Methone. On the way, he was attacked and defeated in battle by Philip, many of the Athenian mercenaries being slain and the rest taken captive. According to Diodorus, this victory did much to restore the morale of the Macedonian army, and gave the soldiers encouragement for the battles to come.

Having defeated the last immediate threat to Macedon, Philip returned to diplomacy. He released the Athenian prisoners immediately, and sent ambassadors to Athens. He was prepared to abandon all claim to Amphipolis, and this, coupled with his treatment of the Athenian prisoners, persuaded the Athenians to make peace with him.

Conquest of Thessally / Thrace : Philip also invaded Thessaly in 358 BCE. Prior

to it in 357 BCE, Amphipolis was already captured. In the years up to 360 BCE, Thessaly had enjoyed a brief ascendancy in the Greek world, after being unified under Jason of Pherae, who was appointed Tagus (chief magistrate) of Thessaly. However, Jason was assassinated in 370 BC, and his son Alexander became Tagus. Alexander ruled harshly, and other states of the Thessalian League therefore withdrew their support for him, resulting in a desultory conflict in which both Macedon (under Alexander II) and eventually Thebes became embroiled. This conflict eventually ended in 364 BC when the Thebans were victorious over Alexander, and imposed a peace settlement on Thessaly. However, with the weakening of Thebes in the aftermath of Mantinea, on-off conflict within Thessaly continued. Alexander was himself assassinated in 358 BC, by his wife's brothers Lycophron and Tisiphonus, who became tyrants in his place. According to Diodorus, the Aleuadae, the noble family which dominated politics in the northern Thessalian city of Larissa, were opposed to these new tyrants, and requested aid from Philip.

Macedonia & it's neighbors in 336 BCE

Philip appears to have had a strong interest in Thessaly from the start of his reign, even despite his problems elsewhere. There are several probable reasons for this interest. Firstly, and most pressingly, Philip probably wanted to take control of the border region of Perrhaebia (traditionally part of Thessaly), in order to secure Macedon's southern border. Secondly, since Larissa controlled the main north-south routes between Macedon and Thessaly, friendly relations with the Aleuadae would help protect Macedon and give Philip access to the rest of Greece. Thirdly, Thessaly had plentiful resources that Philip could see the long-term potential of exploiting.

Athenian Alliance : In 356 BC, in response to King Philip's machinations, the Athenians allied with the kings of Illyria, Paionia and Thrace, to try to block his advance. Thrace was by now ruled by three kings, descendants of Cotys; in the west was Ketriporis, the son of Berisades (Cotys's second son); in the centre, Amadokos II (Cotys's third son), and in the east Kersebleptes (Cotys's first son). Whether Athens allied to all three Thracian kings is a matter of conjecture; certainly at least Ketriporis joined the alliance. If Kersebleptes did ally with Athens, he appears to have relatively quickly cast off this allegiance, in favor of extending his realm at the expense of Amadokos and Ketriporis.

According to Diodorus, Philip marched on his enemies in this alliance before they had chance to combine, and forced them to ally to Macedon instead. However, other sources suggest that the picture was actually much more complex, and that Philip in turn defeated each of the powers over the next few years, with the exception of Athens.

According to Plutarch, an army under Parmenion defeated the Illyrian king Grabos in 356 BC, shortly after the conclusion of the siege of Potidea. Grabos then became a subject ally of Macedon. The following year, Philip seems to have defeated Ketriporis, and reduced him to the status of a subject ally, although information for this campaign is very limited. He is also presumed to have defeated the Paionians at some point during this period, although there is no explicit record of this. There is no evidence that any of these allies received any substantial aid from Athens, which was still too preoccupied with the Social War

20.6 The Sacred War

In 358 BCE, Philip marched against the Illyrians, establishing his authority inland as far as Lake Ohrid. Subsequently, he agreed to lease the gold mines of Mount

Pangaion to the Athenians in exchange for the return of the city of Pydna to Macedon. Ultimately, after conquering Amphipolis in 357 BCE, he reneged on his agreement, which led to war with Athens. During that conflict, Philip conquered Potidaea, but ceded it to the Chalkidian League of Olynthus, with which he was allied. A year later, he also conquered Crenides and changed its name to Philippi, using the gold from the mines there to finance subsequent campaigns.

Philip earned immense prestige and secured Macedon's position in the Hellenic world during his involvement in the Third Sacred War, which began in Greece in 356 BCE. Early in the war, Philip defeated the Thessalians at the Battle of Crocus Field, allowing him to acquire Pherae and Magnesia, which was the location of an important harbor, Pagasae. He did not attempt to advance further into central Greece, however, because the Athenians occupied Thermopylae. Although there were no open hostilities between the Athenians and Macedonians at the time, tensions had arisen as a result of Philip's recent land and resource acquisitions. Instead, Philip focused on subjugating the Balkan hill-country in the west and north, and attacking Greek coastal cities, many of which Philip maintained friendly relations with, until he had conquered their surrounding territories. Nonetheless, war with Athens would arise intermittently for the duration of Philip's campaigns, due to conflicts over land and/or with allies.

For the next few years Philip II was occupied with reorganizing the administrative system of Thessaly, campaigning against the Illyrian ruler Pleuratus I, deposing Arybbas in Epirus in favor of his brother-in-law Alexander I (through Philip II's marriage with Olympias), and defeating Cersebleptes in Thrace. This allowed him to extend Macedonian control over the Hellespont in anticipation of an invasion into Achaemenid Asia. In what is now Bulgaria, Philip II conquered the Thracian city of Panegyreis in 342 BC and reestablished it as Philippopolis (modern Plovdiv, Roman-era Trimontium). War broke out with Athens in 340 BC while Philip II was engaged in two ultimately unsuccessful sieges of Perinthus and Byzantion, followed by a successful campaign against the Scythians along the Danube and Macedonia's involvement in the Fourth Sacred War against Amphissa in 339 BC. Hostilities between Thebes and Macedonia began when Thebes ousted a Macedonian garrison from Nicaea (near Thermopylae), leading Thebes to join Athens, Megara, Corinth, Achaea, and Euboea in a final confrontation against Macedonia at the Battle of Chaeronea in 338 BC. The Athenian oligarch Philippides of Paiania was instrumental in the Macedonian victory at Chaeronea by assisting Philip II's cause, but was later prosecuted in Athens as a traitor by the orator and statesman Hypereides.

20.7 The Final Campaign in South and Defeat of the Athenian League

In 339 BCE, When news first arrived that Philip was in Elatea, just three days march away, there was panic in Athens. In what Cawkwell describes as his proudest moment, Demosthenes alone counseled against despair, and proposed that the Athenians should seek an alliance with the Thebans; his decree was passed, and he was sent as ambassador. Philip had also sent an embassy to Thebes, requesting that the Thebans join him, or at least allow him to pass through Boeotia unhindered. Since the Thebans were still not formally at war with Philip, they could have avoided the conflict altogether. However, in spite of Philip's proximity, and their traditional enmity with Athens, they chose to ally with the Athenians, in the cause of liberty for Greece. The Athenian army had already pre-emptively been sent in the direction of Boeotia, and was therefore able to join the Thebans within days of the alliance being agreed.

The details of the campaign leading up to the decisive Battle of Chaeronea are almost completely unknown. Philip was presumably prevented from entering Boeotia by way of Mount Helikon, as the Spartans had done in the run-up to the Battle of Leuctra, or by any of the other mountain passes. There were certainly some preliminary skirmishes; Demonsthenes alludes to a "winter battle" and "battle on the river" in his speeches, but no other details are preserved. Finally, in August 338 BC, Philip's army marched straight down the main road from Phocis to Boeotia, to assault the allied Greek army defending the road at Chaeronea.

Battle of Chaeronea (338 BCE) : The Battle of Chaeronea was fought in 338 BC, near the city of Chaeronea in Boeotia, between the Macedonians led by Philip II of Macedon and an alliance of some of the Greek city-states led by Athens and Thebes. The battle was the culmination of Philip's final campaigns in 339-338 BC and resulted in a decisive victory for the Macedonians. The allied Greek army had taken up a position near Chaeronea, astride the main road. On the left flank, the allied Greek line lay across the foothills of Mount Thurion, blocking the side-road that led to Lebedea, while on the right, the line rested against the Kephisos river, near a projecting spur of Mount Aktion. The allied Greek army included contingents from Achaea, Corinth, Chalcis, Epidaurus, Megara and Troezen, with the majority of troops being supplied by Athens and Thebes, thus making it an army of allied cities of southern Greece, that had been traditionally self-governed for centuries. The Athenian contingent

was led by the generals Chares and Lysicles, and the Thebans by Theagenes. No source provides exact numbers for the allied Greek army; the modern view is that the allied Greek numbers were approximately equal to those of the Macedonians, who according to Diodorus numbered roughly 30,000 infantry and 2,000 cavalry. Philip took command of the right wing of the Macedonian wing and placed his 18-year-old son Alexander (the future Alexander the Great) in command of the left wing, accompanied by a group of Philip's experienced generals.

Details of the battle itself are scarce, with Diodorus providing the only formal account. He says that "once joined, the battle was hotly contested for a long time and many fell on both sides, so that for a while the struggle permitted hopes of victory to both." He then recounts that the young Alexander, "his heart set on showing his father his prowess" succeeding in rupturing the allied Greek line aided by his companions, and eventually put the allied Greek right wing to flight; meanwhile, Philip advanced in person against the allied Greek left and also put it to flight.[This brief account can be filled out, if Polyaenus's anecdotes related to the battle (found in his work Strategems) are to be believed. Polyaenus's accounts have led some modern historians to tentatively propose the following synthesis of the battle. After the general engagement had been in progress for some time, Philip had his army perform a wheeling maneuver, with the right wing withdrawing, and the whole line pivoting around its centre. At the same time, wheeling forward, the Macedonian left wing attacked the Thebans on the allied Greek right and punched a hole in the allied Greek line. On the allied Greek left, the Athenians followed Philip, their line becoming stretched and became disordered; the Macedonians then turned, attacked and routed the tired and inexperienced Athenians. The allied Greek right wing, under the assault of the Macedonian troops under Alexander's command, then also routed, ending the battle. Diodorus says that more than 1000 Athenians died in the battle, with another 2000 taken prisoner, and that the Thebans fared similarly.

The battle has been described as one of the most decisive of the ancient world. The forces of Athens and Thebes were destroyed, and continued resistance was impossible; the war therefore came to an abrupt end. Philip was able to impose a settlement upon southern Greece, which all states accepted, with the exception of Sparta. The League of Corinth, formed as a result, made all participants allies of Macedon and each other, with Philip as the guarantor of the peace. In turn, Philip was voted as strategos (general) for a pan-Hellenic war against the Achaemenid Empire, which he had long planned. However, before he was able to take charge of the

campaign, Philip was assassinated, and the Kingdom of Macedon and responsibility for the war with Persia passed instead to his son Alexander.

20.8 League of Corinth

In the aftermath of Chaeronea, records show desperate attempts in Athens and Corinth to re-build the city walls, as they prepared for Philip to lay siege to them.[161] However, Philip had no intention of besieging any city, nor indeed of conquering Greece. Himself also being Greek, he wanted the rest of the Greeks as his allies for his planned campaign against the Persians, and he wanted to leave a stable Greece in his rear when he went on campaign; further fighting was therefore contrary to his aims. Philip marched first to Thebes, which surrendered to him; he expelled the Theban leaders who had opposed him, recalled those pro-Macedonian Thebans who had previously been exiled, and installed a Macedonian garrison. He also ordered that the Boeotian cities of Plataea and Thespiae, which Thebes had destroyed in previous conflicts, be re-founded. Generally, Philip treated the Thebans severely, making them pay for the return of their prisoners, and even to bury their dead; he did not, however, dissolve the Boeotian confederacy.

By contrast, Philip treated Athens very leniently indeed; although the Second Athenian League was dissolved, the Athenians were allowed to keep their colony on Samos, and their prisoners were freed without ransom.[163] Philip's motives are not entirely clear, but one likely explanation is that he hoped to use the Athenian navy in his campaign against Persia, since Macedon did not possess a substantial fleet; he therefore needed to remain on good terms with the Athenians.

Philip seems to have moved around Greece in the months after the battle, making peace with the states that opposed him, dealing with the Spartans, and installing garrisons; his movements also probably served as a demonstration of force to the other cities, that they should not try to oppose him. In mid-337 BC, he seems to have camped near Corinth, and began the work to establish a league of the Greek city-states, which would guarantee peace in Greece, and provide Philip with military assistance against Persia. The result, the League of Corinth, was formed in the latter half of 337 BC at a congress organised by Philip. All states signed up to the league, with the exception of Sparta.The principal terms of the concord were that all members became allied to each other, and to Macedon, and that all members were guaranteed freedom from attack, freedom of navigation, and freedom from interference in internal

affairs.Philip, and the Macedonian garrisons installed in Greece, would act as the 'keepers of the peace'.At Philip's behest, the synod of the League then declared war on Persia, and voted Philip as Strategos for the forthcoming campaign.

But before that could happen, In 336 BC, whilst the invasion of Persia was in its very early stage, Philip was assassinated in Aegae by the captain of his bodyguard, Pausanias, whilst attending the wedding of his daughter by Olympias, Cleopatra, to Olympias's brother (and Cleopatra's uncle) Alexander I of Epirus. Philip's son Alexander III by Olympias was proclaimed king by the Macedonian army and by the Macedonian noblemen.

20.9 Art and Science in Macedonia

Ancient Macedonia was a culture rich in artistic achievements and scientific advances. Aristotle, considered by some the father of western philosophy, may have composed some of his most important works during the reign of Alexander the Great, including treatises on physics and metaphysics (a branch of philosophy dealing with the nature of reality).

The period after Alexander's death, known as the Hellenistic Period, was one of extravagance and wealth throughout much of the Greek world. Places of entertainment and leisure, such as parks and theaters, proliferated. A style of Greek drama called New Comedy became popular. Unlike earlier Greek comedies, which parodied public figures and events, New Comedy focused on the fictional trials of average citizens.

Alexandria, an ancient Egyptian town thought to be founded by Alexander the Great, became a major hub of science during this period as well. Greek mathematician Euclid, who taught in Alexandria, founded the study of geometry with his mathematical treatise The Elements.In one of the tombs at Aigai, the so-called tomb of Persephone, archaeologists uncovered a wall painting showing Hades' abduction of Persephone to the underworld. It's one of few existing depictions of mystic views of the afterlife from this period of Greek history.

20.10 Conclusion

Thus, the decline of the older Hellenistic Greek world lay the path of the rise of the new power of Macedonia. The rise of Macedon, however chiefly stood on the strength of its efficient military war machine and territorial expansion. Culturally or economically it still lagged behind than those of the ancient Greek city states of

Athens or Thebes. The architect of this rapid expansion was chiefly King Philip II of Macedonia, the father of Alexander the Great. But however it is also clear that Philip's or Macedonia's ambition was not chiefly to become the supreme dictator or conqueror of whole Greece, but rather to form a unifying force of the entire Hellenistic world.

20.11 Model Questions

1) What were the factors behind the decline of the older Hellenistic city states? How did it facilitated the rise of the newer ones ?
2) How did the accession of King Philip II laid the foundation stone for Macedonian rise?
3) What made the confrontation between Macedon & Athens inevitable?
4) Describe the course of Early confrontation between Macedonia & Athens including the conquest of Thessaly.
5) What were the causes & impact of the Sacred Wars?
6) Write a short note on The Battle of Chaeronea.
7) How & why was the League of Corinth established?

20.12 Suggested Readings

Bury, J.B., A History of Greece to the Death of Alexander the Great, (London : McMilan & Co. Ltd., 1900)

Green, Peter, The Greco-Persian Wars, (London : University of California Press, 1996)

Stobart, J.C., The Glory that was Greece, (London : Sidgwick & Jackson, 1971)

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