

# **Meaning, Scope and Development of Anthropology**

**Lecture 3, 4 & 5**

**By Dr. Huma Hassan**



## 1.1 Meaning, Scope & Development of Anthropology



## 1.2 Relationship with other Disciplines



## 1.3 Main branches of Anthropology



# Syllabus

1.1 Meaning, Scope and development of Anthropology.

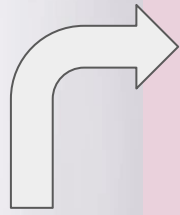
1.2 Relationships with other disciplines : Social Sciences, behavioral Sciences, Life Sciences, Medical Sciences, Earth Sciences and Humanities.

1.3 Main branches of Anthropology, their scope and relevance:

- (a) Social-cultural Anthropology.
- (b) Biological Anthropology.
- (c) Archaeological Anthropology.
- (d) Linguistic Anthropology.

# Objectives of 1.1, 1.2 and 1.3

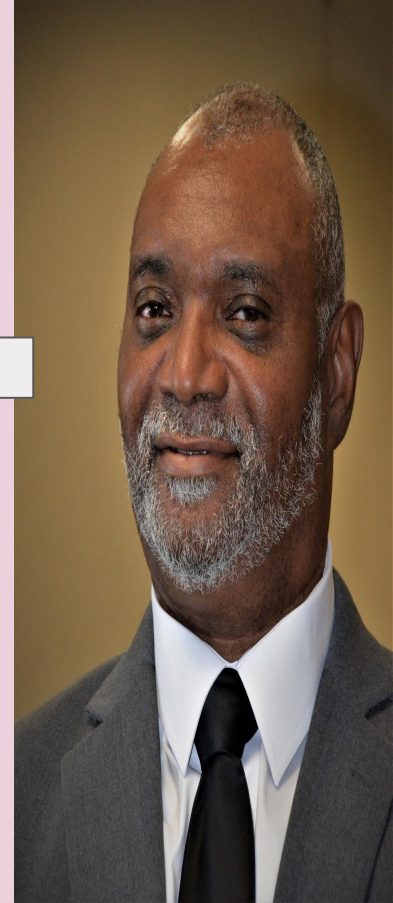
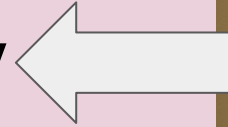
- Define anthropology and describe its basic concerns and subject matter
- Describe the different subfields of anthropology
- Explain how and why sociocultural anthropology as a science emerged
- Appreciate the contributions and applications of anthropology in personal and professional lives and
- Compare and contrast anthropology with other related behavioral or social sciences.



**What Anthropology study?**



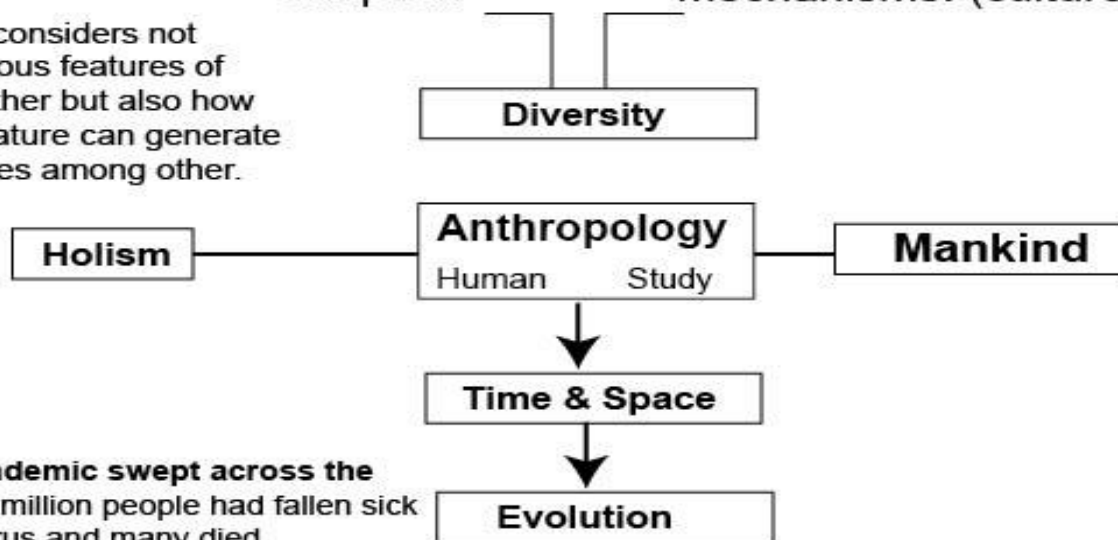
**Why Anthropology Study**



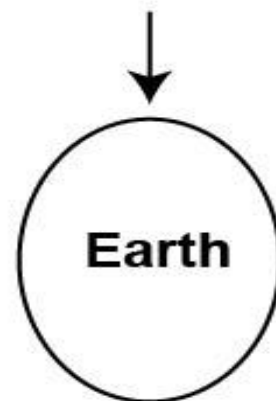
Holistic analysis considers not only how the various features of culture hold together but also how change in one feature can generate cascading changes among other.

Biological  
adaption

Non-biological adaptive  
mechanisms. (culture)



Human beings  
considered collectively  
called the human race.



**Example-**

**The covid-19 pandemic swept across the globe-** Dozens of million people had fallen sick with the corona virus and many died

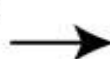
**Medical Researcher-** studying long term effects on the lungs of brains - Psychological effect

**Economic impact**

- Racial violence
- some Americans blame China for the outbreak pandemic

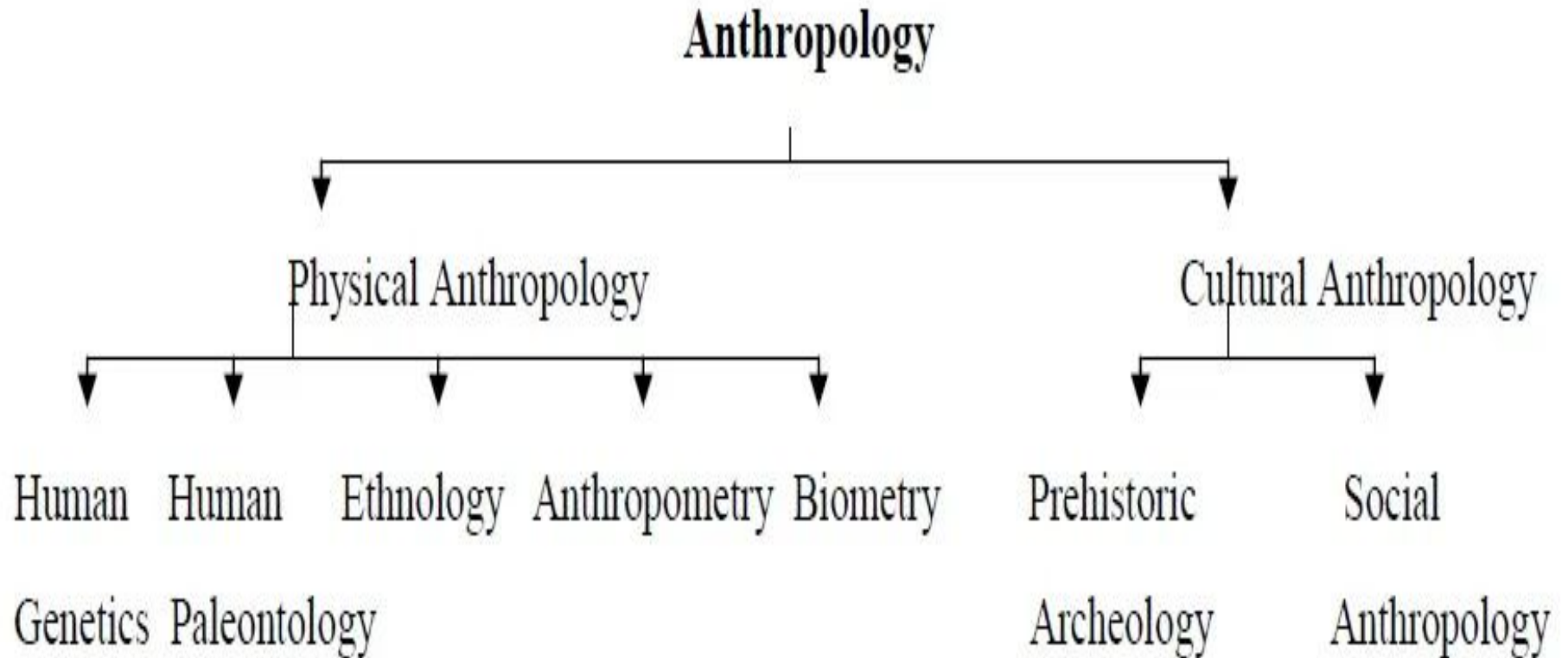
**Positive consequences**

- air quality
- stars visible
- Quality time with family



How did virus caused  
such changes.

# 1.1 Meaning, scope and development of Anthropology.



Time and Space

Anthropology

Holism

Mankind

Diversity

Teaches

- Non biasness
- Full experience of humanity
- Makes us uncomfortable.

- Science of humanity
- Homo sapiens
- Distinguished from other species

Social

Biological

- Cultural
- Linguistic
- Values
- Beliefs
- Customs

- Variations
- Genes
- Adaptation
- Health, diseases
- Nutrition and Health

# Definitions

“Anthropology is the science of man”

**- A L Kroeber**

“Anthropology is the study of man and his works”

**- Melville J Herskovits**

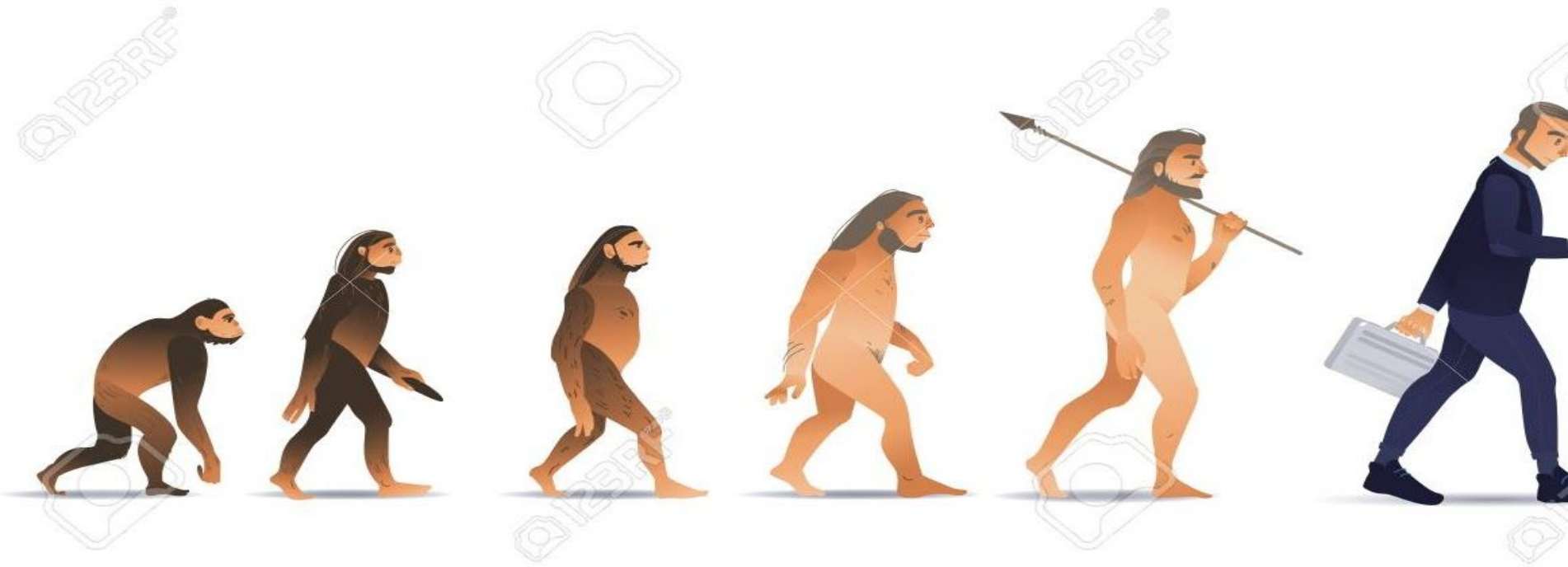
“Out of all the sciences which study various aspects of man, anthropology is the one which comes nearest to the total study of man”

**– Clyde Kluckhohn**

“Anthropology is the scientific study of the physical, social and cultural development and behaviour of human being since their appearance on earth”

**- M Jacob and B T Stern**

**PLUTUS IAS**



**Evolution of Human species- Charles Darwin**

**PLUTUS IAS**

# Meaning of Anthropology

The term anthropology is a combination of two words derived from **Greek** language: **anthropos and logos**. The term anthropos is equivalent to the word mankind or human being, while logos means study or science.

So putting the two words together, anthropology is the study or science of mankind or humanity. The following are two important, simple, definitions of anthropology:

- **Anthropology is the study of humanity.**
- **Anthropology is a broad scientific discipline dedicated to the comparative study of humans as a group, from its first appearance on earth to its present stage of development.**

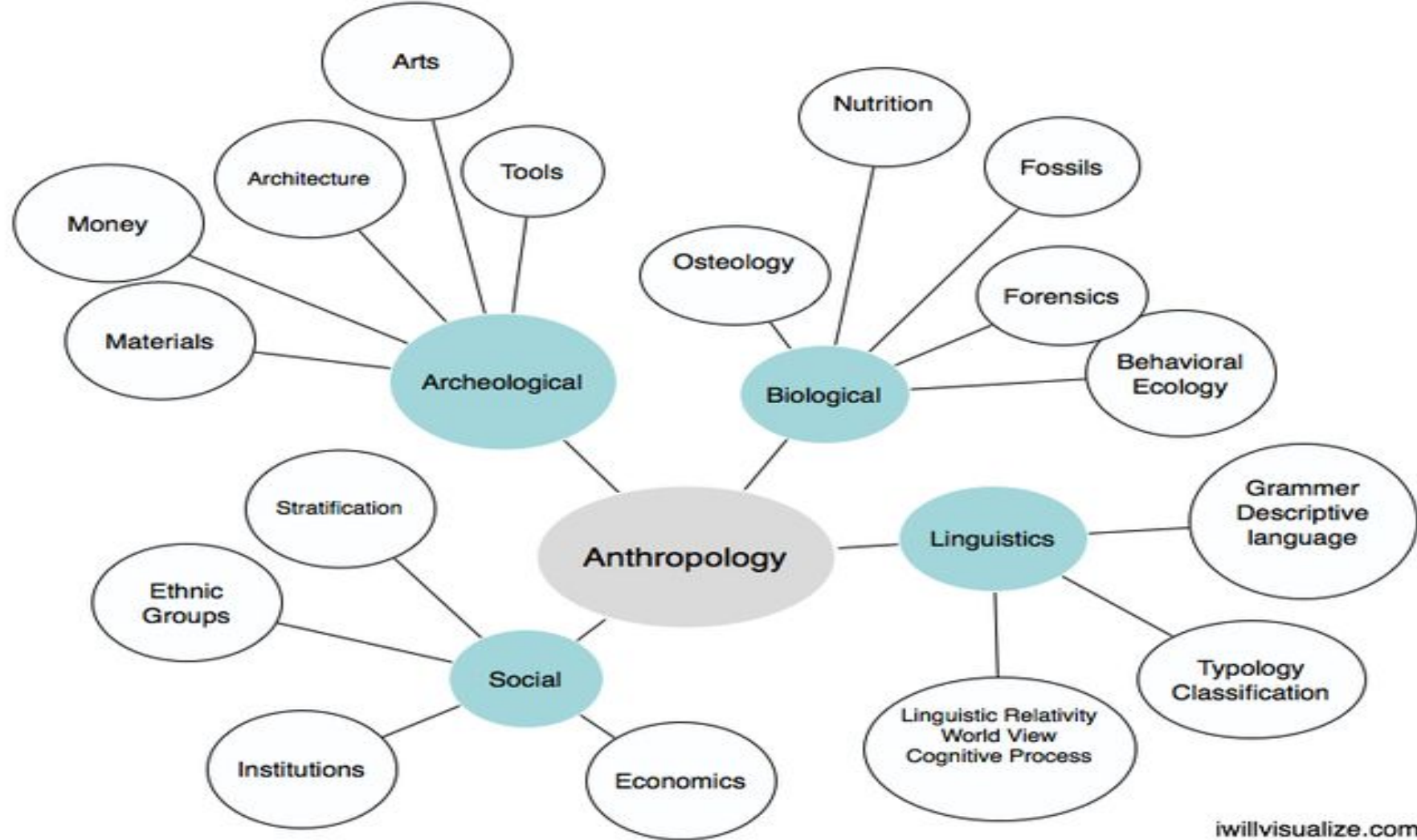
# What is Anthropology?

- Anthropology is the study of mankind or human kind.
- The term Anthropology comes from the Greek word *Anthropos* which means “man or human” and *logos* which means “the study of.”



**Anthropology is the study or science of mankind or humanity**





# Why do we study



- In a more specific term, **anthropology is science** which:
- Investigates the **strategies for living that are learned and shared by people** as members of human social groups;
- Examines the **characteristics that human beings** share as members of one species (homo sapiens) and the **diverse ways** that people live in different environments;

- Analyzes the products of social groups: material objects **(tools, cloths, houses, etc)** and non material creations **(beliefs, values, practices, institutions, etc)**.
- It should further be stressed that anthropology focuses on **(1) the origin of humans, (2) the evolutionary development of humans, (3) human physical, bio chemical and cultural variations, and (4) the material possessions and cultural heritages of humans.**

- Anthropology seeks to explain how and why people are **both similar and different** through examination of our biological and cultural past and comparative study of contemporary human societies
- Anthropology's ultimate goal is to develop an **integrated picture of humankind**—a goal that encompasses an almost infinite number of questions about all aspects of our existence.
- We ask, for example, what makes us human? Why do some groups of people tend to be tall and lanky, while others tend to be short and stocky? Why do some groups of people practice agriculture, while others hunt for a living? Anthropologists are interested in all things human.

- Anthropology has a strong affinity with natural sciences as well. In fact, anthropology is well known by that aspect of it which is mainly concerned with **the biological/ physical dimensions of mankind** as a biological being in group context.
- Hence, it may be inappropriate to say that anthropology is only a social science. It is also a natural science, not in the sense that it deals with the natural phenomenon or man as an individual entity per se, but in the sense that one of its main interests is to **study man and man's behavior as a product of the natural processes, and in the context of the animal kingdom** (Scupin and DeCorse, 1995).

# Four Misconceptions about anthropology

1. Anthropology is limited to the study of "primitive" societies.
2. Anthropologists only study the rural people and rural areas.
3. Anthropologists are only interested in the study of far away, remote exotic communities living isolated from the influences of modernization.
4. Anthropology wants to keep and preserve primitive, defunct cultural practices in museums and anthropologists are advocates of defunct, obsolete culture.

# So what is Anthropology ?



- You may be thinking, **If anthropology is the human aspect of absolutely everything**, then does anthropology encompass the other social disciplines, such as political science, religious studies, and economics?
- This is not the case. Certainly, anthropologists are frequently multidisciplinary, meaning that while their research and teaching are focused within the discipline of anthropology, they also engage with other disciplines and work with researchers and teachers in other fields.
- But the way that scholars in the other **social disciplines approach their subject matter is different from the way anthropologists approach those same subjects.**

- The distinctive approach of anthropology relies on a central narrative, or **story, about humanity** as well as a set of scholarly commitments.
- This central story and these common commitments hold the discipline together, enabling anthropologists to combine insights from **diverse fields into one complex portrait of what it means to be human.**
- Anthropology is everything, but it's not just anything. Anthropology is the study of humanity guided by a distinctive narrative and set of commitments.

- The narrative of anthropology is a true story, a factual narrative about the origins and development of humanity as well as our contemporary ways of life.
- The central narrative of anthropology can be summarized this way.
- Human beings have developed flexible biological and social features that have worked together in a wide variety of environmental and historical conditions to produce a diversity of cultures.

# Scope of Anthropology

- **The subject matter of anthropology is very vast.** The subject covers all aspects of human ways of life and culture, as humans live in a social group relationship. Discovering the meaning, nature, origin, and destiny of humanity is one of the key concerns of anthropology.
- According to the present stage of scientific knowledge attained in anthropology, the term humanity or mankind is a very difficult term to define. Anthropologists seem to be unsure whether humanity is absolutely dichotomous with other lower forms of animals. Some may even tend to regard humanity and non-humanity as something that is best understood in the form of continuum.

- This sense of continuum may be particularly in terms of time scale. Thus, the farther we go in time backwards, the narrower becomes the difference between humanity and non humanity.
- It has now become a generally accepted fact in anthropology, although no full evidences are forthcoming, that humanity is a product of the evolutionary processes, and that humans have evolved from their closest living primates (Bryan, 1997; Behe, 1996).

# **Anthropology is interested in some of the following questions and issues about humans:**

- Where did human species come from (i.e. what are the origins of mankind)?
- Were human beings created in the image and likeness of God, or were they just the products of millions of years of the natural, evolutionary process?
- In what ways does man differ from other animal species?
- How did mankind arrive at the present stage of biological, intellectual, and cultural development?

- Is there a common human nature, and if so, what is it like?
- In what ways do humans who live in various times and places differ?
- How can we explain why cultures vary? Such and many other related questions are the concerns of anthropology.

- Anthropologists try to know and explain about the technological, economic, political and intellectual development of humanity.
- They attempt to discover the extent to which different human populations vary in their biological and social characteristics and to understand why these differences exist.

- Case Study: Anthropologists are, for example, interested to know and explain why a pregnant woman in **Gumuz** goes to a bush to give birth during labor, how the **Nuer practice** birth control methods and why they put horizontal line marks on their forehead, or why the Wolayta put a circular body mark on their cheek while the Tigreans put a cross mark on their foreheads, etc.

- Although anthropologists investigate **the distinctive features of different cultures**, they also study the **fundamental similarities** among people throughout the world (Scupin and De Corse, 1995).
- They try to find out what factors account for the similarities in certain beliefs, practices and institutions that are found across cultures.

## **Important**

- They grapple with explaining why cultural universals exist. Are these cultural similarities results of diffusion (i.e., a certain material culture or non-material culture created in a certain society diffuses to other societies through contact, war, trade, etc)?
- Or are they due to independent creation (i.e., certain cultural items created by two or more societies without one copying from the other)? Anthropologists have debated taking different sides while attempting to answer these questions.

# **Distinguishing Features of Anthropology**

We may identify five distinguishing marks of anthropology:

# Its Broad Scope

The main distinguishing characteristic of anthropology, the thing that makes it different from the many other fields that also include people as their subject matter is its broad scope.

A good way to emphasize this broad scope is to say that anthropologists are interested in all human beings, whether living or dead, "primitive" or "civilized" and that they are interested in many different aspects of humans, including their skin color, family lives, marriages, political systems, tools, personality types, and languages.

No place or time is too remote to escape the anthropologist's notice. No dimension of human kind, from genes to art styles, is outside the anthropologist's attention (Kottak, 1994, 2002; Howard and Dunaif-Hattis, 1992)

# Its Unique Approaches

- I. Anthropology is Holistic: Studying one aspect of the ways of life of a group of people by relating it to other complex related aspects of life.
- II. Anthropology is Relativistic: Anthropology tries to study and explain a certain belief, practice or institution of a group of people in its own context. It does not make value judgment, i.e., declaring that ‘this belief or practice is good’ or ‘that is bad.’
- III. Anthropology is Comparative: Anthropology studies certain aspects of the culture of a group of people by comparing it across societies and different times; i.e., the present with the past, the modern with the traditional, etc.

# Emphasis on Insiders' View:

Anthropologists focus on how the people themselves understand about their world, how a particular group of people explains about the world, etc.

This is what anthropologists call **emic perspective**.

## The Micro-focus:

This is another distinguishing mark of anthropology. Anthropology focuses on **small-scale society or community.**

The kinds of social groups or communities anthropologists study, whether they are in traditional or modern world, are usually small scaled in their social organization, economic and political structure, and tend to be homogenous in their overall character.

## **Its Method of Research:**

The hallmarks of anthropology are **qualitative research methods such as extended fieldwork, focus-group discussion, participant observation, in-depth and key informant interviews.**

Although these methods are now practiced in other behavioral sciences as well, no other discipline seems to be so associated with and employs such methods as anthropologists.

# Distinguishing features of anthropology

1. Its broad scope
2. Its unique approaches: Holism, relativism and comparativism
3. Emphasis on insider's view
4. The micro-focus
5. Its methods of research: emphasis on extended field work

- A strives to understand the humankind in its totality.
- In this context, it not only describes and analyzes but also synthesizes knowledge on the biological, cultural, and social aspects of humankind in all places and in all times, in order to understand the totality in relation to its parts and the parts in relation to its totality and to derive certain generalizations about the biological, cultural and social behaviour of the humankind.

- The **scope of anthropology is universal.**
- It does not limit itself to any one group of people, it searches out the remains of human beings in pre-historic sites and it carries on held studies in primitive communities, peasant villages and in the urban settings of modern civilizations.

- **It does not confine to any particular period of human history,** it covers the human in prehistoric, proto-historic, present and future times.
- It does not confine to anyone portion of earth, it covers human beings in prehistoric landscapes, historic settings and contemporary arctic snows, desert wastes, temperate prairies and woodlands.
- So, anthropology studies human beings right from their emergence till today and in future wherever they live anthropology is concerned with the extinct humans and living people.

- Subsequently, anthropologist investigation becomes special because of its role, it lies in the unique combination of holistic, historical and comparative methods.
- The holistic method involves the study of human beings or groups of human beings in terms of the entire pattern of their lives.
- Thus, even when anthropologists specialize in particular fields such as biology, social relations, economic or art, they tend to consider those fields in terms of their relationships to all other aspect of humanity and human endeavor.

- The basic propositions underlying holism in anthropology is that human behaviour arises out of complex interactions taking place within cultural system.
- The historical method in anthropology involves both the attempt to describe the entire course of human biological and cultural evolution and the attempt to place each way of life in an historical perspective.

- Thus, archeology and ethno history attempt to reconstruct the origins, development and inter-relationships among the various peoples on the earth whereas cultural anthropology interprets the culture of existing in terms of historical influences on their present ways of life and on their probable future development.
- **Comparative methods** are used as a means of explaining the similarities and differences among the various peoples of the earth.

## Why Comparative Method

- Comparative methods can be used in a way to construct explanations of variations within single political units or among closely related peoples.
- They can also be used in comparative studies designed to test broad, general propositions and theories concerning the nature of human beings and the cultures they construct.
- The comparative study of the human species centers its attention upon the differences and similarities that separate and unite the people of the earth.
- It attempts to define and isolate laws and principles that accounts for the development and perpetuation of such differences and similarities.

## Summary

- Anthropological explanations are not limited to any particular group of human beings or to any single period of history
- Anthropologist is as interested in the earliest forms of humanity as in contemporary forms.
- The biological evolution of human ways of life are studied from the earliest times for which any records survives to present.
- In studying the contemporary humanity, an anthropologist is interested in small distant human populations as in those that are large and close.
- Solutions to such problems require intensive study and comparison of many kind of human beings and human cultures.
- The world of today and the fragmentary remains of its past are the source of data for anthropological research.

## **Thus the scope of anthropology examines;**

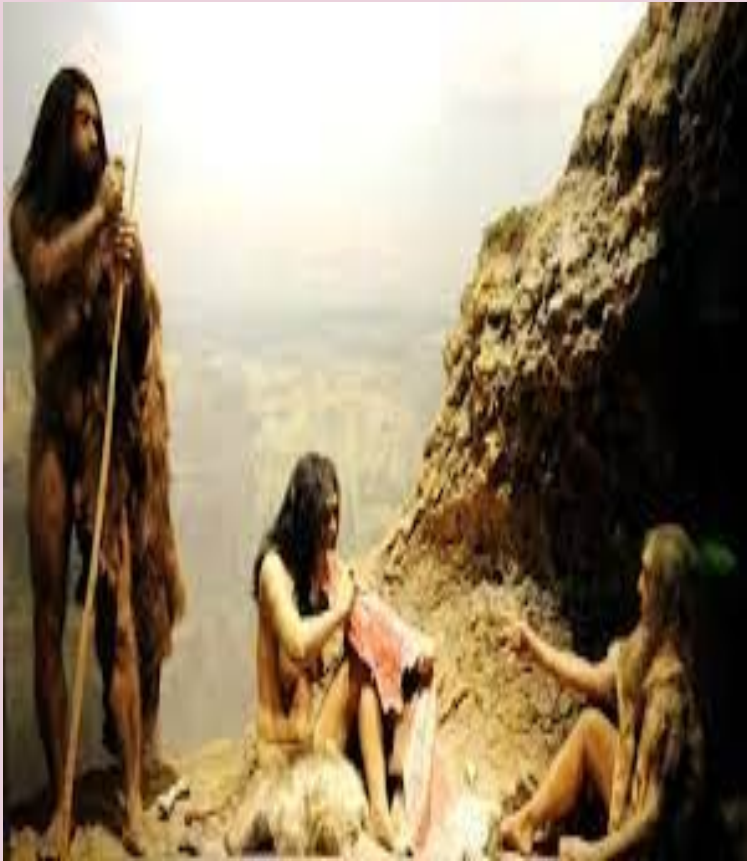
1. How humans are basically organisms.
2. How humans in order to transcend their animal origins have adapted themselves to their environment by creating culture and organising group life
3. How humans while creating culture and groups life, have evolved and used language as an effective means of communications
4. How humans in their adaptations to diverse environment have created an amazing variety of cultures and groups life
5. How humans in their fascinating variety of cultures and group living display solutions to problems which are rooted in their indivisible unity in all places at all times.

- When the scope of anthropology examines how humans are basically organisms, it treats human beings as a part of the living world.
- In this regard, **it describes, analyses, and interprets the origin, evolution, diversification and variation of human kind. This become the subject matter of biological anthropology or physical anthropology.**
- **When the scope of anthropology tries to answer how humans have transcend their animal origins by creating culture and group living in general and how humans have adapted to diverse environments by creating specific cultures and group living it examines the origins, evolution, diversification, structure, organisation, function, and dynamics of culture and society in space and time.**

- This become the subject matter of socio-cultural anthropology. There are several sub-divisions of Socio-cultural anthropology, each dealing with specific aspects of past or present social-cultural life.
- **Therefore, the scope of anthropology is dealing with the unity and diversity of humankind, it tries to know the universal, general and specific regularities governing the biological, cultural, and social behavior of human beings in all places and all times.**

- Finally, when **the scope of anthropology is dealing with the unity and diversity of humankind**, it tries to know the universal, general and specific regularities governing the biological, cultural, and social behavior of human beings in all places and all times.
- While dealing with all these aspects of humankind all over the world in the **past, present and future**, anthropology arrives at the most in the past, present and future, anthropology arrives at the most complete understanding of humankind.
- Therefore, it is a whole “whole science”. Other disciplines study only one or two aspects of humankind. None of them studies all aspects of humankind. For this reason they are called “part sciences”.

# How Humans have transcend their Animal Origin?



# Early Human Culture

- Early humans found shelter in caves
- Drew pictures on the walls of their homes
- Buried their dead in graves, adding food, tools, pottery and flowers suggesting a belief in an afterlife



# Early Human Culture

- Early humans lived in small groups of adults and children
- Their main job was gathering foods to eat
- They hunted animals for meat
- They banded together for protection
- Nomadic - moved around looking for food



# Sociocultural Diversity

- As the narrative suggests, humans in a diversity of conditions create a diversity of cultures.
- Rather than trying to find out which way of life is better, morally superior, more efficient, or happier or to make any other sort of judgment call, anthropologists are **committed to describing and understanding the diversity of human ways of life.**

- Setting aside judgments, we can see that **humans everywhere create culture to meet their needs.**
- Anthropologists discover how different cultures devise different solutions to the challenges of human survival, social integration, and the search for meaning.

# Understanding How Societies Hold Together

- Frequently, **anthropologists discover that changes in one realm of society are related to changes in another realm in unexpected ways.**
- **When farmers in Ghana** began growing cocoa for export during the colonial period, the agricultural shift dramatically altered gender relations as men monopolized cash crops and women were relegated to vegetable farming for their families' consumption and local trade.
- As men benefited from the profits of the cocoa trade, relations between men and women became more unequal.

- As men benefited from the profits of the cocoa trade, relations between men and women became more unequal.
- Anthropologists have a favorite word for the way that all elements of human life interrelate to form distinctive cultures: holism.
- **Sometimes those parts reinforce one another, encouraging stability; sometimes they contradict one another, promoting change. Consider the caste system in India.**
- **Cultural anthropologist Susan Bayly describes how the beliefs and practices associated with caste in India have provided cultural integration and stability while also demonstrating a great deal of local variability and working as a force of social change**

- Anthropologists are curious about how different cultures create **different categories of people** and use those categories to organize the activities of social life.
- In many farming societies, for instance, men do certain kinds of agricultural work and women do others.
- In societies where land must be cleared in order to sow crops, men often chop down trees and clear the brush while women do the planting.

# Evolution of Categories on the basis of division of labour



- In societies that utilize large-scale industrial farming, migrants or people of a specific ethnicity or assigned racial category are often recruited (or forced) to perform the manual labor required to grow and harvest crops.

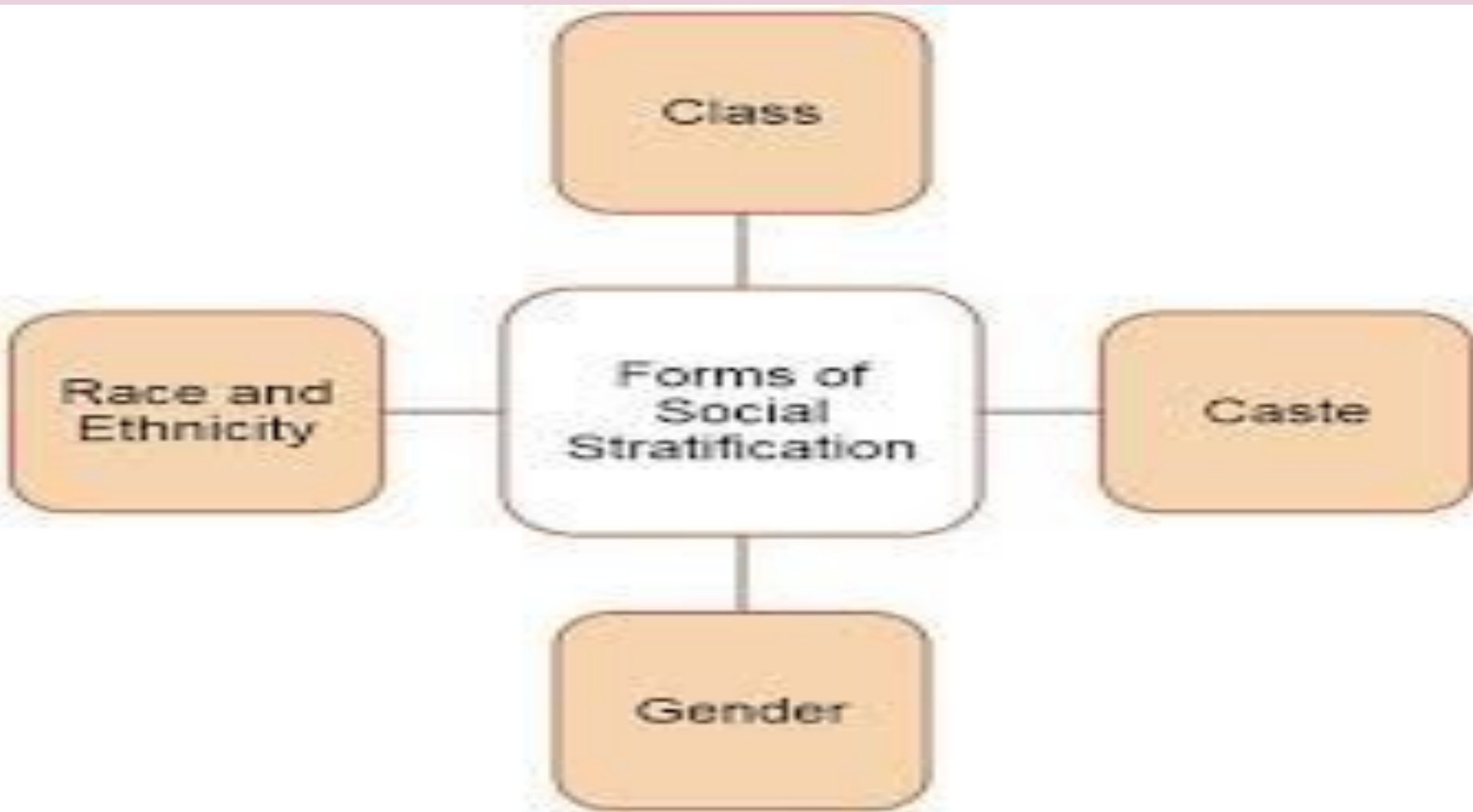
Class

Race and  
Ethnicity

Forms of  
Social  
Stratification

Caste

Gender



- In industrial **capitalist societies**, one group of **people owns the factories** and **another group works** the machines that produce the industrial products.
- Relations between groups can be cooperative, competitive, or combative. **Some cultures promote the equality of social groups, while many others reinforce inequality among groups.**
- **Holism is not the same as harmony. Anthropologists are interested in how society holds together but also in the conditions that can cause conflict, change, and disintegration.**

- You may have heard the word **polarized** used to describe the sense that two different groups in any society are moving farther and farther apart in their values, opinions, and desires.
- Some suggest that the contradictory perspectives of these two groups threaten to tear society apart.
- Others suggest that society are united by deeper values such as freedom, equal opportunity, and democracy.



# Polarization

- Using holism to understand this issue, an anthropologist might consider how the perspectives of each group relate to that group's economic experiences, political convictions, and/or religious or moral values.
- A comprehensive use of holism would explore all of these aspects of society, looking at how they interact to produce the polarization we see today and suggesting what might be done to bring the two groups into productive dialogue.

# **Anthropology and its relationship with other disciplines**

# Examining the Interdependence of Humans and Nature

- As our narrative suggests, **anthropologists are interested in the natural environment, the way humans have related to the natural world over time, and how this relationship shapes various cultures.**
- Anthropologists consider how people in different cultures understand and use the various elements of nature, including land, water, plants, animals, climate, and space. They show how people interact with these elements of nature in complex ways.

- **Archaeologists** working in prehistoric sites all over the world have documented how prehistoric people understood celestial objects and used them to navigate their waterways, create calendars and clocks, regulate farming activities, schedule religious ceremonies, and inform political leaders.
- This area of study is called archaeoastronomy.

- Some anthropologists study how people interact with the plants in their area.
- The field of **ethnobotany** examines how people in different cultures categorize and use plants for food, shelter, tools, transportation, art, and religion.

- Ethnobotanists also conduct research on plants used in healing to discover the relationship between cultural practices and the pharmaceutical properties of these plants.
- Some examine the cultural use of psychoactive plants such as mushrooms and peyote in religious ritual.
- For instance, anthropologist **Jamon Halvaksz studied the controversial use of marijuana among youth in New Guinea (2006).**

- Young people told Halvaksz that marijuana helped them work harder, overcome shame, and understand ancestral stories.
- Critics of the practice told Halvaksz that marijuana dried the blood of people who used it, making their offspring weak and feeble.
- Marijuana use has generated similar controversies in other countries, including the United States, with some arguing that the drug provides relaxation and pain relief while others claim it interferes with cognitive abilities and motivation.

- Our relationship with nature is reciprocal. Nature shapes humanity, and humanity shapes nature.
- Exploring how nature shapes humanity, anthropologists speculate about how aspects of the environment have shaped the emergence and development of human biology, such as our ability to walk, the shape of our teeth, and the size of our brains.
- Dramatic climactic shifts over the past several million years have forced periods of rapid biological and cultural adaptation, resulting in new hominin species and new skill sets such as language and toolmaking.

- In more recent archaeological time periods, **environmental characteristics** have shaped religious beliefs, gender relations, food-getting strategies, and political systems.
- Environmental forces can trigger the beginning or the end of a society.
- Some archaeologists study how natural events such as volcanic eruptions and droughts have led to mass migrations and the collapse of empires.

- Our reciprocal relationship with nature also works the other way around; that is, **humans shape nature.**
- Our environments are shaped by the food-getting methods of our societies as well as the way we acquire and trade resources **such as oil, natural gas, diamonds, and gold.**

- Many anthropologists explore how contemporary ways of life change the natural world at local, regional, and global levels. **Farming dramatically impacts ecosystems with the clearing of prairies, wetlands, and forests.**
- **Fishing can deplete certain species, changing the whole ecosystem of rivers and coastal waters.** Responding to population pressures, people construct dams to channel water to emergent cities.
- The redirection of water transforms regional ecosystems, turning wetlands into deserts and deserts into resource-hungry cities.

- Scholars use the term **Anthropocene** to describe the contemporary period of increasing **human impact on the ecosystems of our planet.**
- Large-scale pollution, mining, deforestation, ranching, and agriculture are causing dramatic environmental disruptions such as climate change and mass extinction of plant and animal species.
- Many anthropologists are studying these problems, focusing on how people are working locally, regionally, and globally to promote more sustainable ways of living in our natural world.

# **Development of Anthropology**

- Functional
- Structural
- Diffusion
- Personality
- Diffusion

Critical  
Period

- Travellers, Explorers,
- Inquisitive
- Culture Diversity

Formulatory  
Period

- Herodutus (484-425c)
- Protagoras
- Socrates
- Plato
- Aristotle
- Macro-polo
- Vasco-Da-gama
- Fracis Bacon
- Thomas Hobes
- Immanuel Kant
- William Harrey
- Carl Linnaeus
- Varrier Elwin
- John Russel
- Edgar Thurston
- William crook

## Development of Anthropology

- Bio-social evolution
- Darwin-Herbert Spencer
- Industrial Revolution
- Raw Material-Market
- Colonization
- Thus, institutionally,  
anthro-emerged out of  
natural history
- R.R. Marret- Anthropology  
is the child of Darwanism

Convergent  
Period

- Charles Lyell
- Charles Darwin
- Herbert Spencer
- Louis Pasteur
- Alexander Ivanovich Oparin
- John Burdon Sanderson Haldane
- Karl Marx
- Emile Durkheim
- Max Weber

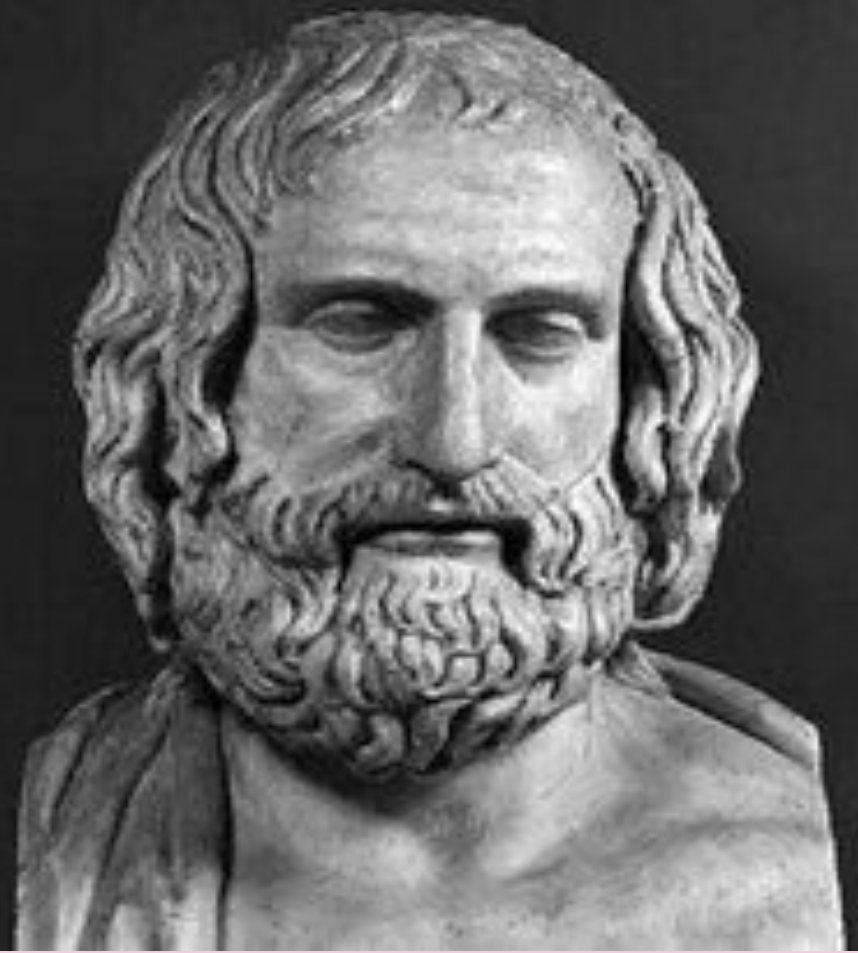
- Independent  
Discipline
- Sub-fields
- Branches of Anthro.

Constructive  
Period  
20th Century

- E B Tylor
- James Frager
- Henry Maine
- L.H. Morgan

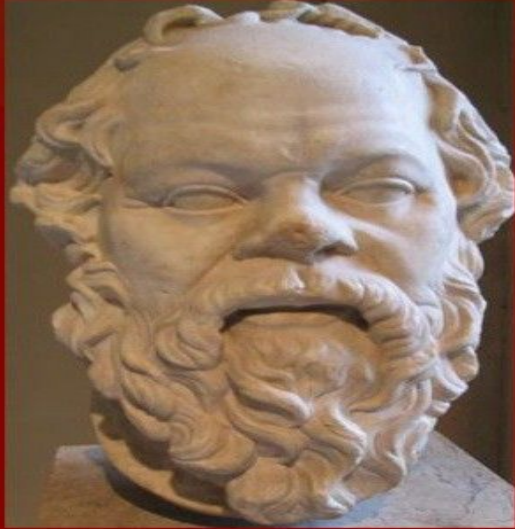


**Herodotus**

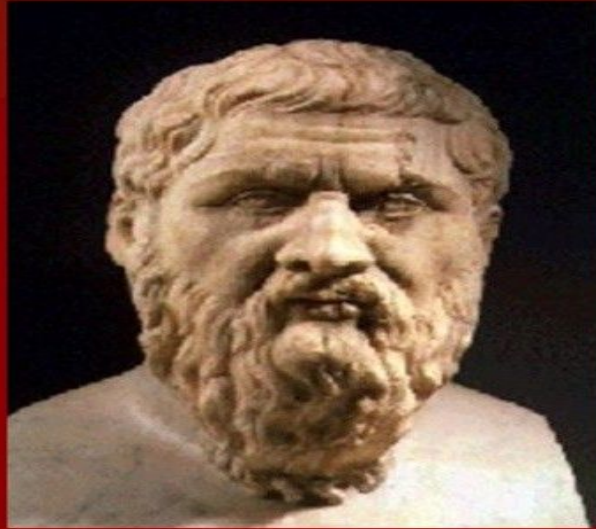


**Protagoras** PLUTUS IAS

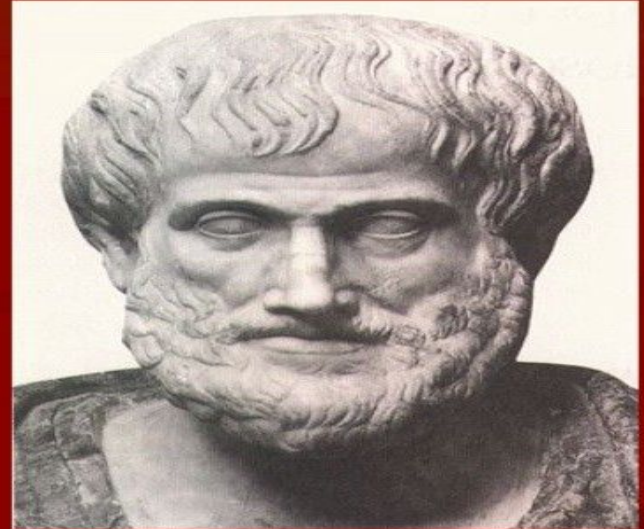
Socrates of Athens (l. c. 470/469-399 BCE) is among the most famous figures in world history for his **contributions to the development of ancient Greek philosophy which provided the foundation for all of Western Philosophy**. He is, in fact, known as the "Father of Western Philosophy" for this reason.



Socrates



Plato

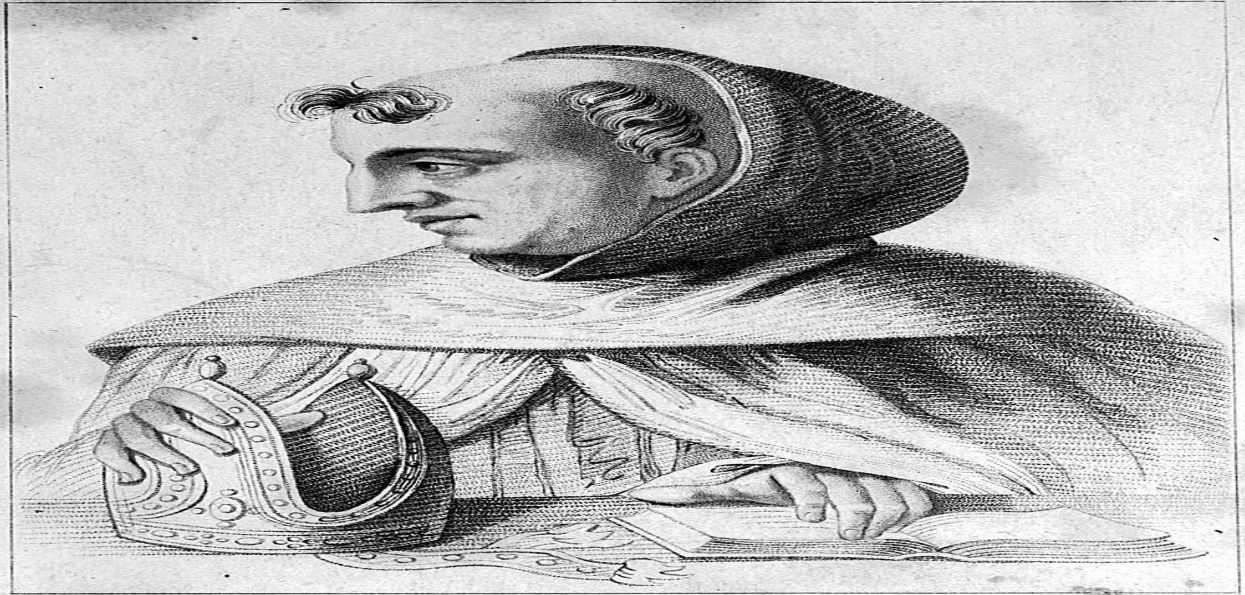


Aristotle

**Plato** was a Greek philosopher born in Athens during the Classical period in Ancient Greece, founder of the Platonist school of thought and the Academy ( First University). Plato's most famous work is **the Republic**, which details a wise society run by a philosopher. He is also famous for his dialogues (early, middle, and late), which showcase his metaphysical theory of forms—something else he is well known for. His most famous contribution is **the theory of Forms known by pure reason**, in which Plato presents a solution to the problem of universals known as Platonism (also ambiguously called either Platonic realism or Platonic idealism).

**Aristotle** was a Greek philosopher and polymath during the Classical period in Ancient Greece. Taught by Plato. Aristotle was **one of the greatest philosophers who ever lived and the first genuine scientist in history**. He made pioneering contributions to all fields of philosophy and science, he invented the field of formal logic, and he identified the various scientific disciplines and explored their relationships to each other. Aristotle's greatest impacts can be seen in his **creation of a logic system, established many fields of sciences, and creation of a philosophy system** which serves as one of the foundation works of philosophy even to this day. Aristotle was the first person to create and widely disseminate a system of logical thought. Aristotle's most famous student was **Philip II's son Alexander**, later to be known as Alexander the Great, a military genius who eventually conquered the entire Greek world as well as North Africa and the Middle East.

**Albertus Magnus** was a German Dominican Friar ( Order of Preachers). Albert was a scientist, philosopher, astrologer, theologian, spiritual writer, ecumenist, and diplomat. Under the auspices of Humbert of Romans, Albert molded the curriculum of studies for all Dominican students, introduced Aristotle to the classroom .



ALBERTUS MAGNUS.

*From a scarce Print.*

**Thomas Aquinas** was the greatest of the Scholastic philosophers. He produced a comprehensive synthesis of Christian theology and Aristotelian philosophy that influenced Roman Catholic doctrine for centuries and was adopted as the official philosophy of the church in 1917.



# Niccolò Machiavelli (1469—1527)



Machiavelli was a 16th century Florentine philosopher known primarily for his political ideas. His two most famous philosophical books, *The Prince* and the *Discourses on Livy*, were published after his death.

# Francis Bacon (22 January 1561 – 9 April 1626)



Francis Bacon was an English Renaissance statesman and philosopher, best known for his **promotion of the scientific method**

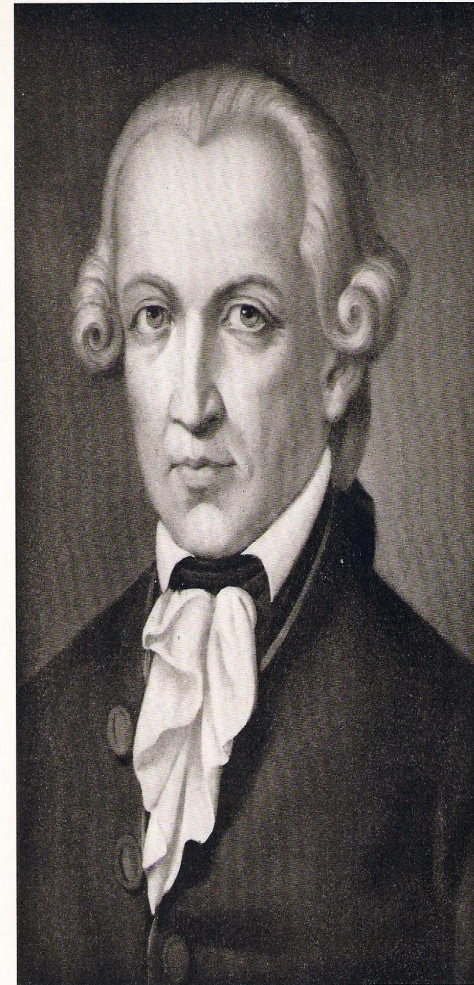
**PLUTUS IAS**

## **Renaissance brought changes in the Society**

Renaissance mounted its revolt against the reign of religion and therefore reacted against the church, against authority, against Scholasticism, and against Aristotle, there was a sudden blossoming of interest in problems centring on civil society, humankind, and nature. These three areas correspond exactly to the three dominant strands of Renaissance philosophy: **political philosophy, humanism, and the philosophy of nature.**

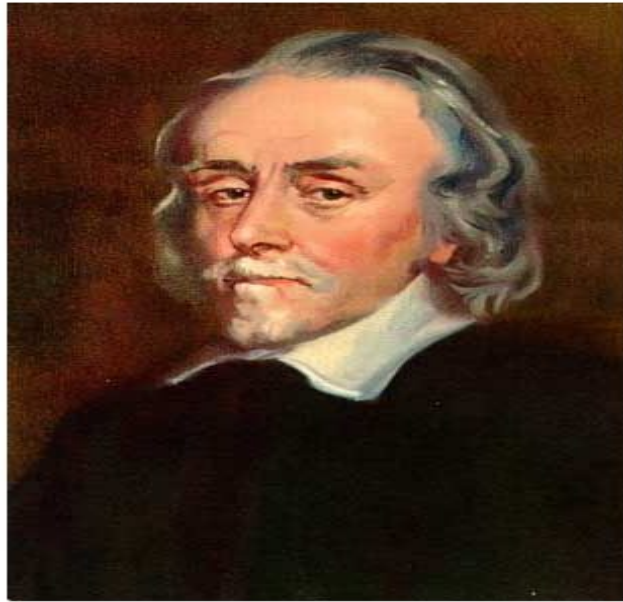
# Immanuel Kant (1724-1804)

- He is renowned German Philosopher in the history of Modern Philosophy.
- Kantian thought has influenced many philosophical movements
- Metaphysical Foundation of morals (1785) talks about **Categorical Imperative**
- **Kant** asserted that when confronted with a moral choice, people should ask themselves about the rationality their actions.

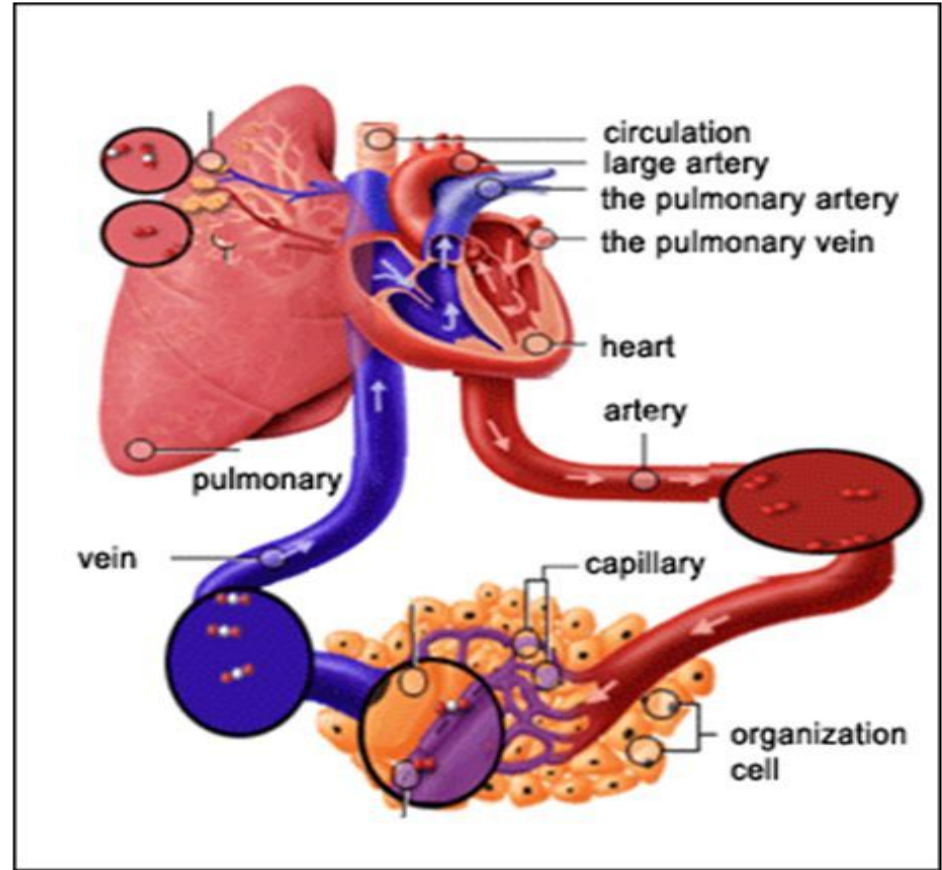


IMMANUEL KANT  
*From a painting*

The works of **Albertus Magnus**, **St. Thomas Aquinas**, **St. Bonaventure**, and **John Duns Scotus** had been basically unrelated to the countries of their birth; but the philosophy of **Niccolò Machiavelli** (1469–1527) was directly related to Italian experience, and that of **Francis Bacon** (1561–1626) was English to the core, as was that of **Thomas Hobbes** (1588–1679) in the early modern period. Likewise, the thought of **René Descartes** (1596–1650) set the standard and tone of intellectual life in France for 200 years.

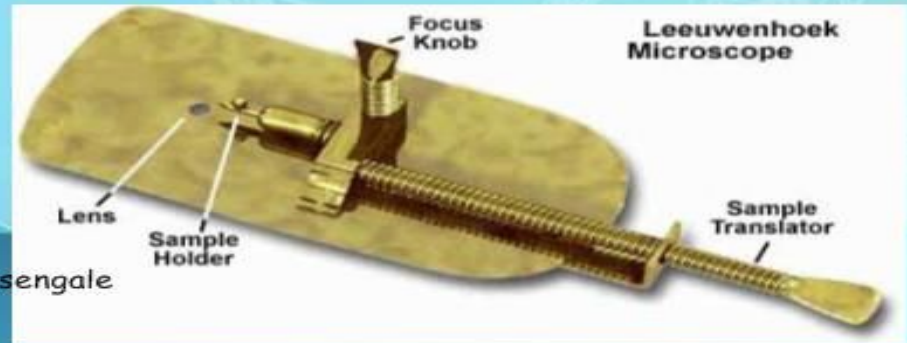


- In biology, William Harvey (1578-1657) accurately demonstrated how blood circulates through the human body.

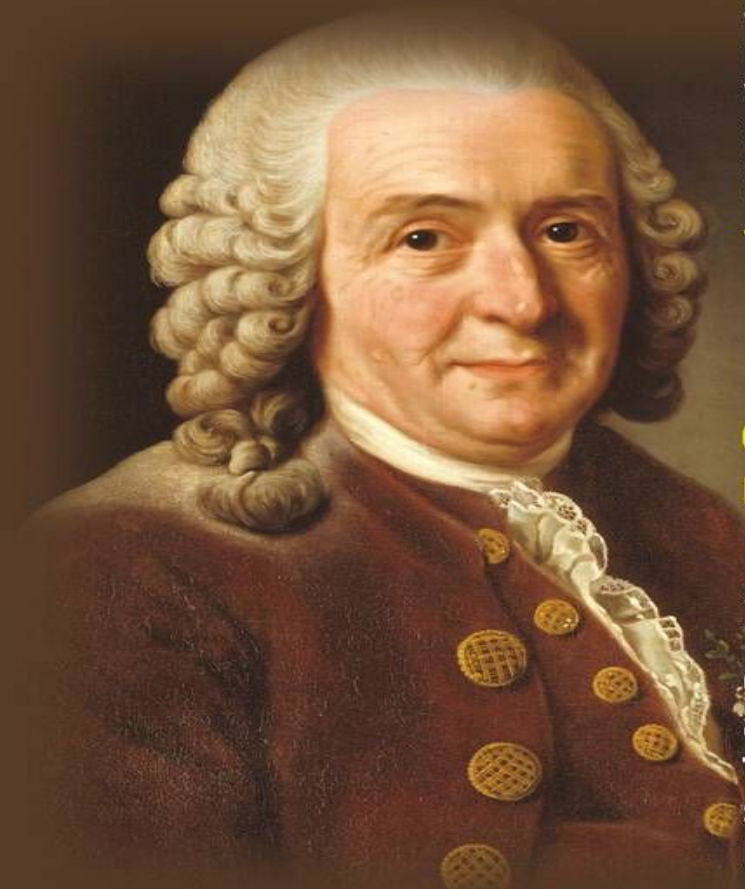


# Anton van Leeuwenhoek

- In 1673, Leeuwenhoek (a Dutch microscope maker), was first to view living cells (organisms)
- Leeuwenhoek used a simple, handheld microscope to view pond water and scrapings from his teeth



copyright cmassengale



Known as the **Father of Taxonomy**, he was a qualified physician and also went by the names Carl Linnaeus & Carolus Linnaeus

He also **campaign**ed to **promote breast-feeding of infants by mothers**, instead of employing wet nurses

## THE MAN WHO GAVE US **OUR NAMES**

**Carl von Linné**, creator of the binomial nomenclature, was born on May 23, 1707

His binomial system of nomenclature **classified plants & animals based on their genus and species**, which in use till today

He **inverted the temperature scale of Celsius**, who had marked  $0^{\circ}\text{C}$  as water's boiling point &  $100^{\circ}\text{C}$  as freezing point, for easy measurement



Thomas  
Malthus

*"The power of population is so superior to the power of the Earth to produce subsistence for man, that premature death must in some shape or other visit the human race."* —Thomas Malthus, 1798

*"If the present growth trends in world population, industrialization, pollution, food production, and resource depletion continue unchanged, the limits to growth on this planet will be reached sometime within the next 100 years."*

—The Club of Rome think tank, 1972

CHARLES DARWIN 1809 - 1882

# THE ORIGIN OF SPECIES

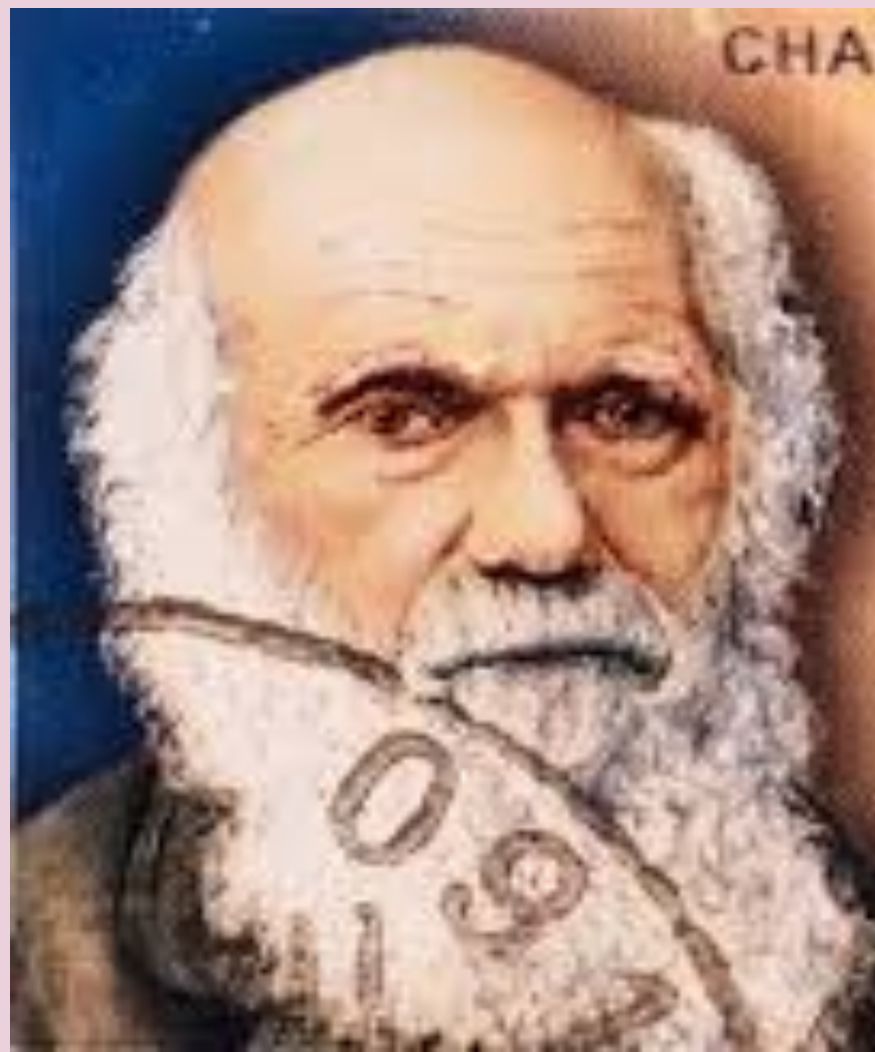
BY MEANS OF NATURAL SELECTION,

OR THE

PRESERVATION OF FAVOURABLE RACES IN THE STRUGGLE  
FOR LIFE.

By CHARLES DARWIN, F.R.S.

SECOND EDITION, WITH ADDITIONAL NOTES, BY THE AUTHOR.  
LONDON: LONGMANS, GREEN, & CO., 15, AVE MARIA LANE. 1882.



# 1. Formulatory period (before 1835) :

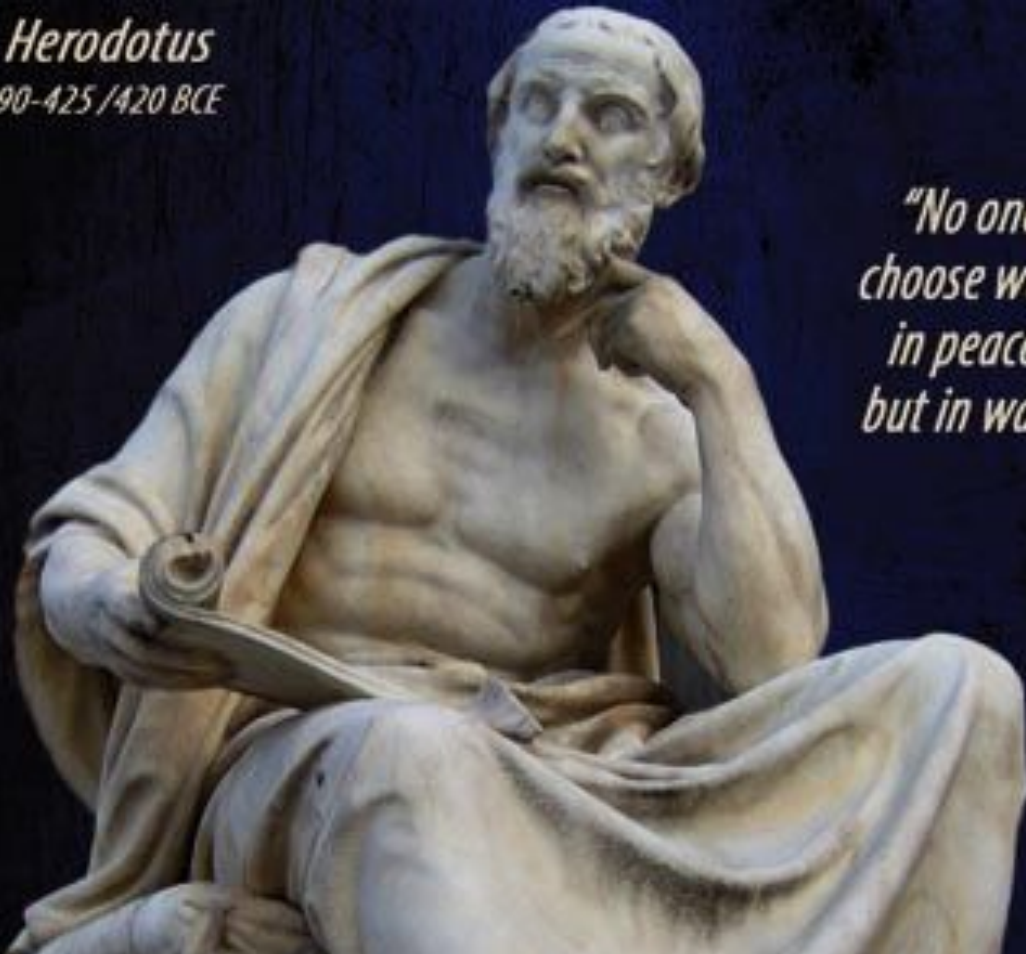
This is the first and longest period in the history of Anthropology.

It extends from the time of the Greek historians, philosophers and naturalists. Penniman considers **Herodotus** (484 - 425 BC) as the first anthropologist. He is also considered as the father of Greek Ethnography.

*Herodotus*

*490-425 / 420 BCE*

*"No one is fool enough to  
choose war instead of peace -  
in peace sons bury fathers,  
but in war fathers bury sons."*



He travelled throughout the world and researched about races and customs entirely alien to him. Herodotus asked some questions like the following:

Is the father natural head of the family or the mother?

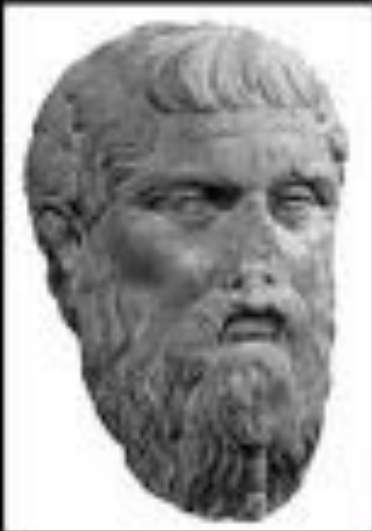
How much time must be allowed for the development and diffusion of human varieties?

Thus Herodotus collected a large number of facts about peoples in different cultural stages.

He not only talked about the origin of culture, but also described the spoken language, physical types, material culture, marriage and divorce, social laws customs etc.

**Protagoras** (480-410 BC), is another Greek philosopher who has contributed to the knowledge about human beings and culture.

In his opinion “man is the measure of all things”. He was the first to propose the theory of relativism.



# *Protagoras*

**Man is the measure of all things: of those that are that they are, and of those that aren't that they aren't.**

He also introduced the evolutionary scheme, which explains how different social traits come into existence.

Another Greek scholar of this period is **Socrates** (470-399 BC). He was of the opinion that every society is guided by certain universal values.

All men's souls are  
immortal, but the  
souls of the  
righteous are immortal  
and divine.

- *Socrates*



He mainly put forwarded the philosophical aspect of social thinking. **Plato** (428 – 348 BC), another Greek thinker proposed the ideas about state, marriage, education, etc.

According to him, humans outside social control, are but animals and it is really the society that makes the individual, a social being.

# *the* REPUBLIC

PLATO



MAPLE  
CLASSICS

Like Plato, Aristotle (384 – 322 BC) also proposed his view of the state and the humans. He had clearly understood the difference between functional and structural similarities.

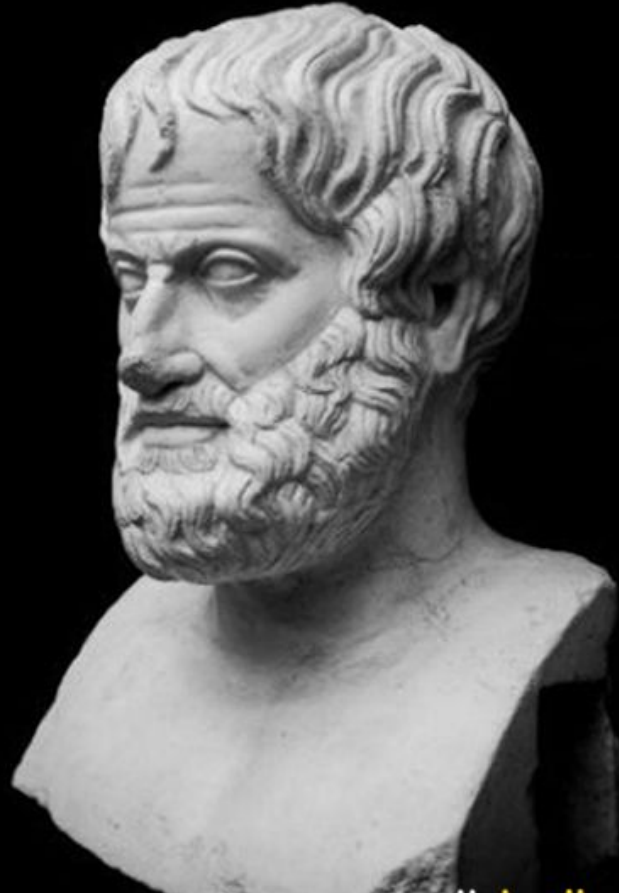
This is clear from the fact that he classified bats with the mammals and not with the birds and the whales with the mammals and not with the fishes.

**Aristotle** believed that the state determines the behaviour of humans.

Without law and justice, humans would be the worst of all animals and he also proposed that human being is a social animal.

**Education is an  
ornament in  
prosperity and a  
refuge in adversity.**

**- Aristotle**



In the medieval period, various travellers and explorers wrote details about the people they encountered.

Among these, **Marco-polo** (1224-1313) and **Vasco-Da-Gama** (1397-1499) contributed a lot towards the enrichment of knowledge on Anthropology.



# Vasco-Da-Gama



During the 17th century, **Francis Bacon** and **Thomas Hobbes** formulated different theories for the study of society.

John Lock provided the metaphysical foundation upon which the Anthropologist formulated their formal definition of culture.

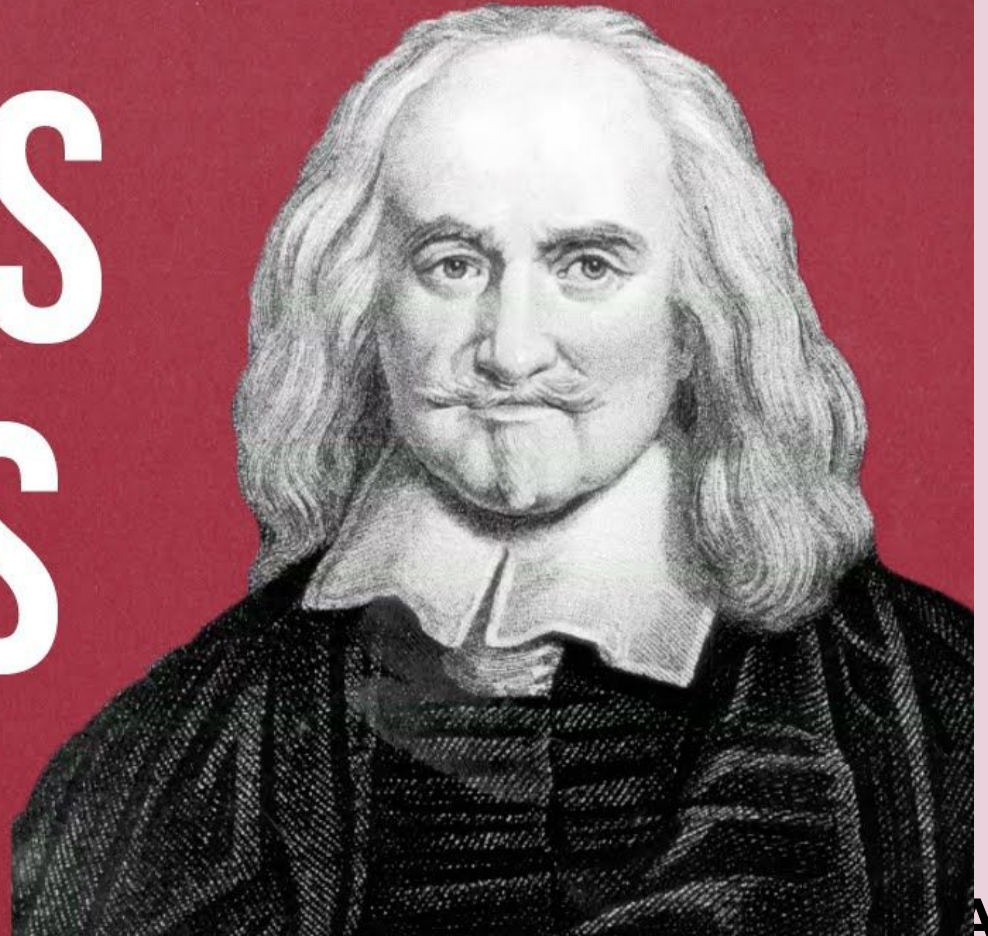
THE ART OF EXAMINATION

FRANCIS BACON



FRANCIS

# THOMAS HOBBES



German philosopher **Immanuel Kant** (1724-1804) wrote the book Anthropology in 1789 suggesting the animal origin of man and concluded that human knowledge comes from pre-human condition.

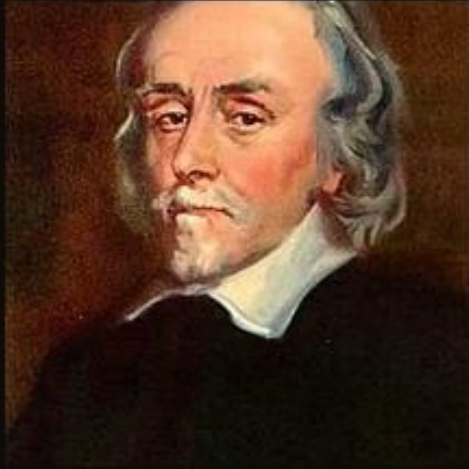


**Rules for happiness:**  
something to do,  
someone to love,  
something to hope for.

— *Immanuel Kant*

There was a lot of curiosity to learn about the different races of human kind during the 16th century.

Demonstration of blood circulation by **William Harvey** in 1628, and the discovery of microscope by Leeuwenhoek opened a new world of study.



Very many maintain that all we know is still infinitely less than all that still remains unknown.

~ William Harvey

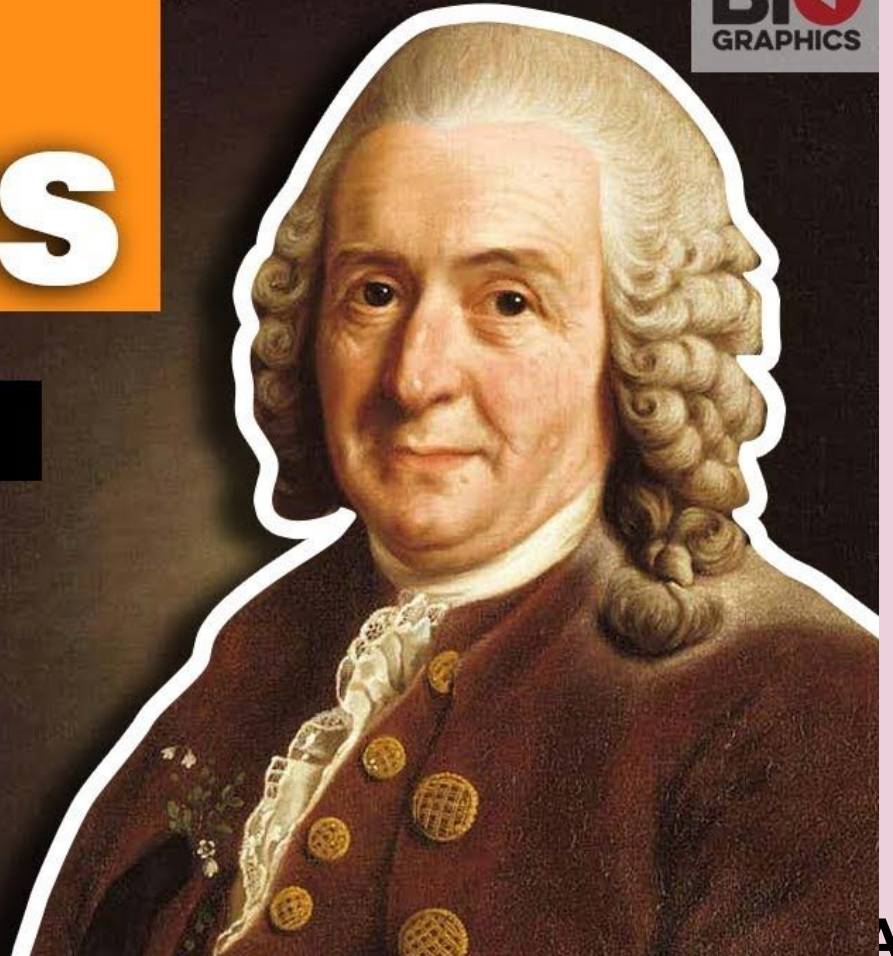
Vesalius had made an attempt to compare human being with ape. He also tried to dissect the human body.

In 1735, **Carl Linnaeus** published his book 'Systema Naturae' where in he has clearly mentioned about the inclusion of human in the Zoological classification.

# CARL LINNAEUS

THE FATHER OF  
TAXONOMY

BIO  
GRAPHICS

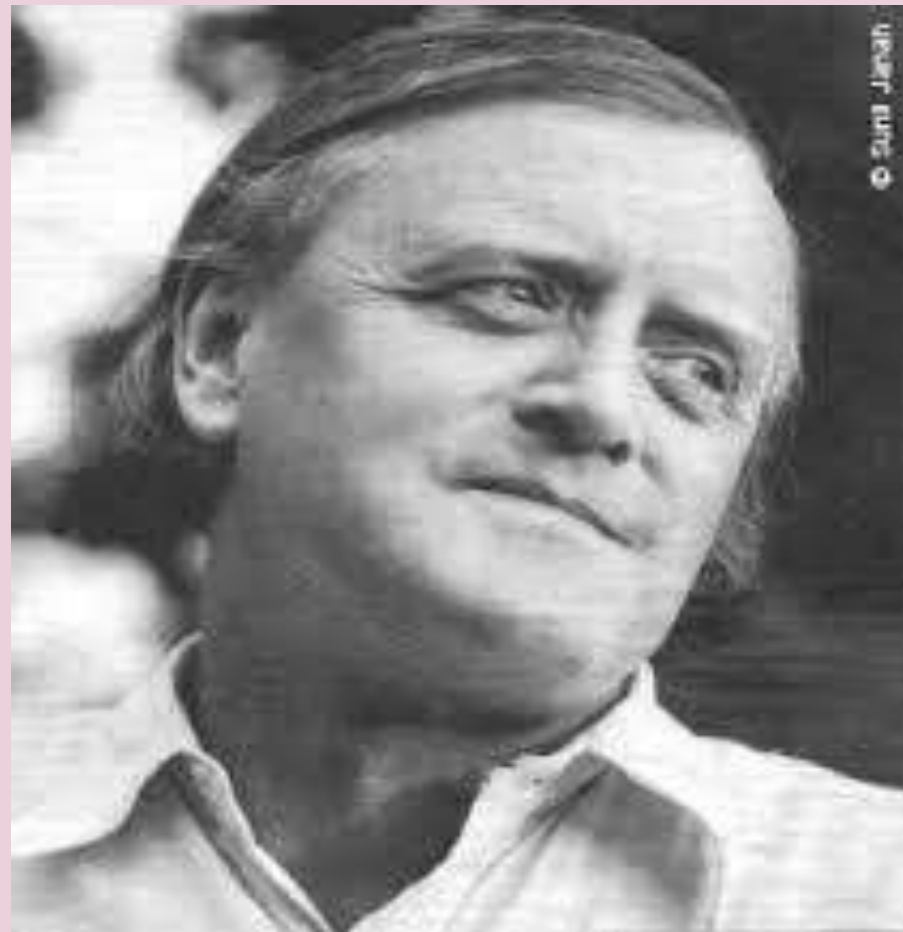


PHOTOGRAPH BY AS

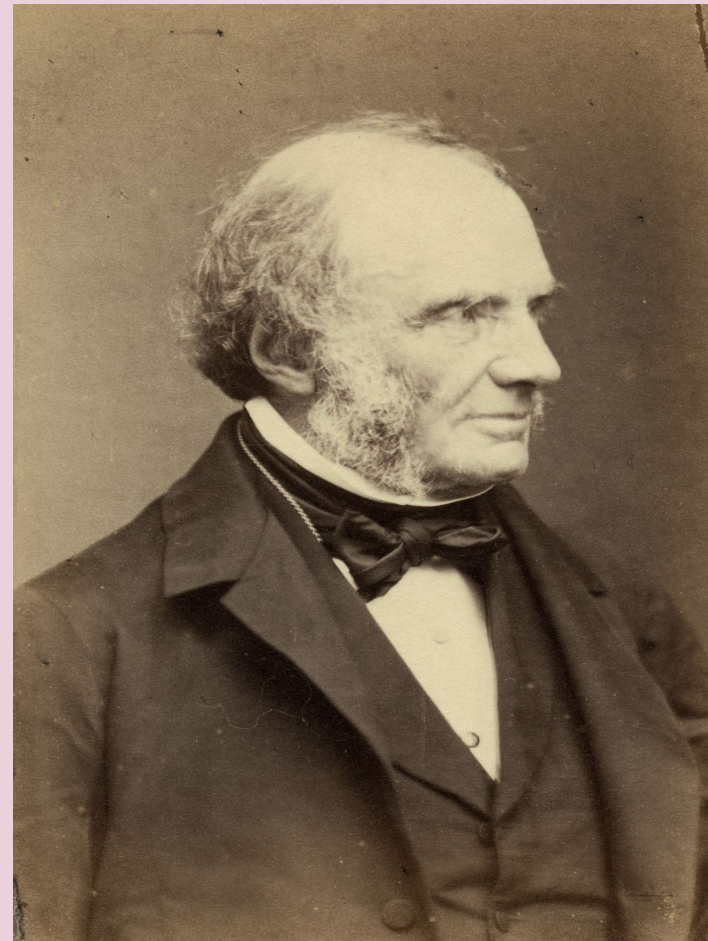
During 16th and 17th centuries, Christian missionaries travelled all around the world for the spread of Christian ideology and conversion of people into Christianity.

They studied the culture of native people to make their attempt of conversion easy.

**Verrier Elwin**



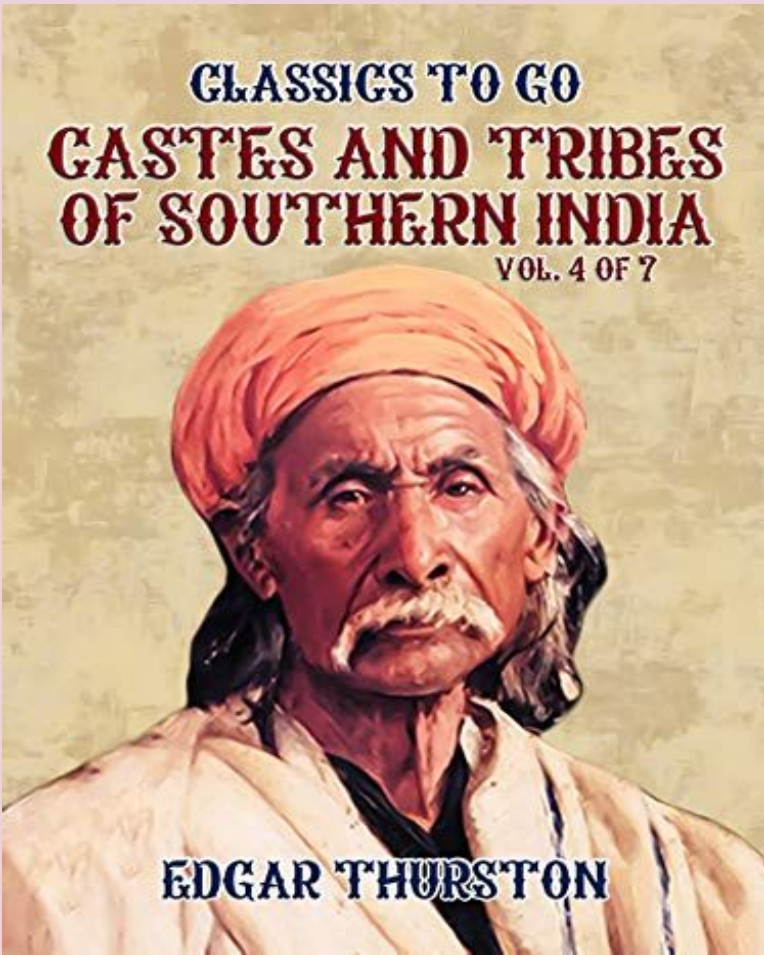
**John Russell**



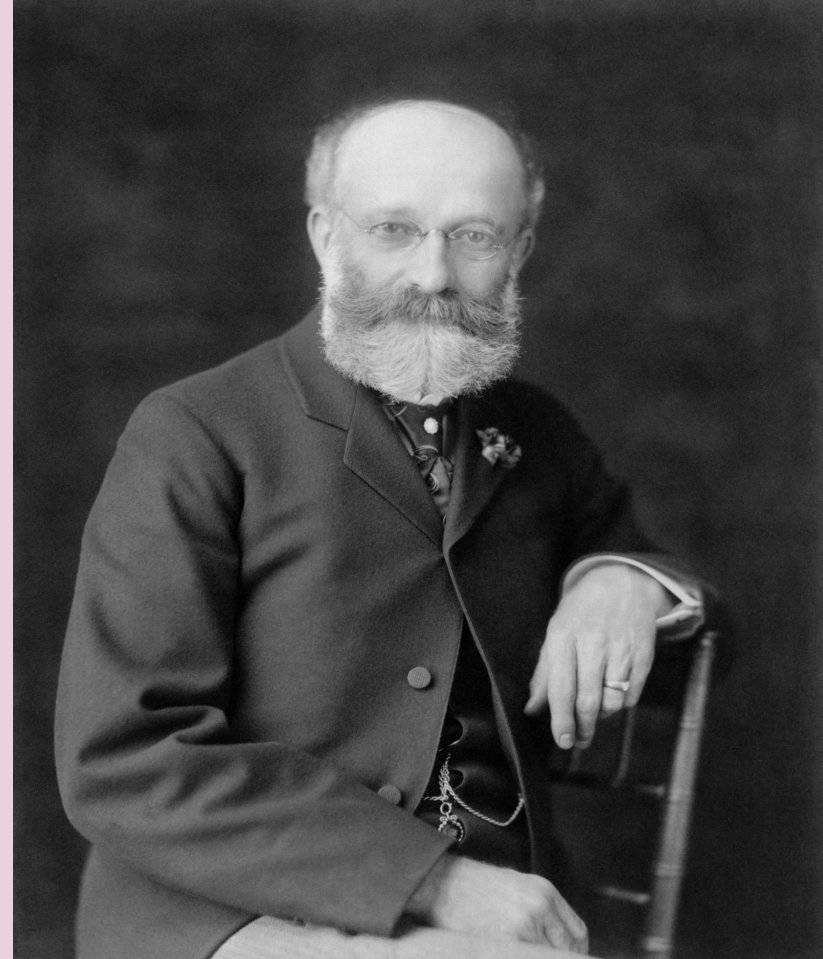
During the period of colonisation British administrators conducted many studies on native people to make their administration easy.

**Edgar Thurston**, (Castes and Tribes of India)  
**William Crook** (Tribes and Castes of the North Western Provinces) , **Verrier Elwin**, (Philosophy of NEFA) and **John Russel** made significant contributions in Anthropology by conducting various studies on the culture of different groups in India.

# Edgar Thurston



# William Crook



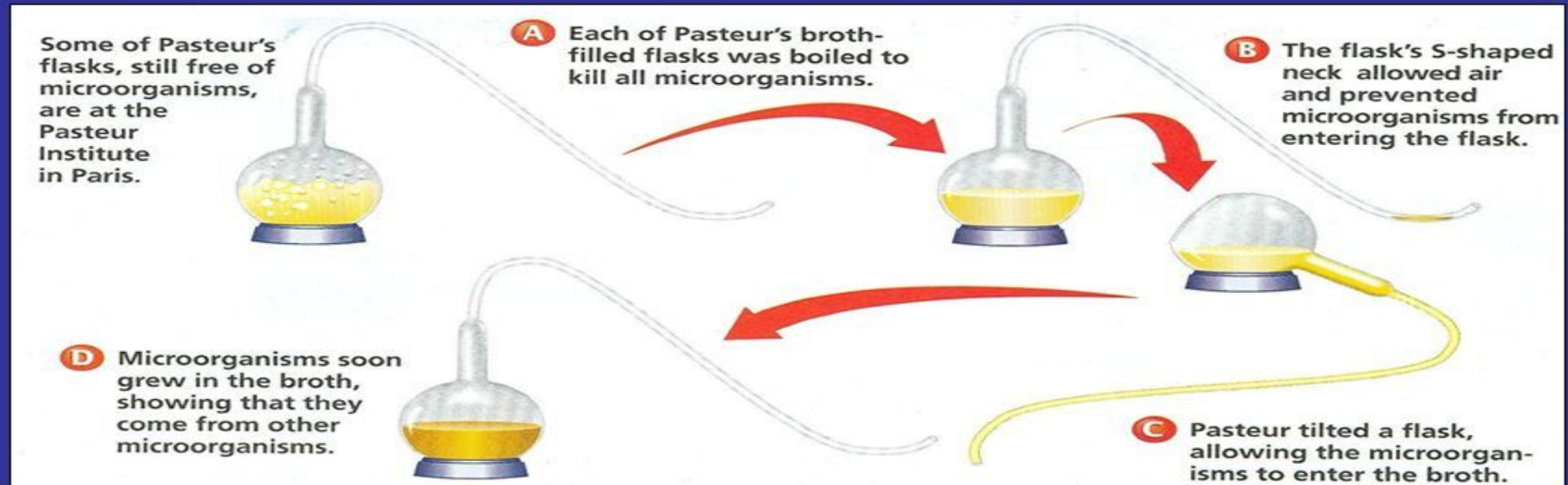
## 2. Convergent Period (1835-1859) :

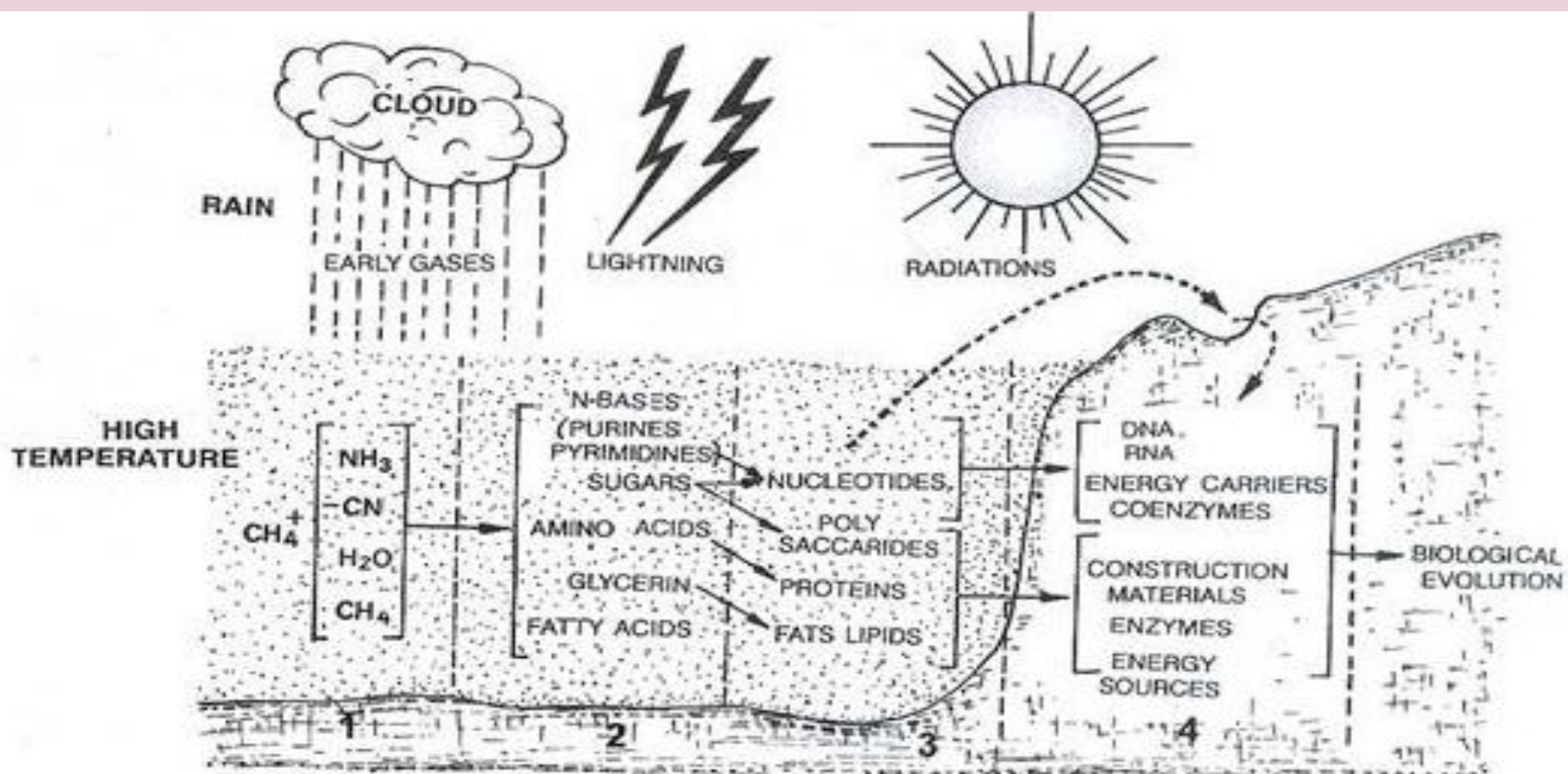
During this period, divergent views about the origin of biological and social aspects of human being were expressed by scholars of different countries.

Among these, the contribution of **Karl Marx** (1818 – 1883) , **Charles Lyell** (1797 – 1895), and of **William Smith** (1769 – 1839) are important. Marx accepted the dialectical process as the moving power of history.

# Origins of Life

- **Louis Pasteur**
  - Disproved the spontaneous generation of microorganisms
  - Experiments with broth





Chemical evolution on early earth.

Step 1

- Free Atoms C, H, O and N
- Abiotic synthesis of Monomers from Simple inorganic compounds  $H_2$ ,  $H_2O$ ,  $CH_4$  and  $NH_3$
- Amino acids, purines, pyrimidines, monosaccharide, fatty acids, glycerol

Step 2

- Monomers combine to form polymers
- Proteins, Nucleic acids, fats, polysaccharides

Step 3

- Formation of Coacervates
- Biomolecules surrounded by a lipid membrane

Step 4

- Origin of Nucleic acid and protein controlled metabolism inside a lipid membrane (protocells or protobionts)

**Oparin & Haldane Chemical Evolution Theory of Life**

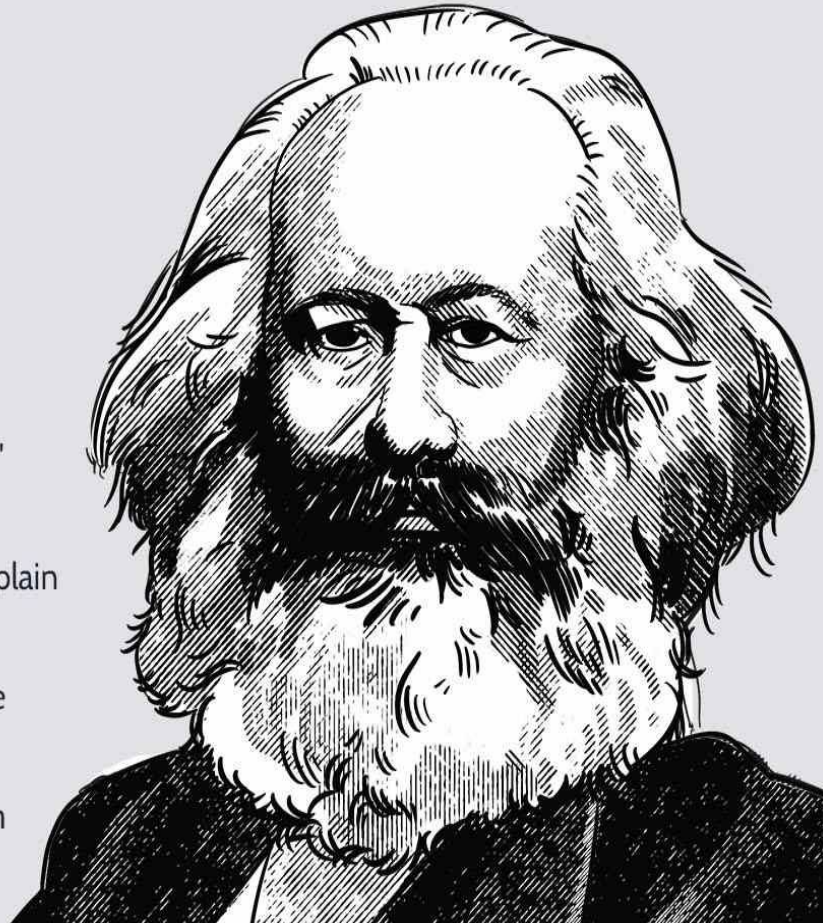
# Karl Marx

Born: May 5, 1818

Died: March 14, 1883

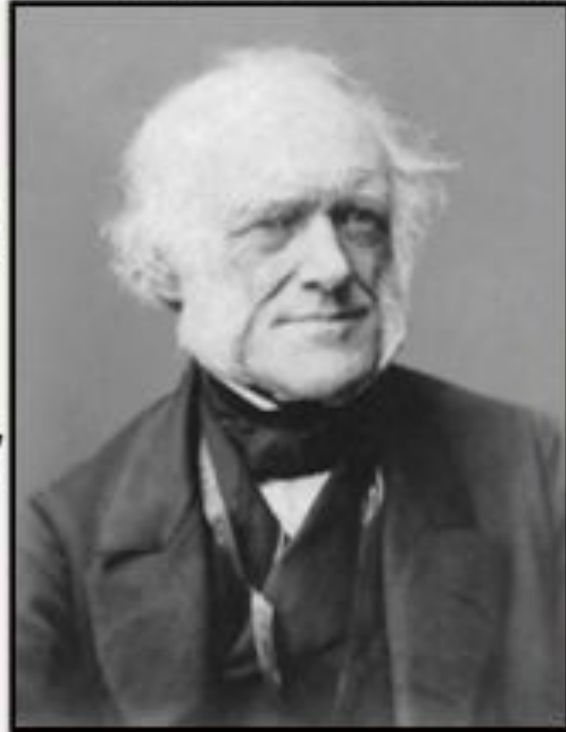
## Philosopher, Social Theorist, and Economist

- Published the "The Communist Manifesto" with Friedrich Engels (1848)
- Believed in the labor theory of value to explain the relative difference in market prices
- Presented a great challenge to laissez-faire economics in "Das Kapital" (1867)
- Developed theory of historical materialism



## **Charles Lyell (1797-1875)**

- **Gradualism**
- **Uniformitarianism**
- **Geological change is slow**
- **Earth must be very old**



In the field of Archaeology, **Boucher Deperthe's** discoveries of flint implements at Abbeville in 1838 and 1846, **Dr. Rigollet's** discovery at Saint Acheul in 1854 are some of the new developments.

Neanderthal's discovery at Dusseldorf in 1857 gave a new outlook about human evolution.

**James Prichard** classified and systematised the facts about races of humankind in his book *The Natural History of Man* in 1833 and *Physical History of Man* in 1836.

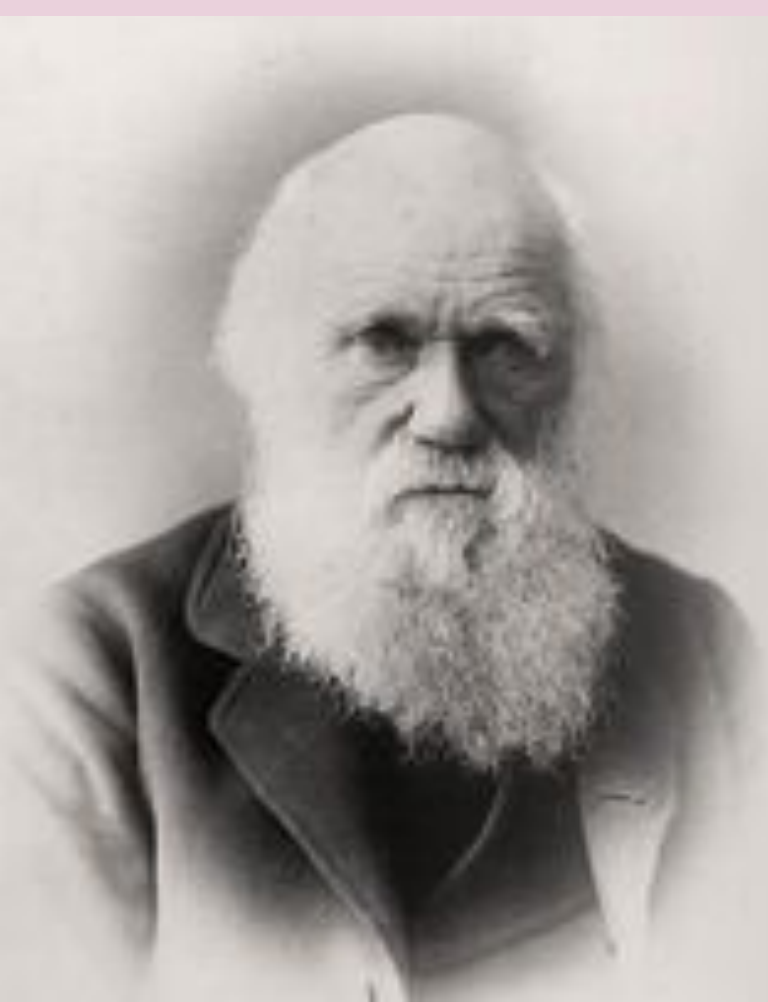
He proposed the differences of colour, hair, stature and form and examined the criteria of racial classification.



**James Prichard**

The convergence of all these ideas was completed with the publication of **Charles Darwin's** book The Origin of Species (1859).

In this book, he proposed his theory of organic evolution popularly known as 'Darwinism'.



“As for a future life,  
every man must  
judge for himself  
between conflicting  
vague probabilities.”

- Charles Darwin

With the publication of this book, physical evolution of human being based on scientific investigation was established.

Thus, diversities of arguments expressed about origin of human being and society came to an end with the publication of Origin of Species.

### **3. Constructive Period (1859–1900):**

During this period Anthropology started as an independent discipline in many universities.

A Department of Anthropology was started in Oxford University in 1884 and Cambridge University in 1900.

Scientific researches and publications by scholars like **E B Tylor, James Frazer, Henry Maine, and L. H. Morgan**, came out during this period.

Different branches of anthropology like ethnology, pre-history, social anthropology and physical anthropology were also evolved.

**E B Tylor**



**James Frazer**



# Henry Maine



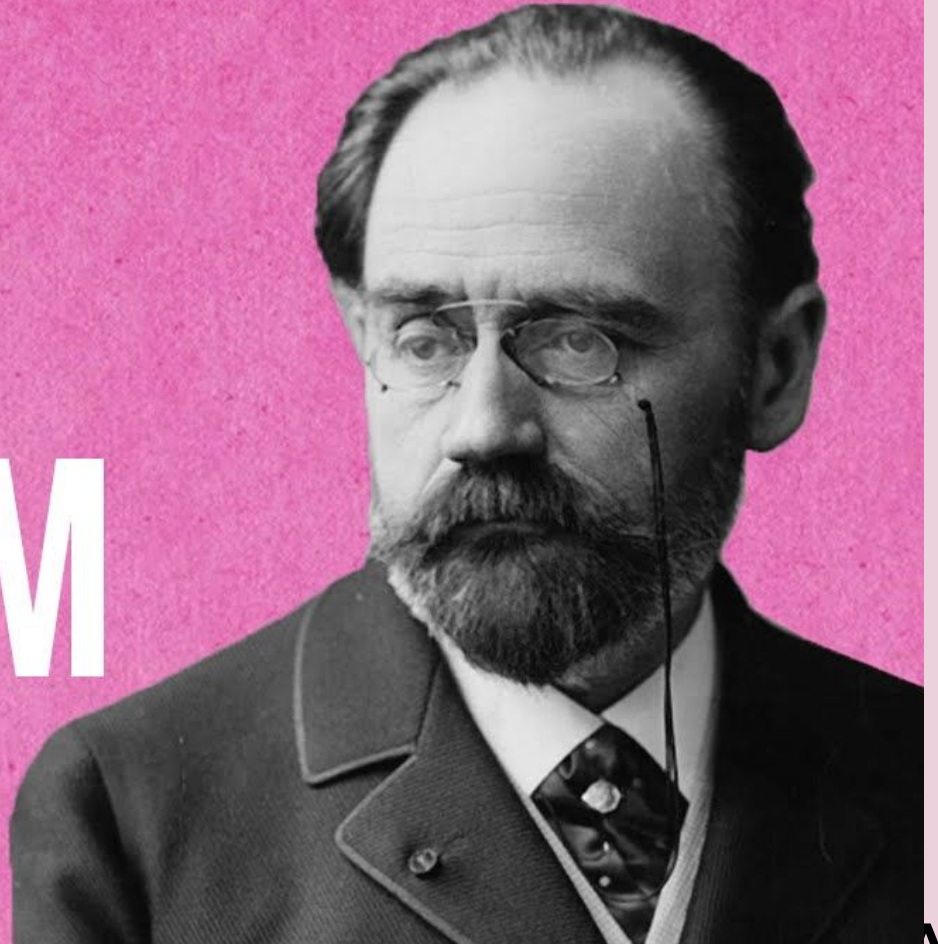
# L. H. Morgan



Apart from England, Germany and USA, anthropological researches had flourished in France and some other countries as well.

Contributions of **Emile Durkheim** in France helped to popularise Anthropology in France.

# ÉMILE DURKHEIM



Some important journals like 'American Journal of Folklore', 'Bulletin of the Royal Asiatic Society of Great Britain and Ireland' (now known as 'Man') etc. were also started during this period.

Large number of anthropological articles were published in these journals.

Colonial administrators had also published their reports and papers in this journal.

The researches done by British officers like **Edgar Thurston, Russel**, and others facilitated the growth of anthropological tradition in India.

## **4. Critical Period (1900 onwards) :**

Penniman used the term 'critical' to denote this period because of the crucial contribution made to the development of Anthropology during this period.

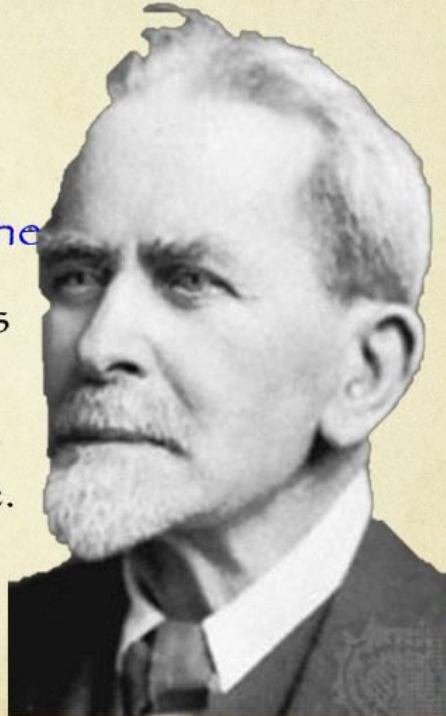
Some significant developments had also marked this period.

The first chair of social anthropology was started in 1908 in the University of Liverpool in Britain. It was chaired by **Sir James Frazer**.

The first Anthropology department in India was started in the University of Calcutta in 1920. In 1919, Social anthropology had been introduced as a subject in the Department of Sociology at the University of Bombay.

# Sir James George Frazer

- Frazer (1854–1941) was a Scottish **social anthropologist & modernist**
- His most famous work, **The Golden Bough** (1890), explores the similarities among magical and religious beliefs across the globe.



During this period, different schools of thought in anthropology were founded.

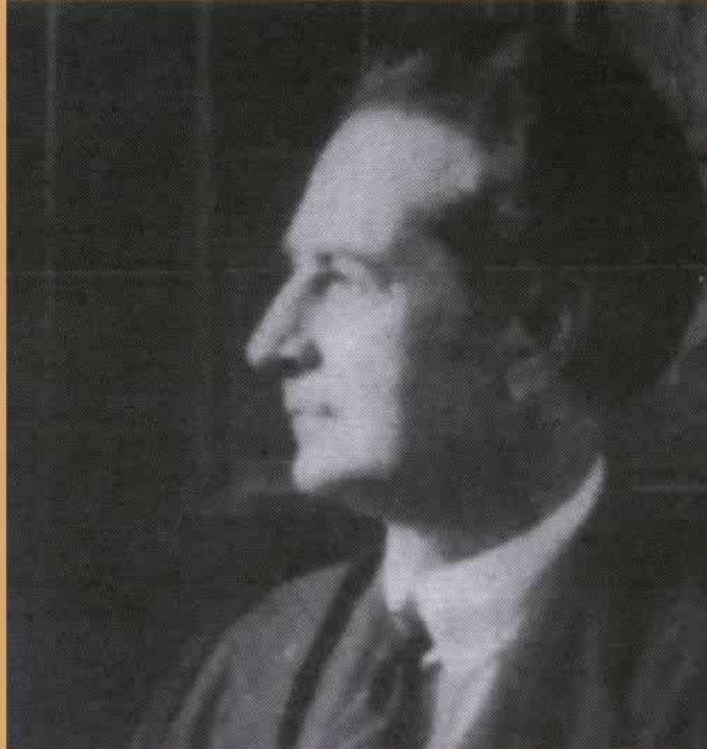
Functional school of thought, structural school of thought, school of diffusion, and culture and personality school are prominent among them.

Authors of this period specialised in theorising the concepts, definitions and different aspects of culture.

For instance, **B K Malinowski**, based on his field expedition among the Trobriand Islanders proposed his idea of Functionalism.

**Radcliffe Brown**, based on his study of the Andaman Islanders established his theory of Social Structure during this period.

# Alfred Radcliffe-Brown



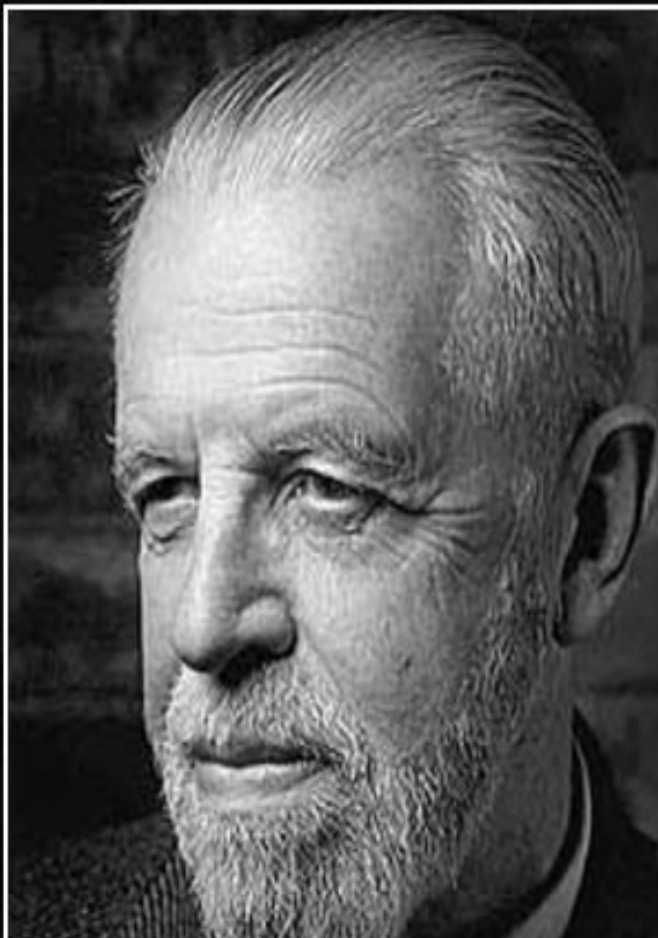


**B K Malinoswki**

**PLUTUS IAS**

Similarly, the American scholars such as **A L Kroeber, Ruth Benedict, Margaret Mead**, and **Clark Wissler** played their own role in shaping the destiny of world anthropology.

As in the world, anthropology flourished in India at a very slow pace. As a subject that shares infinite curiosity towards human being, anthropology flourished in India as well.



Anthropology is the most humanistic  
of the sciences and the most  
scientific of the humanities.

— Alfred L. Kroeber —



The purpose of anthropology is to  
make the world safe for human  
differences.

— *Ruth Benedict* —

# MARGARET MEAD



PHOTOGRAPH BY JAMES H. HARRIS

# Clark Wissler

- Clark Wissler (Cattell's student) did the first basic validation research, examining the relation between the old 'mental test' scores and academic achievement



- His results were largely discouraging
- He had only bright college students in his sample
  - Why is this a problem?
- Wissler became an anthropologist with a strong environmentalist bias.



# Hundred Years of Anthropology

Penniman, T K

Note: This is not the actual book cover

# Development of Anthropology

- **Aristotle** referred as the **father of Anthropology**
- He defines the anthropology was defined as the systematic study of man as a physical or moral being
- Biological= Tangible things whereas non-tangible= intangible things

- In 18th century **Immanuel Kant** defines anthropology in the book called Anthropology where he defines **anthropology as a study which describes and explains the animal origins, social as well as cultural development and progress of man**

- The facts of the **incredibly diverse** and at the **same time essentially similar nature of humans** over time and space have **intrigued curious-minded people** over the century.
- The history of **anthropological thought** is replete with many and varied ideas, some of which often were **wild extremes resulting from ethnocentric attitudes**.
- Before anthropology attained the status of scientific discipline curious-minded persons from ancient to medieval times have speculated a lot about the issues and problems that concern anthropologists today (Hodgen, 1964).

- That is, **the present academic anthropology has its roots** in the works and ideas of the **great ancient and Medieval Greek, Roman, and Hebrew philosophers and social thinkers.**
- These people were interested in the nature, origin and destiny of man, and the morality and ethics of human relationships
- While the roots of anthropology can be generally traced through the history of western culture as far back as ancient Greek social philosophical thinking, the discipline did not emerge as distinct field of study until the mid-nineteenth century.
- **Anthropology as an academic discipline was born during the 19th century**

- Anthropology as academic discipline was born out of the intellectual atmosphere of that is called the **Enlightenment**, which is the eighteenth century social philosophical movement that emphasized human progress and the power of reason, and based on **Darwinian Theory of Evolution** (Scupin and DeCorse, 1995). \

- According to Howard and Dunaif-Hattis (1992:362): By the late 1870s, anthropology was beginning to emerge as a profession.
- A major impetus for its growth was **the expansion of western colonial powers and their consequent desire to better understand the peoples living under colonial domination.**

- **Early anthropologists mainly studied small communities in technologically simple societies.**
- Such societies are often called by various names, such as, traditional, non industrialized or simple societies.
- Anthropologists of the early 1900s emphasized the study of social and cultural differences among human groups.

- Here, many of the indigenous peoples of the non-western world and their social and cultural features were studied in detail and documented. This approach is called ethnography.
- By the mid-1900, however, anthropologists attempted to discover universal human patterns and the common biological psychological traits that bind all human beings.
- This approach is called ethnology. Ethnology aims at the comparative understanding and analysis of different ethnic groups across time and space (Kottak, 2002; Scupin and DeCorse, 1995).

# Difference between ethnography and ethnology

- **Ethnography:** description of the culture of a certain group of people.
- **Ethnology:** Anthropological attempt to discover universal human patterns and the common bio psychological traits that bind all human beings.

- Anthropology of equally inquisitive about human biological evolution of man which contributed the cultural evolution and the human cultural capacity is responsible for the development of society.
- **Edward Burnett Tylor** defined anthropology as the study of old remains of people and the physical features, races, languages, customs, and practices of primitive peoples.
- Thus, Burnett restricts the scope of anthropology to the study of primitive people
- **Paul Broca** have emphasised that the scope of anthropology extends even to the study of modern cultures also
- Scholars like Malinowski, **Radcliffe Brown** and **Franz Bogs** defined anthropology during the beginning of the 20th century as the study of man at all levels of developments
- Now, anthropologist emphasised that anthropology pertains to the study of biology, culture and society of man throughout time, and in all parts of the world.

- Today, **anthropology is equally inquisitive about the man in his past, present and future and exists as comprehensive, comparative holistic and humanistic sciences in the world.**
- The anthropologist concentrate on a community consist of different races or people with tracking their former and current lives.

- It may be called that **Anthropology is an integrated or universal field or a science of man in its totality.** In other words, anthropology is a **fusion of social and biological science.**
- It does not only deal with human as a member of animal kingdom but also concerned with man's behaviour as a member of society.
- So, **growth of civilization and structural evolution of mankind** both are studied from their dawn to the present.

- **Magnus Hundt** in his book , “ Anthropologic de Hominis”, in the 15th century tells that anthropology is a **study of human anatomy and human physiology.**
- His book serves to explain the body not only anatomically and physiologically, but physiology and religiously too, stating that human have created in the image of God and represent a microcosm of the world as God created it.

- However, one basic question arises about anthropology- Historians, Psychologist, economist, sociologist and other scholars in many other fields systematically study humankind in one way or another so **how it is different from other discipline?**

- **Anthropology stands apart because it combines four subdisciplines.**
- Or sub-fields that bring natural sciences, the social sciences, and the humanities together.

**These four subdisciplines are**

- 1. Physical anthropology**
- 2. Archaeology**
- 3. Linguistic**
- 4. Ethnology or Cultural anthropology**

- Thus in the **first half of the past century** a foundation was laid for providing a scientific meaning to the term anthropology **by second half of the 20th century**, the term **acquired complete scientific meaning**.
- Anthropology as the study of mankind especially of all societies and customs, study of structure and evolution of man as an animal.
- Anthropologists called anthropology as scientific study of the physical, social and cultural development and behaviour of human beings since their appearance on earth.

- Such meanings of ‘anthropology’ were very common to appear almost all popular textbooks
- But between 1960 and 1970, the women liberation movement in USA was critical of the basis of meaning of anthropology in favour of man.
- Thus, anthropologist freed the term from gender biasness.

*Hitherto the meaning the term anthropology was not explicit about the time dimension and spatial dimension of the study of humankind.*

*Since 1970s it was quite explicit about temporal and spatial dimensions of study of humankind.*

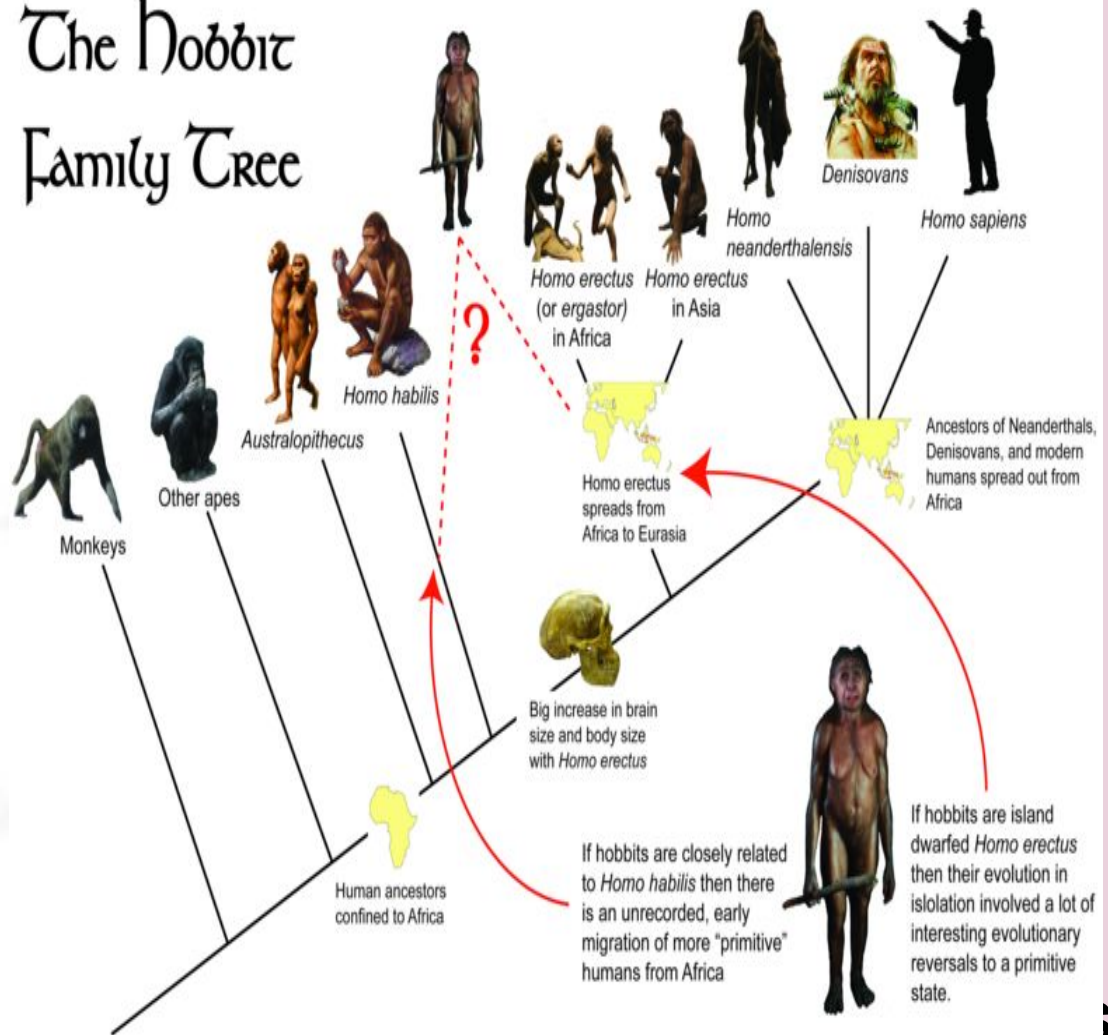
- **E.A Hoebel and T. Weaver** in their popular book- **Anthropology and the Human experience (1979)** gave the meaning of Anthropology as the study of humankind in all places at all times.
- Recently, **Conrad Phillip Kottak** in his book, **Cultural Anthropology** presented the meaning of anthropology in the social and cultural context.
- Later on **Marvin Harris** in his book, ‘Theories of the term anthropology with reference to the study of all aspects of the whole humankind in all places at all times.

# Explanation of Scientific meaning

- As a science of humankind in its totality, **anthropology** tries to describe analyze and synthesize all aspects of human being.
- There are three different aspects of human being
  1. **Biological aspect**
  2. **Cultural aspect**
  3. **Social aspect**



# The Hobbit Family Tree



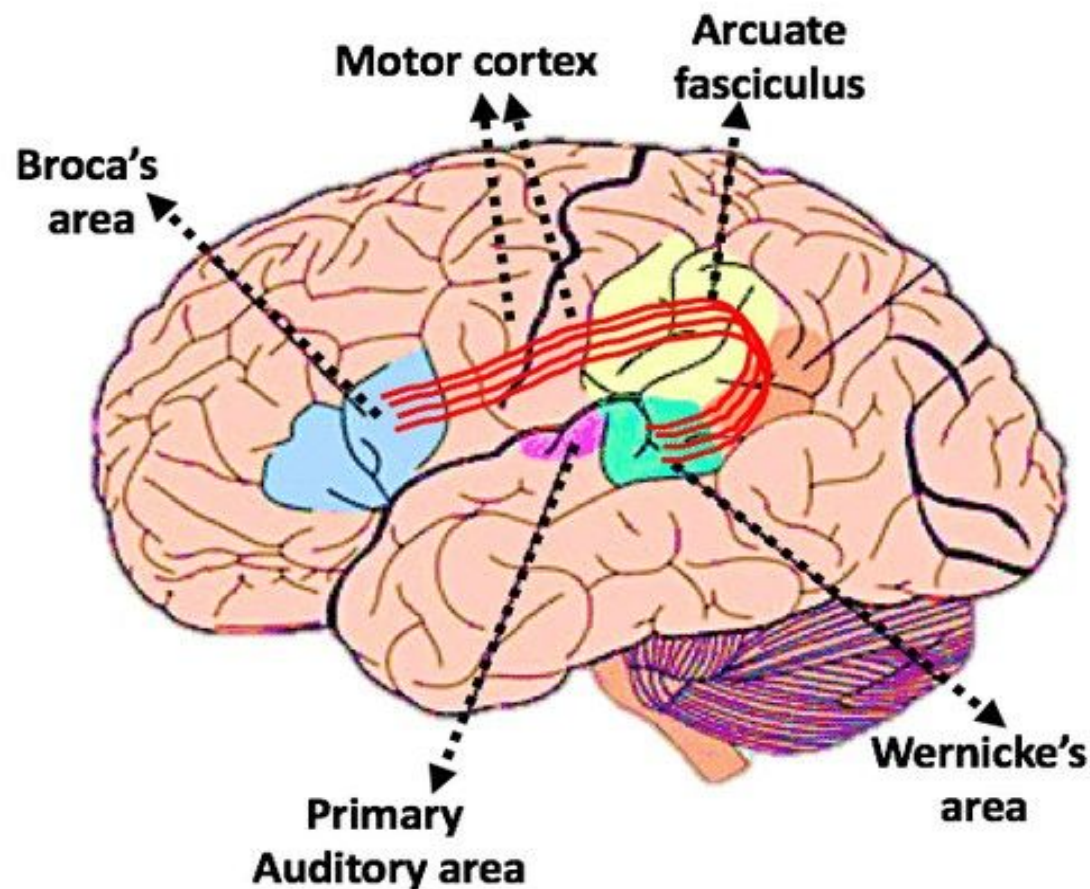
# Biological Aspect

- Human beings are the part of the living world and like other organisms human beings are the product of biological evolution.
- However, unlike other organisms **human species is the highest product of biological evolution.**
- Human beings habitually walk fully erect. Their hands with opposite thumbs are free to hold and manipulate objects.

They have large complex brains that provide them excellent sense of perception, high intelligence and good memories.

Their brain equipped them with the communication system known as language.

As a result, what has become peculiar to human beings is the level of biological developments that has given them uniqueness in the living world.



**Broca's area:** involved in production of speech sound

**Wernicke's area:** involved in Understanding of speech

**Motor cortex:** controls the Movements of muscles

**Arcuate fasciculus:** connects Wernicke's area to Broca's area.

## Parts of the Brain that controls Speech



**Neanderthals** or *Homo sapiens neanderthalensis*) are an extinct species or subspecies of archaic humans who lived in Euroasia until about 40,000 years ago. They most likely went extinct due to assimilation into the modern human genome (bred into extinction), great climatic change, disease, or a combination of these factors. They were fully replaced by early European Modern Humans

**PLUTUS IAS**

## Cultural aspect

- Humans are animals with a difference, and that difference is culture. Human species is a cultural bearing animal.
- Culture refers to the means by which human beings adapt to the world and to each other, culture is the means by which humans come to terms with the environment and with one another. Culture is design for living.

- Since the brain is the product of the of evolutionary development, culture is to be thought of as a product of human evolutionary development, culture is to be thought of as product of human biology.
- **Culture rests on human biology but it is not biological.**

- Culture is not innate, it is not inborn but the ability of human beings to create culture is innate.
- Culture is the thus the result of biological development that enabled human beings to invent many ways of behaving which were not in their in genetics codes.

- These new ways allowed human beings to adapt to the environment in a unique ways, allowed human beings to adapt to the environment in a unique way.
- Human behaviour has thus been simultaneously biological and cultural.

# Social aspects

Society is the organisation of life in groups. Like human beings other animals live in the groups.

However, human beings are the only species that lead group life according to the design for living, namely culture, human living is impossible without group life.

- **Group life involves collective interaction. Collective interaction may vary from the simplest dyadic relation to the almost complex network of inter personal and inter group relations.**
- Culture provides the guidelines for study interaction.

- Although some other organisms have at least a rudimentary, pre cultural ability, no organisms has elaborated cultural activities, namely, to learn, to communicate, and to store, process and use information to the process and use information to the same extent as human beings.
- Human society is thus an aggregate of persons with culture.



# Summary

- Anthropology studies all the three aspects of humankind in all places at all times.
- First, there is the time dimension.
- Time is something that flows from the past on through the present and into the future.
- The human biology has evolved through time from related animal forms.

- Likewise, the culture and society of humankind evolved through time from lower levels to higher levels, simplicity to complexity and from homogeneity to heterogeneity.
- The stream of human culture is a continuous and cumulative flow.
- It is learnt, shared transmitted from generation to generation.

- To sum up, Anthropology a Greek word coined by Aristotle implies, “ the science of man”.
- This etymological meaning underwent a change between 1960 and 1970 when it was made free from gender bias and and read as the, sciences of humankind.

*Thank You*