



DUALISM IN GEOGRAPHY

INTRODUCTION

- The thinking and knowledge of human being is always dynamic which developed over a period of time under the influence of society, culture, geography, climate and peer group interaction. All these things can be best understood by analyzing concept of regional synthesis that sphere of geography is not homogenous and is guided by various sister disciplines which over period of time create dichotomy and dualism.
- Dichotomy means branching of subject into 2 parts- Dualism also stands for dichotomy. Geographers right from classical period have been dividing subject into 2:- Human and physical geography. Over a period of time, several dichotomies emerged out of which some are General Vs Regional geography, Physical Vs Human geography, Historical Vs Contemporary geography, Study of formal sites Vs Study of functional sites, Deterministic Vs Spatial/Possibilistic geography.

DUALISM AND DICHOTOMIES IN GEOGRAPHY

1. General Geography versus Regional Geography
2. Physical Geography versus Human Geography
3. Determinism and Possibilism
4. Quantitative versus Behavioral Geography
5. Idiographic versus Nomothetic
6. Inductive Approach versus Deductive Approach
7. Modernism versus post-modernism

GENERAL GEOGRAPHY VERSUS REGIONAL GEOGRAPHY

- Bernhard Varen, aka Verenius introduced the dualism of general (Universal) geography and special (particular) geography, which led to the development of 'systematic' and 'regional' geography. Thus, Varenius was the first scholar who laid the foundation of the dichotomy of systematic vs. regional geography.
- **SYSTEMATIC GEOGRAPHY**- The approach of systematic geography isolates particular elements such as agriculture, industry or transport, and seeks to understand their spatial patterns and processes which have produced them.
- **REGIONAL GEOGRAPHY**- The approach of regional geography seeks to understand the unique character of an area as produced by the interaction of human activities and the physical environment.

GENERAL GEOGRAPHY VERSUS REGIONAL GEOGRAPHY

- After 2nd WW, Systematic geography is essential analytical whereas regional geography is essentially synthetic and deals with unique situation and peculiarities. Systematic geography examines phenomenon at the whole world level like temperature, vegetation, soil, crops, rainfall, population, and so on. So, theorists like Koeppen, Whittlesey, Stump, Candolle, Penck- all belonged to school of systematic geography.
- In contrast to this, if we study landforms, climate, soil, vegetation and superimposed these physical variables on cultural landscape, this would be a case of regional/physical geography.
- In opinion of Barry, the regional and general are not different approaches but extreme of continuum.

- Anuchin the soviet geographer, summarized controversy by saying that systematic geography cannot exist without regional geography and regional geography cannot be survived without systematic geography. In brief, dichotomy of systematic vs regional falls and they are complementary to each other.

PHYSICAL GEOGRAPHY VERSUS HUMAN GEOGRAPHY

- Dichotomy of physical and human geography is as old as discipline of geography itself. The Greeks were probably the first who stated and started dichotomy of physical and human geography.
- Hecataeus gave more emphasis to physical geography.
- Similarly Eratosthenes and Ptolemy gave more importance to physical geography while Strabo and his disciples were in favour of human geography.
- The scholars who advocated the growth of physical geography are Hecateus, Kant, Humboldt, Darwin, Davis, Penck and L.C. King, whereas human geographers such as Herodotus, Ratzel, Miss Semple, Huntington, Ritter, Mackinder, Harris, Burges, Carl-O-Saur and Stamp related to study of human geography.

PHYSICAL GEOGRAPHY VERSUS HUMAN GEOGRAPHY

- Verinus whose *Geographical Generalis* published in 1650 was one of the 1st scholar to suggest that the universal and special laws can be framed in geography. The laws of physical geography can be universal, while the special laws can be framed about human society, is related a work of human geography.
- Verinus was the first geographer who divided the geography into general or universal and special or particular. In the opinion of Verinus, general geography deals with the formulation of universal laws which are common for the physical geography, while the spatial/particular geography providing space for regional geography which is more related to human geography as spatial geography can formulate laws/theories only for particular region as well as for human geography.

PHYSICAL GEOGRAPHY VERSUS HUMAN GEOGRAPHY

- To understand the depth of dichotomy, we may go into historical development of human geography. Ritter and Ratzel were among early geographers who consider man as an important agent to change existing landscape. Vidal de Lablache opined that main objective of geography to study PAYS(region). Pays are ideal units of study and he argued that regional geography is core of discipline of geography.
- In USA, human geography received an impetus from idea put forward by Mark Jefferson's central place in the form of primate city concept.

PHYSICAL GEOGRAPHY VERSUS HUMAN GEOGRAPHY

- The dichotomy of physical and human geography was sharpened in later parts of 19th century and 1st half of 20th century. It was under this influence that department of physical geography and also another department by name human geography in western world and also in Asian countries like India.
- Still some of the geographers considered the main area of geography as to explain variations in physical attributes of earth surface like landform class, geomorphology, oceanography, biogeography and climatology in which universal laws can be formulated. In opposition, a substantial majority of geographers both in developing and developed countries take geography as a social science but in general dichotomy of physical and human geography is artificial and in fact they are not in opposition but complimentary to each other.

DETERMINISM VERSES POSSIBILISM

- **DETERMINISM** is an approach focusing on the effects of the physical environment on man, in which man was seen as a passive creature moulded by natural forces. The belief that variations in human behaviour around the world can be explained by differences in natural environment is known as environmental determinism.
- The emphasis of **POSSIBILISM** is firmly placed on man rather than nature, and in which man is seen as an active force rather than a passive being.

- Determinism is one of the most important philosophies which persisted up to second World War in one shape or other. The point of view is that the physical environment controls the course of human action. In other words, the belief that variation in human behavior around the world can be explained by the difference in the natural environment.
- The essence of deterministic school of thought is that the history, culture, living style and stage of development of a social group or nation are exclusively governed by the physical environment.
- The determinists considers man as a passive agent on which the physical factors are constantly working and thus shaping his attitude and process of decision making.
- The first attempt to explain the physical features and character traits of different peoples and their culture with reference to the influence of natural conditions was made by the Greek and Roman scholars.

- The determinists of that time were physician Hippocrates, the philosopher Aristotle, the historians Thucydides, Xenophone, Herodotus (Greek), and Strabo (Roman).
- Geographical determinism continued to dominate among the Arab scholars. They divided the habitable world into seven *kishwars* or terrestrial zones and highlighted the physical and cultural characteristics of races and nations of these zones.
- Al-Biruni, Al-Masudi, Al-Battani, Ibn-Hauqal, Al-Idrisi and Ibn-Khaldun attempted to correlate environment with human activities and mode of life.
- Al-Masudi, for example, asserted that in land like Sham (Syria) where water is abundant, the people are gay and humorous, while the people of dryland are rude and short-tempered. The nomads who live in the open air are marked by strength and resolution, wisdom and physical fitness.

- The environmental causation continued throughout the 19th century when geographers themselves used to regard geography above all as natural science. Carl Ritter, the leading German geographer adopted an anthropogenic approach and introduced geographical determinism in the early nineteenth century. Alexander von Humboldt, one of the founders of 'modern geography' and a contemporary of Ritter also asserted that the mode of life of the inhabitants of a mountainous country differs from the people of plains.
- The origin of scientific determinism lie in the work of Charls Darwin, whose seminal book *Origin of species* (1859) influenced many geographers.
- The founder of the 'new' determinism was Friedrich Ratzel. He supplemented classical geographical determinism with elements of Social Darwinism.
- The names of Ratzel and Semple are associated with the most outspoken expression of the idea of environmental determinism. Huntington tried to seek out objective evidence of the effect of physical environment, and in particular climate which he regarded as an important influence on human behaviour.

- Possibilism in geography developed as a reaction to extreme generalisations of environmental determinists that led to a counter thesis, of possibilism, which presented the man as an active agent.
- A historian Lucien Febure and Vidal de Lablache advocated the philosophy of possibilism. The concept was exclusively associated with French school of Geography.
- The idea of possibilism emphasised that the natural environment offers opportunities, the number of which increases as the knowledge and technology of a cultural group develop.
- “Nature sets limits and offers possibilities for human settlement, the way man reacts or adjusts to these conditions depends on his own traditional way of life.” – Vidal de Lablache

- “The true and only problem with the geographical problem is that of utilization of possibilities. There are no necessities, but everywhere possibilities.” - Febure
- “Nature is not mandatory but permissive”. –Brunhes
- Vidal in his studies minimised the influence of environment on the activities of man. Central to Vidal’s work were the *genres de vie* (lifestyles).
- Barrows, a prominent ecologist gave greater importance to man than to environment.
- A more acceptable view of possibilism was presented by Saur. He asserted that geographer’s role is to investigate and understand the nature of the transition from the natural to the cultural landscape.

QUANTITATIVE GEOGRAPHY VERSES BEHAVIOURAL GEOGRAPHY

- In the years immediately following World War II, the American academic community increasingly stressed the value of the physical sciences and mathematics. Conversely, interest in the social sciences, arts, and humanities declined. Accordingly, many geographers believed that in quantitative geography, they had at last found an approach that would eliminate the ambiguity that seemed to obscure the unifying theme of their discipline. So enthusiastic was their embrace of “number crunching,” that some less devoted to the cause of quantification began to refer to the new love affair with creating complex formulae in order to explain the nature of the world as the “quantitative revolution.”

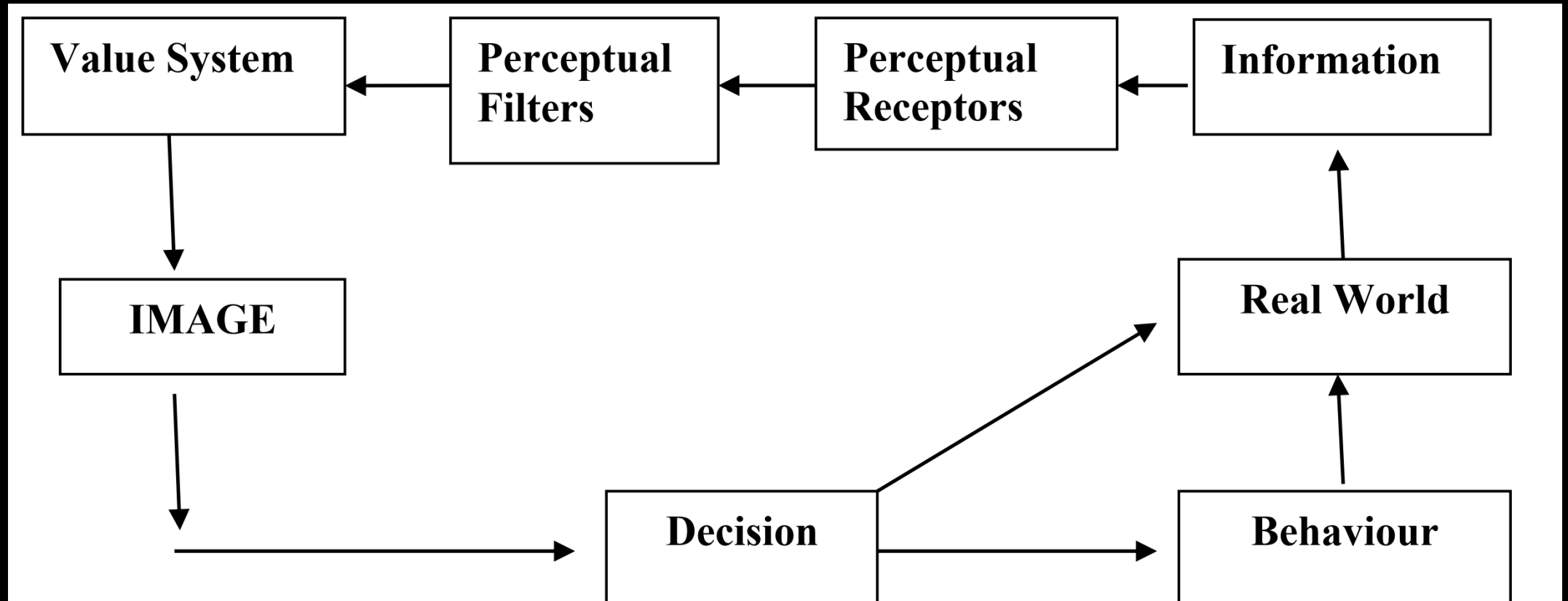
QUANTITATIVE GEOGRAPHY VERSES BEHAVIOURAL GEOGRAPHY

- Whereas many geographers decided that total quantification of their research was mandatory, others continued to see value in the time-honored expository tradition. For several decades, the debate raged on. Those in love with quantitative analysis suggested that those who were more qualitative in their approach were not academically viable. Others, less enamored with the manipulation of numbers and somewhat suspicious of the outcomes based solely on the application of mathematical formulae, sometimes suggested that the quantifiers were far more interested in the manipulation of numbers than they were in explaining the nature of places, regions, and geographic phenomena.
- During the 1970s and 1980s, geographic journals tended to shun publications that were not based on quantitative analysis, and universities tended to avoid hiring geographers who were not at least comfortable with advanced statistical methods. In recent years, however, the debate has waned and geographers seem to have accepted the notion that the discipline is strengthened by its diversity. It seems there is room for quantifiers and qualifiers within the broad boundaries of the discipline after all.

QUANTITATIVE GEOGRAPHY VERSES BEHAVIOURAL GEOGRAPHY

- It was increasingly realized by the geographers that the models propounded and tested with the help of quantitative techniques, provided poor descriptions of geographic reality and man and environment relationship. Consequently, progress towards the development of geographical theory was painfully slow and its predictive powers were weak.
- Theories such as Central Place Theory, based on statistical and mathematical techniques, were found inadequate to explain the spatial organization of society. The economic rationality of decision-making was also criticized as it does not explain the behaviour of floodplain dweller, who does not leave his place despite the risk of flood.
- It was a psychological turn in human geography which emphasized the role of cognitive (subjective) and decision-making variables as mediating the relationship between environment and spatial behaviour. The axiom of 'economic person' who always tries to maximize his profit was challenged by Wolpert. In an important paper, Wolpert (1964) showed that, for a sample of Swedish farmers, optimal farming practices were not attainable. He concluded that the farmers were not optimizers but, in Simon's term, satisficers.

QUANTITATIVE GEOGRAPHY VERSES BEHAVIOURAL GEOGRAPHY

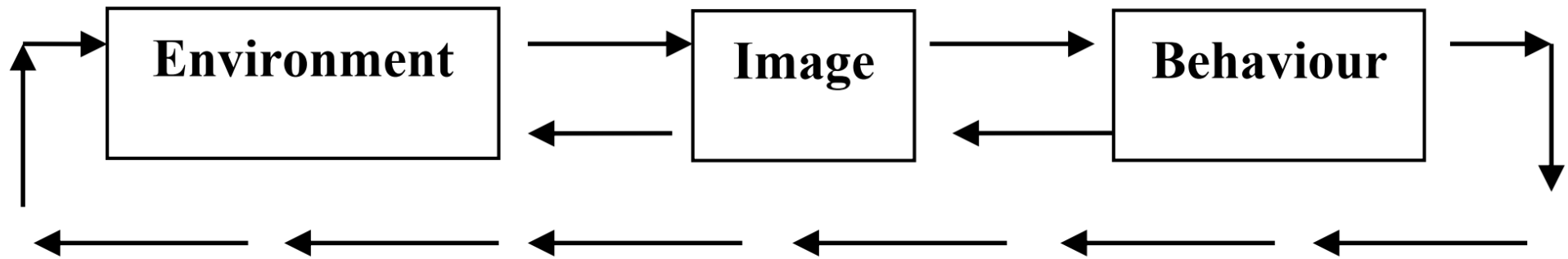


Environmental Perception and Behaviour (after Downs, 1970)

QUANTITATIVE GEOGRAPHY VERSES BEHAVIOURAL GEOGRAPHY

- The behavioural approach in geography was introduced in the 1960s. Its origin can be traced to the frustration that was widely felt with normative and mechanistic models developed with the help of quantitative techniques.
- These normative and mechanistic models are mainly based on such unreal behavioural postulates as 'rational economic man' and isotropic earth surface. In normative models, there are always several assumptions, and generally the centre of attention is a set of omniscient (having infinite knowledge) fully rational actors (men) operating freely in a competitive manner on isotropic plane (homogeneous land surface).
- Behavioural geography banks heavily on 'behaviouralism'. Behaviouralism is an important approach adopted mainly by psychologists and philosophers to analyze the man-environment relationship. The behaviouristic approach is largely inductive, aiming to build general statements out of observations of ongoing processes. The essence of behavioural approach in geography lies in the fact that the way in which people behave is mediated by their understanding of the environment in which they live or by the environment itself with which they are confronted.

QUANTITATIVE GEOGRAPHY VERSES BEHAVIOURAL GEOGRAPHY



A Conventional Model of Man-Environment Relationship (after Boulding, 1956)

QUANTITATIVE GEOGRAPHY VERSES BEHAVIOURAL GEOGRAPHY

- In behavioural geography, an explanation for man-environment problem is founded upon the premise that environmental cognition and behaviour are intimately related. In other words, behavioural approach has taken the view that a deeper understanding of man-environment interaction can be achieved by looking at the various psychological processes through which man comes to know environment in which he lives, and by examining the way in which these processes influence the nature of resultant behaviour.
- The basic philosophy of behaviouralism may be summed up as under:
- The behavioural geographer recognizes that man shapes as well as responds to his environment and that man and environment are dynamically interrelated. Man is viewed as a motivated social being, whose decisions and actions are mediated by his cognition of the spatial environment.

IDIOGRAPHIC VERSUS NOMOTHETIC

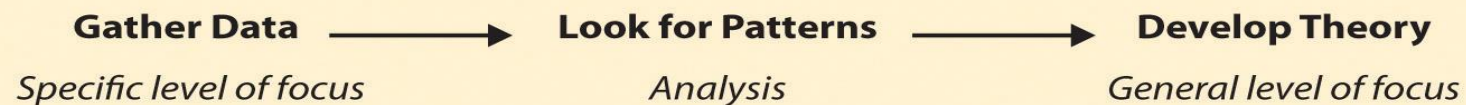
- The idiographic approach emphasized on the view that all places are unique, and that the task of the geographer is to describe and explain the differences that exist over the surface of the earth.
- Nomothetic approach is concerned to find similarities between places and phenomena, and which is a necessary approach in the development of geography.
- According to some scholars, geography is an idiographic science, while other consider it as a nomothetic science. Kant, Hettner, and Hartshorne considered geography as an idiographic science. He conceived geography as the study of spatial differentiation of phenomena.

IDIOGRAPHIC VERSUS NOMOTHETIC

- Nomothetic sciences deals with general laws. Systematic geography or general geography comes under this category. Humboldt, Sauer and many other followers laid stress on systematic geography and the formulation of general laws.
- James, while discussing the idiographic and nomothetic approach, declared that there is no such thing as a 'real region'. The region exists only on an intellectual concept which is useful for particular purpose.
- After second world war, the geographers concentrated on theoretical issues and prepared diffusion models, location theory and gravity models as well as geometrical models to explain geographical patterns. This process has passed the take-off stage and it is hoped that new nomothetic (general) laws will be formulated which shall put geography on a sound footing and will bring it greater recognition in sister disciplines.

INDUCTIVE APPROACH VERSUS DEDUCTIVE APPROACH

- In an **inductive approach** to research, a researcher begins by collecting data that is relevant to his or her topic of interest. Once a substantial amount of data have been collected, the researcher will then take a breather from data collection, stepping back to get a bird's eye view of her data. At this stage, the researcher looks for patterns in the data, working to develop a theory that could explain those patterns. Thus when researchers take an inductive approach, they start with a set of observations and then they move from those particular experiences to a more general set of propositions about those experiences. In other words, they move from data to theory, or from the specific to the general.

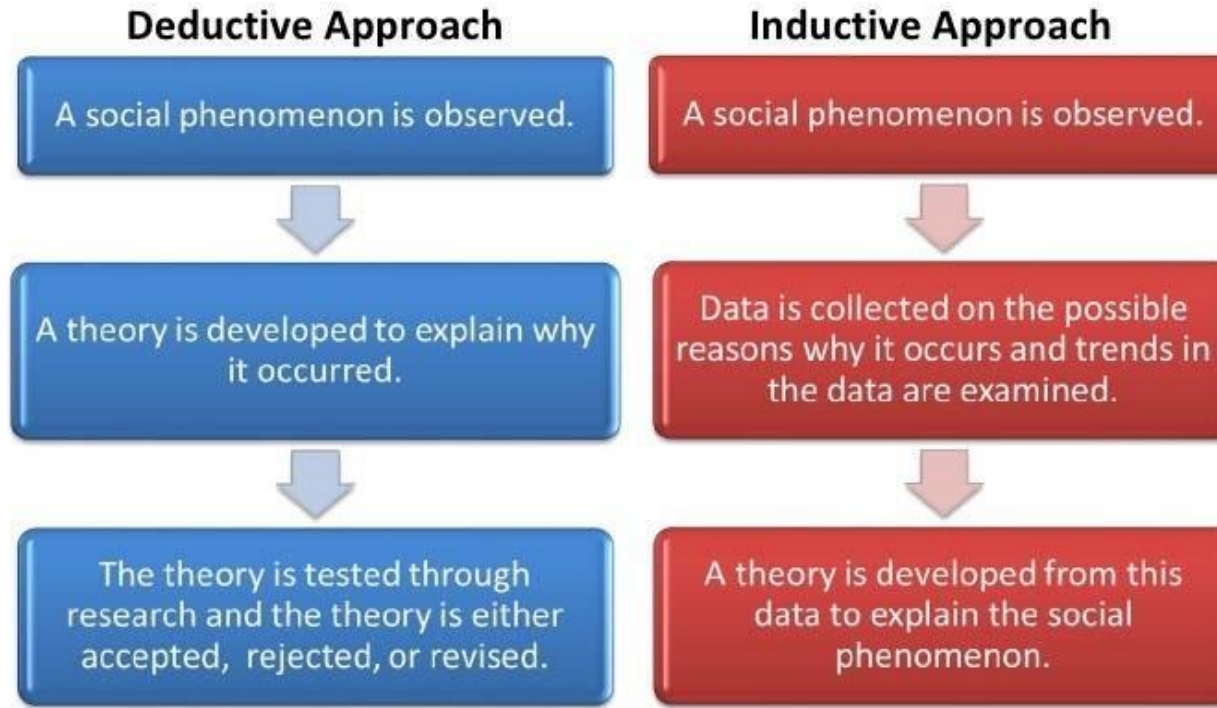


INDUCTIVE APPROACH VERSUS DEDUCTIVE APPROACH

- Researchers taking a **deductive approach** take the steps described earlier for inductive research and reverse their order. They start with a social theory that they find compelling and then test its implications with data. That is, they move from a more general level to a more specific one. A deductive approach to research is the one that people typically associate with scientific investigation. The researcher studies what others have done, reads existing theories of whatever phenomenon he or she is studying, and then tests hypotheses that emerge from those theories.



Deductive and Inductive Approaches



MODERNISM VERSUS POST-MODERNISM

- Modernism is a school of thought or a movement that took place in the late 19th century and early 20th centuries. It involved a reform movement in art, music, literature, and the applied arts. It was based on rational thinking, logic, and the scientific process. It aimed at creating a clear and rational view of the world; believing that through science and reason mankind can advance and grow. It advocated the belief that there is much to learn from the past that could be beneficial to the present.
- Modernism supported the belief that there is a purpose for life and that it should be viewed objectively. Modernists had an optimistic view of the world and believed that there are values and ethics that need to be followed. They were not very concerned about politics and gave more thought to significant things. The era of modernism was a time of artistic and literary advancement. Great works of art and literature were abundant as well as of music, architecture, poetry, and science. Modernist works were admired for their simplicity and elegance.

MODERNISM VERSUS POST-MODERNISM

- Postmodernism, on the other hand, is a school of thought or a movement that took place after the Second World War, but it gained popularity in the 1960s. It was a chaotic era hard to comprehend and apprise. It advocated the belief that there is no universal truth. It used an unscientific approach to life and believed that all things are irrational. Postmodernists believed in chance and transience. They questioned the rationality of modernism, its principles and thinking. They believed that there is no connection between the past and the present and that past events are irrelevant in the present.

Summary

1. Modernism is a school of thought that took place in late 1800s and early 1900s while postmodernism is a school of thought that took place after World War II.
2. Modernism advocated rational thinking and the use of science and reason for the advancement of man while postmodernism believed in the irrationality of things.
3. The modernist era was characterized by the simple and elegant original works of gifted artists while the postmodernist era was characterized by the advancement in technology and its use in different media.
4. Modernists believed in universal truth while postmodernists did not.
5. Postmodernists were very political while modernists were not.