

Dualism in Geography

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.

After WW-II, 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 Koppen, 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 Sempé, Hutton, Ritter, Mackinder, Harris, Burges, Carl-O-Saur and Stamp related to study of 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.

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.

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 classi, 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 versus 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 lies in the work of Charles 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 Febvre 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 versus 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.”

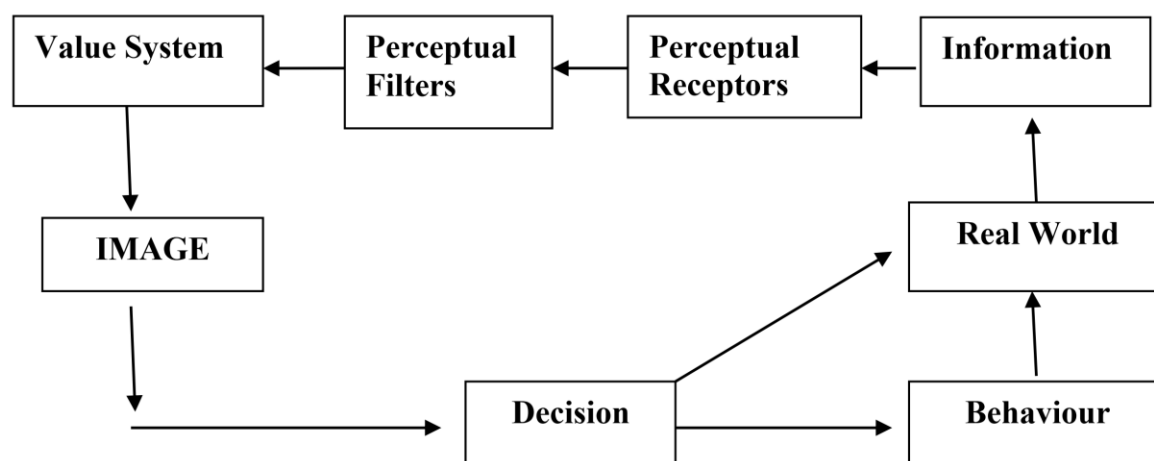
Whereas many geographers decided that total quantification of their research was mandatory, others continued to see value in the time-honored expository tradition. For several decades, the debate raged on. Those in love with quantitative analysis suggested that those who were more qualitative in their 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.

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.



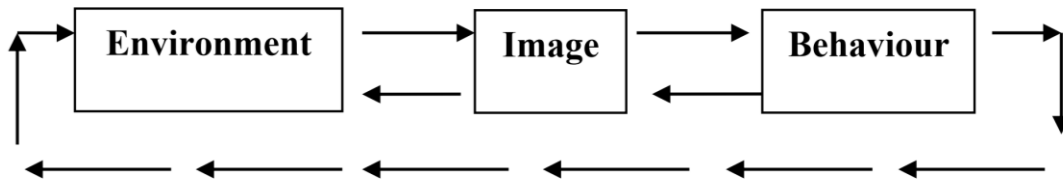
Environmental Perception and Behaviour (after Downs, 1970)

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.



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

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.

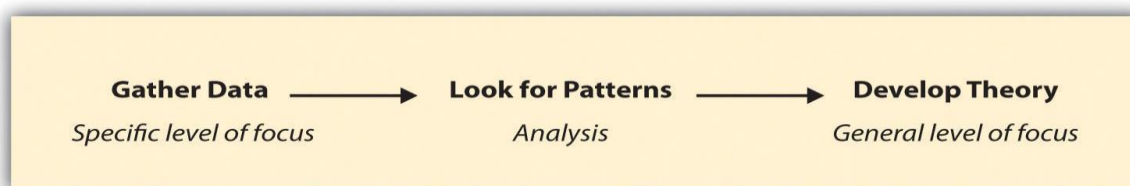
According to some scholars, geography is an idiographic science, while other consider it as a nomothetic science. Kant, Hettner, and Hartshorne considered geography as an idiographic science. He conceived geography as the study of spatial differentiation of phenomena.

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.

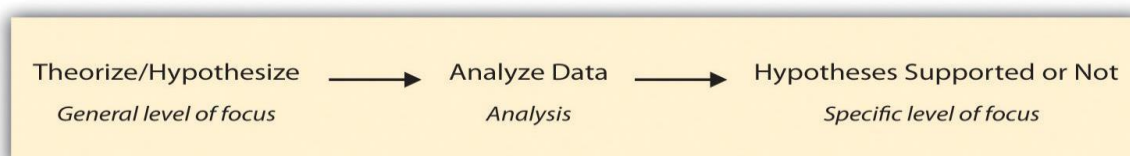
James, while discussing the idiographic and nomothetic approach, declared that there is no such thing as a 'real region'. The region exists only on an intellectual concept which is useful for particular purpose.

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.

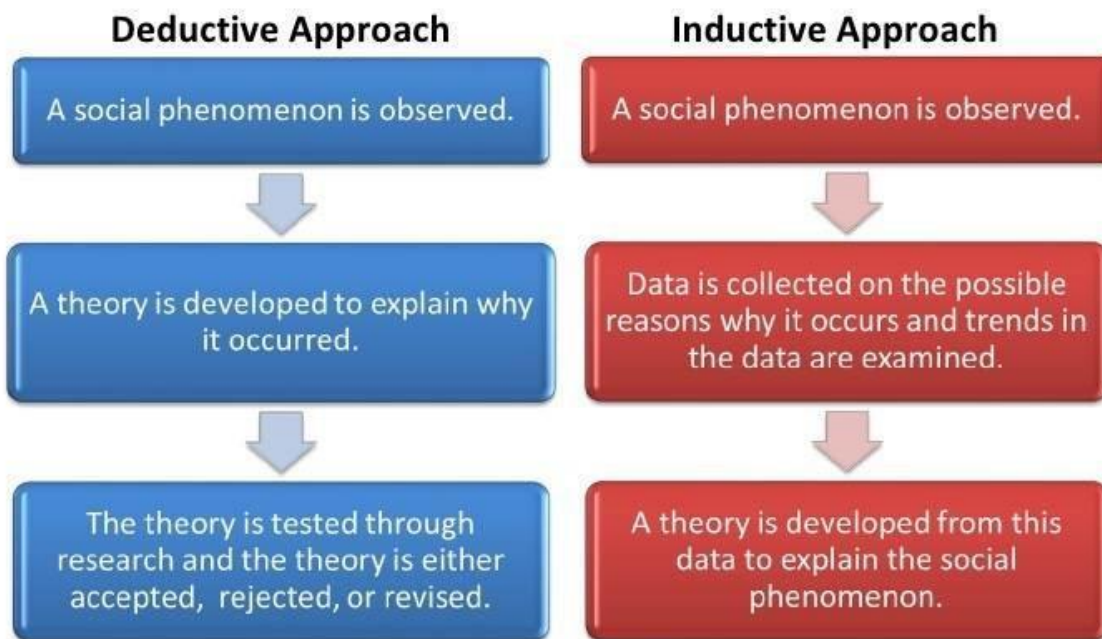
In an inductive approach to research, a researcher begins by collecting data that is relevant to his or her topic of interest. Once a substantial amount of data have been collected, the researcher will then take a breather from data collection, stepping back to get a bird's eye view of her data. At this 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.



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, in its broadest definition, is modern thought, character, or practice. More specifically, the term describes the modernist movement, its set of cultural tendencies and array of associated cultural movements, originally arising from wide-scale and far-reaching changes to Western society in the late 19th and early 20th centuries. Modernism was a revolt against the conservative values of realism. Arguably the most paradigmatic motive of modernism is the rejection of tradition and its reprise, incorporation, rewriting, recapitulation, revision and parody in new forms. Modernism rejected the lingering certainty of Enlightenment thinking and also rejected the existence of a compassionate, all-powerful Creator God.

In general, the term modernism encompasses the activities and output of those who felt the "traditional" forms of art, architecture, literature, religious faith, social organization and daily life were becoming outdated in the new economic, social, and political conditions of an emerging fully industrialized world. The poet Ezra Pound's 1934 injunction to "Make it new!" was paradigmatic of the movement's approach towards the obsolete. Another paradigmatic exhortation was articulated by philosopher and composer Theodor Adorno, who, in the 1940s, challenged conventional surface coherence and appearance of harmony typical of the rationality of Enlightenment thinking. A salient characteristic of modernism is self-consciousness. This self-consciousness often led to experiments with form and work that draws attention to the processes and materials used (and to the further tendency of abstraction). The modernist movement, at the beginning of the 20th century, marked the first time that the term

"avant-garde", with which the movement was labeled until the word "modernism" prevailed, was used for the arts (rather than in its original military and political context). Surrealism gained fame among the public as being the most extreme form of modernism, or "the avant-garde of modernism".

Present-day perspectives Some commentators approach Modernism as an overall socially progressive trend of thought that affirms the power of human beings to create, improve and reshape their environment with the aid of practical experimentation, scientific knowledge or technology. From this perspective, Modernism encouraged the re-examination of every aspect of existence, from commerce to philosophy, with the goal of finding that which was 'holding back' progress, and replacing it with new ways of reaching the same end. Others focus on Modernism as an aesthetic introspection. This facilitates consideration of specific reactions to the use of technology in The First World War, and anti-technological and nihilistic aspects of the works of diverse thinkers and artists spanning the period from Nietzsche to Samuel Beckett.

Postmodernism is difficult to define, because to define it would violate the postmodernist's premise that no definite terms, boundaries, or absolute truths exist. In this article, the term "postmodernism" will remain vague, since those who claim to be postmodernists have varying beliefs and opinions on issues.

Are nationalism, politics, religion, and war the result of a primitive human mentality? Is truth an illusion? How can Christianity claim primacy or dictate morals? The list of concerns goes on and on especially for those affected by a postmodern philosophy and lifestyle. For some, the questions stem from lost confidence in a corrupt Western world. For others, freedom from traditional authority is the issue. Their concern centers around the West's continued reliance on ancient and traditional religious morals, nationalism, capitalism, inept political systems, and unwise use and adverse impact of promoting "trade offs" between energy resources and environment, for economic gain.

According to the Postmodern Worldview, the Western world society is an outdated lifestyle disguised under impersonal and faceless bureaucracies. The postmodernist endlessly debates the modernist about the Western society needing to move beyond their primitiveness of ancient traditional thought and practices.

Their concerns, for example, often include building and using weapons of mass destruction, encouraging an unlimited amount of consumerism thus fostering a wasteful throwaway society at the sacrifice of the earth's resources and environment, while at the same time not serving the fair and equitable socioeconomic needs of the populace.

Postmodernists believe that the West's claims of freedom and prosperity continue to be nothing more than empty promises and have not met the needs of humanity. They believe that truth is relative and truth is up to each individual to determine for himself. Most believe nationalism builds walls, makes enemies, and destroys "Mother Earth," while capitalism creates a "have

and have not” society, and religion causes moral friction and division among people.

Postmodernism claims to be the successor to the 17th century Enlightenment. For over four centuries, “postmodern thinkers” have promoted and defended a New Age way of conceptualizing and rationalizing human life and progress. Postmodernists are typically atheistic or agnostic while some prefer to follow eastern religion thoughts and practices. Many are naturalist including humanitarians, environmentalists, and philosophers.

They challenge the core religious and capitalistic values of the Western world and seek change for a new age of liberty within a global community. Many prefer to live under a global, non-political government without tribal or national boundaries and one that is sensitive to the socioeconomic equality for all people.

Postmodernism – Right and Wrong?

Postmodernists do not attempt to refine their thoughts about what is right or wrong, true or false, good or evil. They believe that there isn’t such a thing as absolute truth. A postmodernist views the world outside of themselves as being in error, that is, other people’s truth becomes indistinguishable from error. Therefore, no one has the authority to define truth or impose upon others his idea of moral right and wrong.

Their self-rationalization of the universe and world around them pits themselves against divine revelation versus moral relativism. Many choose to believe in naturalism and evolution rather than God and creationism.

Postmodernism – Politics

Postmodernists protest Western society’s suppression of equal rights. They believe that the capitalistic economic system lacks equal distribution of goods and salary. While the few rich prosper, the mass populace becomes impoverished. Postmodernists view democratic constitutions as flawed in substance, impossible to uphold, and unfair in principle.