



NETAJI SUBHAS OPEN UNIVERSITY

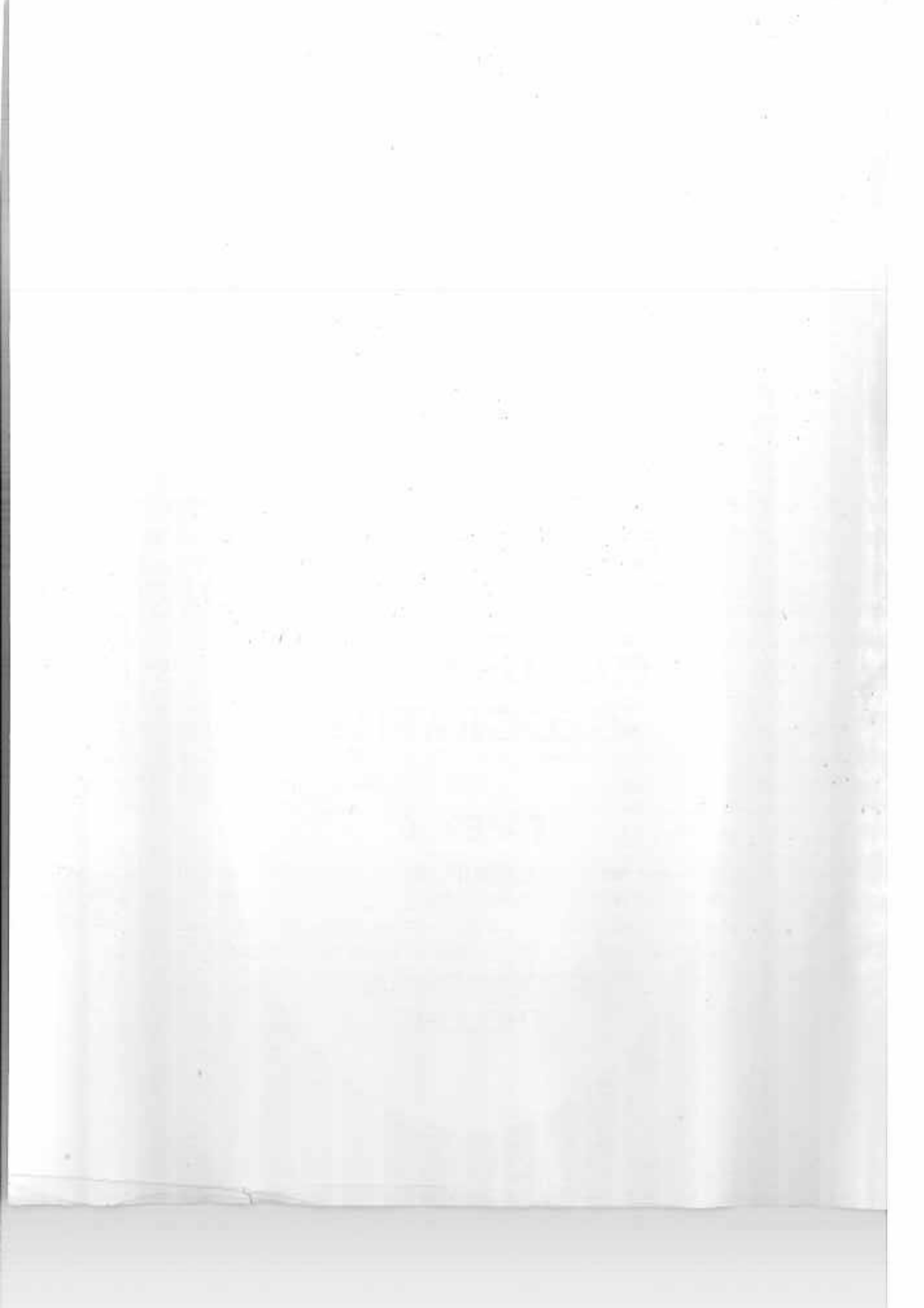
STUDY MATERIAL

**POST GRADUATE
GEOGRAPHY**

PAPER : 6

GROUP : A

**GEOGRAPHICAL
THOUGHT**



PREFACE

In the curricular structure introduced by this University for students of Post-Graduate degree programme, the opportunity to pursue Pos-Graduate course in a subject as introduced by this University is equally available to all learners. Instead of being guided by any presumption about ability level, it would perhaps stand to reason if receptivity of a learner is judged in the course of the learning process. That would be entirely in keeping with the objectives of open education which does not believe in artificial differentiation.

Keeping this in view, study materials of the Post-Graduate level in different subject are being prepared on the basis of a well laid-out syllabus. The course structure combines the best elements in the approved syllabi of Central and State Universities in respective subjects. It has been so designed as to be upgradable with the addition of new information as well as results of fresh thinking and analysis.

The accepted methodology of distance education has been followed in the preparation of these study materials. Cooperation in every form of experienced scholars is indispensable for a work of this kind. We, therefore, owe an enormous debt of gratitude to everyone whose tireless efforts went into the writing, editing and devising of proper lay-out of the materials. Practically speaking, their role amounts to an involvement in 'invisible teaching'. For, whoever makes use of these study materials would virtually derive the benefit of learning under their collective care without each being seen by the other.

The more a learner would seriously pursue these study materials the easier it will be for him or her to reach out to larger horizons of a subject. Care has also been taken to make the language lucid and presentation attractive so that they may be rated as quality self-learning materials. If anything remains still obscure or difficult to follow, arrangements are there to come to terms with them through the counselling sessions regularly available at the network of study centres set up by the University.

Needless to add, a great deal of these efforts is still experimental—in fact, pioneering in certain areas. Naturally, there is every possibility of some lapse or deficiency here and there. However, these do admit of rectification and further improvement in due course. On the whole, therefore, these study materials are expected to evoke wider appreciation the more they receive serious attention of all concerned.

Professor (Dr.) Subha Sankar Sarkar
Vice-Chancellor

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POST GRADUATE GEOGRAPHY

[M. Sc]

PAPER : GROUP

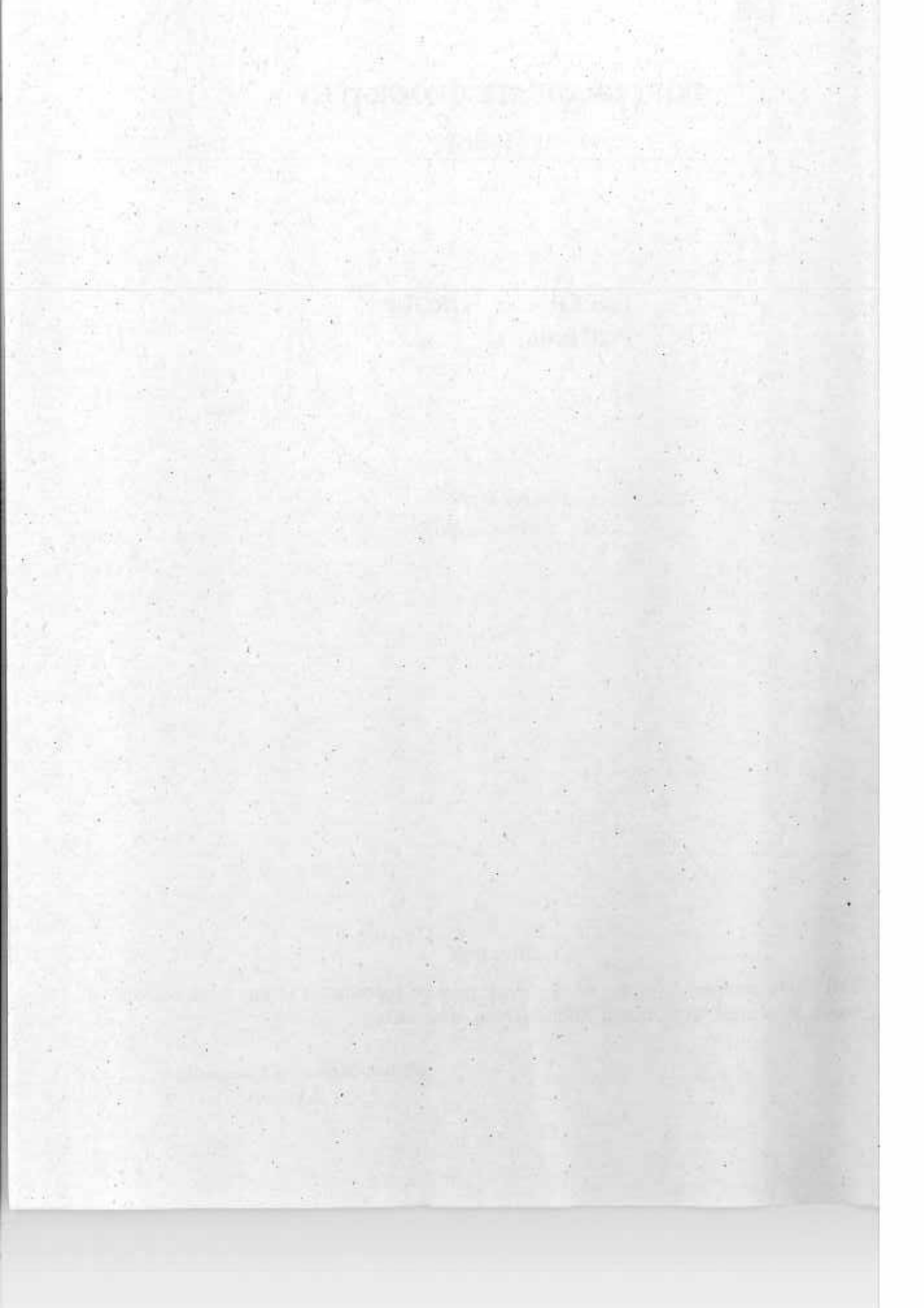
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Mohan Kumar Chattopadhyay
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Group – A

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UNIT 1 □ DICHOTOMIES IN GEOGRAPHY : PHYSICAL AND HUMAN, SYSTEMATIC AND REGIONAL, DETERMINISM AND POSSIBILISM

Structure

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1.1 DICHOTOMIES AND DUALISM IN GEOGRAPHY

Introduction— Dualism means the existence of two fundamental principles or concepts often in opposition to each other. The development of dualism and dichotomies in geography has classical antiquity and can be seen in the works of ancient Greek, Arab and Roman geographers. After the post renaissance period, the apparent dichotomies were developed for the different methodologies in the study of geography. Actually, dualism is characteristics of any field of learning, this learning could be diverted to different paths through their distinctive methodologies and give birth to a new form of dualism. In geography of ancient time there were two main themes of study. First, the study of unique things that means about different phenomena in particular places and second, the formulation of general concept by studying particular types of phenomena on the earth surface. So, naturally these two forms of study within a single field gave rise to methodological problem. As Geography is dynamic and complex in nature, its scope to exhibit dichotomies and dualism also increased with the span of time. Some of the important dichotomies in geography are-

- 1 General geography vs. Regional geography
- 2 Physical geography vs. Human geography
- 3 Deterministic geography vs. Possibilistic geography
- 4 Historical geography vs. Contemporary geography
- 5 Study of formal region vs. Functional region.

1.1.1 Dualism between Physical vs. Human Geography

The dichotomy between physical and human geography most probably started from the works of ancient Greek geographers like Hecataeus, Aristotle, Herodotus, Polybius, Strabo etc. Although the basic traditions in ancient Greek worlds were mathematical and literary but in that time scholarly writers also produced topographical descriptions of places in the known world, discussing both natural condition and cultural and the way of life of people living there, (Holt-Jenson, 1981, 9). Division of geography into physical and human branches takes place because of their different methodologies. In studies of natural phenomena, including climate, geology and landforms, it is possible to use the methods of natural science; however, they do not lead themselves very well to the study of social and cultural phenomena. Our generalizations about human groups must be limited in time and space, and must relate to statements of probability rather than certainty (Holt-Jenson, 1981, 13).

The trend of dichotomy between physical and human geography was initiated by the Greeks. In ancient Greek, Hecataeus gave more importance to physical geography, which is clear from his remark that 'we should take stock of what is around us and put the accumulated knowledge about the world together in usable form'. But Herodotus and Strabo were more interested in human geography. According to Strabo 'the geographer must take his point of departure from the man who has measured the earth as a whole.'

Varenus in his 'Geographia Generalis' (1650) first attempted to make essential differences between physical and human geography. Geography, he wrote focuses attention on the surface of the earth, where it examines such things as climate, surface features, water, forests and deserts, mineral, animals, and the human inhabitants. The human habitats of a place include "a description of the inhabitants, their appearances, arts, commerce, culture, language, government, religion, cities, famous places and famous men." (Dickinson and Howarth, 1933, 101)

1.1.2 Followers of the Physical Geography

Kant was considered as one of the supporters of physical geography because of his lectures on physical geography at University of Konigsburg in Germany between 1756 and 1796. But physical geography, as the term was commonly used in Kant's time included not only the features of the earth produced by natural processes, but

also the races of man, and the changes on the face of the earth resulting from human action. Kant saw man and his works in time association with the physical surroundings and he also recognized human action as one of the principle agencies but he made no distinction between them.

Geography, which Humboldt called 'Erdeschreibung' (earth description), dealt with variety of different kinds of interrelated phenomena that exist together in areas or segments of earth space. Carl Ritter also believed in Unity of Nature as Humboldt but he gave more importance to humans.

Elisee Reclus, was the most famous disciple of Carl Ritter. Reclus was credited with his work on systematic physical geography called 'La Terra' (1866-67). His geography put major emphasis on the study of the physical features of the earth's surface. After Reclus, Guyot worked in the field of physical geography, who was the first professor of physical geography and geology at the college of New Jersey (Princeton) from 1854 to 1880. In the time of Julius Frobels (1805-1893), geography was not merely dualistic but was separated into two branches.

In geography, Darwinism was interpreted primarily as an evolution which was applied in both physical and human geography. The emergence of new geography in Germany had led great development in physical geography. Works of Peschel, Richthofen, Ratzel, Penck, and Hettner enriched this branch.

Peschel was the professor of geography at Leipzig in 1871, and his morphological research created an academic stir in physical geography. He seemed to have recognized the dualism in geography. Peschel excluded the study of man from it, but devoted his scientific energies and his teaching to both.

Richthofen was one of the followers of physical geography; to him geography is the science of earth surface and the things and phenomena that are casually interrelated with it.

Albert Penck is long remembered for his valuable contribution to the development of modern physical geography. He first coined the term geomorphology to refer the origin and development of earth's landform. After that Koppen, Mill, Morton, and Davis, were great scholars who put more emphasis on landforms and climates as the major concerns of geography. Koppen made several attempts to provide a satisfactory classification of climates, using temperature distinctions only. William Morris Davis was the professor of physical geography at Harvard university. According to Davis the study of geography is a means for introducing many kinds of physical sciences in a simple coherent frame work. Davis learned from Shaler to see organic life, including man, as a part of the whole physical landscape and thus he began to seek an even larger conceptual structure for geography. He formulated the concept of the cycle of erosion in 1899 to explain the landform development. Mackinder, Chisholm, and Hettner also recognized physical geography as the main field for geographers.

Voeikov and Dokuchaiev were the two most prominent pre-revolutionary Russian geographers who advocated in favour of physical geography, that geographers' should concentrate on the physical aspects of earth's surface. The pre revolutionary tradition of physical geography was carried by I. P. Gerasimov. Systematic studies of climatographic analogue, soil geography, glaciology, geomorphology, and bio geography, accompanied with the universal and generic concepts, appeared to have given a distinct status to physical geography in the Soviet Union.

However, geographers like Wrigley have mentioned that, in physical geography, law statements assume paramount importance in contrast to human geography where these are irrelevant.

1.1.3 Followers of the Human Geography :

Human geography is originated because the geographers were not fully satisfied to consider man as a part of nature but they also wanted to show that the man has the power to change the earth and have the realization of these changes.

Ratzel and Ritter were first to support this view. Ritter's regional geography was centred on men, the aim was to study the earth surface from the anthropocentric standpoint, to seek to relate man and nature and to see the relationship between man and his history and the ground on which he lived (Tatham, 1967, 44).

Ratzel first separated human geography from regional studies. He wrote 'Anthropogeographie' (1882) in which he attempted to develop the new method of natural science with in geography. Ratzel saw man as the end product of evolution, an evolution in which the emphasis was on the natural selection of types according to their capacity to adjust themselves to the physical environment. Kirchhoff studied human geography by the reverse method- by considering human condition in relation to natural condition. He gave more attention to the culture of human groups than to the physical aspects of the earth. This approach was adopted by Ratzel in his second volume of Anthropogeographie (1891) as he attempted to discuss the concentration and distribution of population, settlement, migration and diffusion of cultural characteristics.

French geographer Comte de Buffon in his book "Historic Naturelle" attempted to emphasize the change on the face of the earth by the action of man, in the process of developing civilization. In geography, according to Febvre, "We deal with man's work, man's calculation, man's movement, the perpetual ebb and flow of humanity, man not the soil or climate -is ever in the forefront."

Vidal de la Blache is regarded as one of the founding fathers of modern human geography. Blache pointed out the inherent weakness of the geographic concept of environmental determinism. He realized the futility of setting man's natural surroundings in opposition to his social milieu and of regarding one as dominating

other. His 'Principles de Geographie Humaine' is regarded by geographers as classic. The book deals with study of population density, clusters, major agglomerations in Europe, movements of population in Europe, man- milieu relationship, transport and communications etc. Blache regarded human geography as a natural science (Jenston, 1986, 207)

Jean Brunhes, was one of the out standing pupils of Vidal. He elaborated Blache's idea about human geography. His major work appeared in 1910 with the title "Geographie Humaine: essai de classification positive" He divided the essential facts of human geography into three categories- 1. The facts of the unproductive occupation of the soil: houses and roads (including rural).

2. The facts of plant and animal conquest: the cultivation of the plant and raising of animals.

3. The facts of destructive exploitation: plant and animal devastation, mineral exploitation. (Preston, E James, 1981, 250).

Albert Demengeon was one of the students of Vidal de la Blache, Human geography according to him, is the study of human groups and societies in their relationships to the physical environment or geographical milieu. He emphasized the work of man in modifying his environment by means of communication, artesian wells, and the control of rivers and the evolution of new plants for human food. The study has four main aspects-

1. The influence of the geographical milieu on modes of life

2. The changes in the genre de vie under the impact of human milieu.

3. The distribution of human groups as the result of the natural milieu, and the degree of civilization.

4. The establishment in the landscape, due to the impact of the human groups on the land (Adhikari, S. 1992, 147).

This dichotomy has worried the German geographers for a long time, but the French geographers stopped worrying about methodological questions of this sort after the death of Vidal in 1920.

In America Mark Jefferson, was the pioneer, with such papers as that of 1909 which dealt with the 'Anthropogeography' of some of the Great Cities. He brought the idea of 'Central places', 'The Primate City', and 'the Civilizing rails' in the field of human and urban geography.

1.1.4 Conclusion

From this discussion it can be properly understood that the human geography

basically deals with the mutual man -nature relationship which is interdependent. Geography studies the "observable-interrelated phenomena" occurring in different locations, on account of man environment relationship on the earth's surface.

Human geography is inseparable from physical geography because the various phenomena on the spatial section of the earth's surface have human elements. So, the dichotomy of physical verses human geography is artificial and illogical. The study of only the physical part or only the human part is not possible, because man can modify his physical environment. Without the reference of human activity, study of physical geography remains incomplete and the study of human geography mostly depend on the physical effects on human beings. So, both are interrelated. For the survival of geography this dichotomy between physical geography vs. human geography should be eliminated.

1.2 SYSTEMATIC GEOGRAPHY VS. REGIONAL GEOGRAPHY

Systematic and regional geography were formally known as general and special geography. These two terms were first used by Bartholomew Keckermann in his lecture at Dazing in 1603. It is commonly believed that Varenus made use of Keckermann's work in an organized manner and provided a clean demonstration of the relation between these two points of view (Barker, 1963, 113).

Basically this intellectual problem became of major importance in the early pre classical period of modern geography, as a result of the redundance of new information about specific places and the efforts to generalize this information.

Bernhard Varenus (1622-1650) first raised the dichotomy between systematic and regional geography. Varenus set forth the relationship between geographical writings that describe the characteristic of particular places and those that apply to all places. Varenus in his 'Geographia Generalis' (1650) divided geography into general or universal and special or particular branches.

In special or regional geography what Varenus intended was that with the exception of celestial features (climate) things must be proved by experience (by direct observation through the senses). But in systematic geography most things could be proved by mathematical or astronomical laws. Regional has particular importance for government and commerce but it leaves out the fundamentals of this field of study. It was rather difficult to establish laws in regional geography, for explanation must be descriptive where people are involved. Systematic geography provides all the fundamental which regional geography is lacking of, but to be of maximum utility they must be applied. After Varenus, this distinction between the two aspects of

geography was more explicitly stated by Gatter (1773-75), Kurg (1800) and particularly by Bucher (1812).

1.2.1 Followers of the Systematic Geography

Kant (1724-1804) was considered as one of the supporters of systematic geography. According to him Geography is an empirical science, seeking to present a "system of nature" and is a law finding discipline (May, J.A.1970, 147-151).

The leading German scholar Alexander Von Humboldt pointed out that in order to establish the unity of the total cosmos; it seemed more important to make systematic studies of particular kinds of phenomena in their interrelations in areas, than to prepare complete studies of individual areas. Humboldt pointed out that geography regarded all the objects as a natural whole as they stood in areal connection, in part with the earth body, in part with the universe (Hartshorne, 1976, 76-78). Humboldt put more stress on empirically observed facts and followed inductive method which means the logical process using observation of particular initial case in order to infer a general law from them. Humboldt strongly held the concept of 'Unity of Nature'. The phenomena of nature were studied in order to establish the coherence and unity.

Humboldt can also be described as a regionalist, his 'Essai politique su le ile de Cuba' are the major works in regional geography but he always gave greater emphasis on scientific process to indicate the interrelationship of different phenomena in areas. He is credited with having made geography an original and distinctive science, rather than a collection of facts from the physical and biological senses.

In the late nineteenth century, because of the Darwinian influence, geographers made significant contribution to systematic studies in geography. Oscar Peschel seemed to have recognized the dualism in geography. To Peschel, geography was to be a systematic, empirical science, its method, and observation, drawing induction from those observations, and correcting these by still new observation. His enormous respect for natural law led him to attempt causal classification of the life features of the earth's surface.

Richthofen followed the precedent of Humboldt, attempted to revive the close connection of geography to the natural sciences, and at the same time restored the Ritterian tradition. According to Richthofen geography is the science of the earth's surface and the things and phenomena that are casually interrelated with it.

Richthofen attempted to distinguish between the general geography and special geography. According to him general geography is not progressive, it is rather regressive; since it passes from the particular to general, from the condition to cause. It is analytical. Special geography is primarily descriptive and synthetic. To him, the essential observation on which any framework of concepts must be built had to be made in the field in particular areas where the features are unique.

Friedrich Ratzel provided the guideline for a comparable systematic study of human geography. The brilliant generalizations of Ratzel's work was the application of Darwin's biological concepts to human societies. This analogy suggested that groups of human beings must struggle to survive in the particular environments as much as plant and animal organisms must do. Thus, Ratzel initiated a new ground in demonstrating that cultural and natural phenomena that could be subject to systematic study.

During 1950's, systematic studies became much more important in the research and teachings of American geographers. Schaefer, Ullman and Ackerman were the precursors of this new paradigm.

According to Schaefer, a science is characterized by its explanations and explanation requires laws. In geography, the major regularities which are described refer to spatial patterns and hence geography has to be conceived as the science concerned with the formulation of the laws governing the spatial distribution of certain features on the surface of the earth.

Edward Ullman (1953) a professor of geography at University of Washington, thought that geography as areal differentiation implies that 'we are not seeking principles or generalizations or similarities, the goal of all sciences'.

In article in *Geographical Review* on the distribution of population in earth space, the astronomical physicist John, Q. Stewart (1947) told, 'there was no longer excuse for ignoring the fact that human being obey mathematical rules resembling the 'Primitive laws of physics'. He said Geography as the study of regional uniqueness could never use the methods of physics which depend fundamentally on the recognition of regularities. For geography to be modern science it had to be redefined away from the irregular and towards the study of space as regularity that is space had to be reconceptualized not as the irregular characteristics of natural environments describable in metaphorical, poetical terms, but as distance pure, simple, and quantifiable.

Von Thunen, (1966), Christaller (1933), Alfred Weber (1929) etc. also expressed the notions of spatial regularity.

1.2.2 Followers of the Regional Geography

Ritter was a contemporary of Humboldt. Most of Ritter's earlier works point towards his zeal in the systematic studies. But latter he was one of the founders of regional geography and stressed that geography should first concentrate on the study of all the interrelated phenomena to be found in each of all the areas of the world, and then on their basis systematic studies could be made on the relations of individual type of the phenomena.

According to the Ritter the aim of geography should be "to get away from mere description to the law of the thing, described, to reach not a mere enumeration of

facts and figures, but together local and general phenomena of the earth surface." Ritter was a regional geographer who gave weight to man as an important component of the physical surroundings.

Hettner was one of the significant regional geographer. He defined geography as the chorological science of the earth's surface, or in other words, geography is the study of the earth (eardkunde) according the causally related differences -the science of areal differentiation of the earth's surface. Actually "the goal of the chorological point of view is to know the character of region and places through comprehension of the existence together and interrelation among the different realms of reality and their varied manifestations, and to comprehend the earth's surface as a whole in its actual arrangement in continents, larger and smaller regions and places" (Hartshorne, 1959, 13).

He pointed out that the systematic sciences ignore the temporal and spatial relationships and find their unity in the objective likeness or similarity of the subjects with which they are concerned.

But it is mainly due to Hettner that dualism, which so long hampered geography has been successfully overcome the problem. However some writers have accused Hettner of defining geography as essentially idiographic (regional) but it is not true. He attempted to make it clear that geography is both idiographic and nomothetic.

Vidal de la Blache seeks to establish geography as a distinct discipline. He rejected the deductive approach of Ratzel and supported inductive and historical method. He studied small natural regions (pays) which are manifestations of intimate relationship between man and nature that developed through the century's. He argued that the study of such small natural region, each of which is unique, should be the task of the geographers. So, he opted for regional geography as the core of the discipline. Man-nature relationship cannot be studied along systematic lines.

Demangeon in support of regional geography wrote 'every region has its unique character to which contribute the features of the soil, atmosphere, plants and man, The aim of all geographical research consists in the analysis of these features. The aim of description is to synthesized these and to show the interlocking of all the phenomena which comprise regional type (Demangeon, 1905).

Jean Brunhes, Sten de Geer etc were the other supporters of regional geography.

In the first half of twentieth century the great supports for regional geography came from the works of Carl O Sauer, Richard Hartshorne and Robert Platt etc. In that time regional geography was transformed from indispensable part of geography to the culminating branch. According to Wooldridge and East, for the general reader, regional geography is and always has been geography par excellence. In Annals of the Association of American geographers (1919) Nevin Fenneman wrote that "The one thing that is first, last and always geography and nothing else, is the study of areas in their compositeness or complexity that is regional geography."

The leading form of regional geography in the Anglo-American tradition was theorized by the eminent geographer Richard Hartshorne (1899-1992).

Hartshorne's 'The Nature of Geography' (1939) was symbolic of a particular style of descriptive regional geography. The main features of Hartshorne's conception of geographical part of knowledge are as follows—

He emphasized that geography seeks to acquire a complex knowledge of the areal differentiation of the world Phenomena significant to areal differentiation having areal expression (Hartshorne, 1939, 463-5). He again pointed out that the things geographers deal with on the face of the earth are not uniformly distributed over it. The phenomena associated in a particular place are unsystematically related because they are produced by different processes. So, the task for the geographer is to study each process as it operates in particular places.

At last, after long discussion, Hartshorne and Ackerman decided that systematic and regional geography are not separate disciplines rather the parts of geography. Berry does not consider any conflict that exists between regional and systematic geography because they lie at the two extremes of a continuum. Some geographers considered regional geography as the traditional component of geography which was until recently widely considered *sine qua non* of the discipline. But another group of geographers also considered that the regional concept is experiencing a reappraisal. Thus the dichotomy of systematic and regional therefore, falls as they do not oppose but support each other in the final analysis, of the subject matter of geography.

1.3 DETERMINISM VERSES POSSIBILISM

Geography is the study of the relationship between man and environment and from ancient time geographers have engaged themselves to study impact of man on environment and vice versa. This study is still relevant for better understanding of the changing pattern of man-environment relationship. Environmental determinism and possibilism are the two mutually exclusive philosophies in human geography, centered on man, whether man is to be looked upon as a 'passive being' or as an 'active force', reacting to his environment and changing it. The philosophy of environmental determinism is, perhaps, the oldest surviving philosophy that can be traced back to the classical antiquity. This idea has been inherited from Greek philosophy that nature is all powerful and not only directed but determined all the human activities. According to Haggett, 'environmentalism is the view that natural environment plays the major role in determining the behaviour patterns of man on the earth's surface'. After Second World War this dichotomy started. On the other hand philosophy of possibilism reflects the view that the pattern of human activity on the earth's surface is the result of the initiative and mobility of man operating within a frame of natural

forces. Without denying the limits every environment sets to man's ambition, they emphasize the scope of man's action rather than these limits. Haggett has defined it as follows, "Possibilism, in contrast to environmentalism, stresses the freedom of man to choose alternative patterns of behaviour despite geographic location (Haggett, 1972, 591).

1.3.1 Supporters of Determinism

Determinism is the oldest surviving philosophy so, it has classical antiquity. First, Greek and Roman scholars attempted to study the impact of nature on man. Hippocrates (420BC) in his 'Airs, Waters and Places' compared the easy going Asiatic living in a very favourable region with the penurious Europeans, with a hard hand of nature upon them. Aristotle in his Politics also showed the difference of colder Europeans with Asians in terms of courage, technical skill, and spirit. The people of Asia are thoughtful, skillful but without spirit. Where as Europeans are brave so they remain free longer than others.

Plato (428-348 BC) insisted that the observable things on the earth were only poor copies of ideas or perfect predicates from which observable things had degenerated or were in the process of degeneration.

Eratosthenes, Strabo, and Ptolemy were the eminent supporters of this view at that time.

The Middle Ages were dark periods for the development of sciences in Europe. But various supports came from Albertus Magnus, Cardinal Pierre d' Ailly, Ibn-Hawqal, Al Masudi, Al- Biruni, Ibn-Batuta, and specially from Ibn-Khaldun, who was the first scholar to have turned his attention specially to man- environment relations. His book 'Muquaddimah' in 1377 begins with a discussion of man's physical environment and its influence and with man's characteristics that is related to his culture or way of living rather than to the environment. During renaissance emphasizing the impact of environmental factors Bodin in 1566 described the peoples of northern lands as brutal, cunning, but gifted with the capacity for separating truth from falsehood. Inhabitants of temperate regions are more talented than those of the north, more energetic than those of the south and they alone possess the prudence necessary for command. Montesquieu, a century later, explained the determining effect of climate and soil on the character of the people as a guide to the law giver. People in cold climate are stronger physically, more courageous, more frank, less suspicious and less cunning than those of the south who are like old men, timorous, weak in body, indolent and passive. The hot climate is the cause of immutability of religion, manners, customs and laws in the eastern countries. He was of the opinion that island peoples are more zealous of their liberties than those of the continents. Kant also described that all inhabitants of hot lands are exceptionally lazy, they are also timid and the same two traits characterize also folks living in the north. From

these basic concepts inherited from Greek philosophers, the nineteenth century geographers developed the concept of deterministic study in a systematic way. Two of such geographers of the early part of the century Carl Ritter and Alexander Von Humboldt known for their 'positivist' approach based on empiricism, had attempted to give a new dimension to the idea of determinism and such hypotheses.

Alexander Von Humboldt (1769-1859), a German geographer, was considered as the pioneer of determinism in geography. In his book *Cosmos*, he described the effect of configuration of the Mediterranean on the evolution of early civilization. He wrote, "the influence of the sea was speedily manifested in the growing power of the Phoenicians and in the rapid extension of the sphere of general ideas."

He believed that the phenomena on the earth's surface were governed by laws, but all these would only become apparent when all facts and relationship had been observed in all parts of the earth. Carl Ritter (1779-1859) a German geographer propounded the influence of environmental factors not only on human activities but also on human character. He was a teleologist, and his views seem to be a manifestation of an implied determinist. Many people said that Ritter was not a determinist because he was much cautious to indulge in facile generalizations. Furthermore, though he was interested in the effect of the earth on man, the reciprocal action of man on earth was to him equally significant. Ritter in fact, pursued 'idealism' in his explanation to this concept of unity of nature vis-a-vis the hypothesis of determinism.

Darwin's ideas revolutionized the early nineteenth century hypothesis on determinism. William Morris Davis, Haeckel, Herbert Spencer, and Ratzel developed the concept of Darwin and established a relationship between Darwinism and Determinism. Fredric Ratzel may be considered as leader of environmentalism. In his 'Anthropogeographie', he showed the influences of the geographical environment upon history. In 1897 Ratzel published his work on political geography where he attempted to show that a state like some simple organisms, must either grow or die and can never stand still, it is the reflection of Darwinian idea of 'selection and struggle'.

Frederic Le Play, Buckle, and Demolins were the great contributors of this approach.

The most influential determinist of the early twentieth century, belonging to the Darwinian-Ratzelian heritage was the American geographer Miss Ellen Semple. In her classical work, 'Influence of geographic Environment' (1911) she noted- "Man is a product of the earth's surface. This means not merely that he is a child of the earth, dust of her dust, but that earth has mothered him, fed him, set him tasks, directed his thought, confronted him with difficulties that have strengthened his body and sharpened his wits, given him his problems of navigation or irrigation and at the same time whispered hints for their solution" (Semple, EC, 1911, P-1-2).

Huntington was often described as an imaginative thinker and interpreter of the

effects of climate on human life. His view is also known as climatic determinism. E. C. Dexter, Albert Brigham, H.J. Mackinder, Mechni Kov, Baranskily, Plekhanov supported the deterministic approach.

Apart from above geographers, several other scholars have supported fully or partially the concept of environmentalism. But with the advancement of knowledge, scientific and technological developments it was realized that man can use nature for his comforts. According to Tatham, although environment undoubtedly influences man, man in turn changes his environment, and the interaction is so intricate that it is difficult to know when one influence ceases and the other begins (Tatham, 1952, P-148). The possibilist paradigm views that the Physical environment tends to provide the opportunity for a range of possible human responses and that people have considerable discretion to choose between them through their creative genius and creativity (Adhikari.S.2006, P-207).

1.3.2. Supporters of Possibilism

It was not until 1899 that a new dimension to the philosophy of possibilism was added by Paul Vidal de la Blache by the work of other geographers like Montesquieu, Comte de Buffon, George Perkins Marsh and Alfred Kirchoff. As opposed to the environmental determinism of the Darwinian-Ratzelian heritage, Blache set forth a conceptual frame work of possibilism which was later fully developed by a critical historian Lucien Febvre. Blache said that the physical environment provided a range of possibilities which man turned to his use according to his needs, wishes and capabilities in creating his habitat. He also said that in an area of human settlement, nature changed significantly because of the presence of man, and these changes were greatest where the level of material culture of the community was highest. According to him "nature is never more than an advisor." Febvre in his book 'Geographical Introduction to History' explained the man -environment relationship in a new form, when he wrote 'man is a geographical agent and not the least. He everywhere contributes his share towards investing the physiognomy of the earth with those 'changing expressions' which is the special charge of geography to study. He again proposed that 'there are no necessities but everywhere possibilities, and man as a master of these possibilities is the judge of their use.'

According to Brunhes 'we must add to the group of material forces whose incessant interplay we have seen this new force, human activity, which is not only a material thing, but which also expresses itself through material effects' (Brunhes, p27). American geographer Isaiah Bowman was a staunch admirer of the French possibilist paradigm. In his 'geography and the Social Sciences', Bowman stated 'as knowledge of the world spread, the association of event or condition with place widened, they became more complex, they had less or more significance with respect to mankind.'

Carl .O Sauer, and V.Whittlesey also supported the view of Possibilism, but like determinism, Possibilism is also an extreme concept and soon people realized that the impact of nature cannot be ignored. Man can use nature but there is a certain limit to such utilization. Striking a balance between extreme Determinism and extreme Possibilism, Griffith Taylor developed a new philosophy, called 'stop and go determinism' or 'neo-determinism', in the early 1940's. It may be, he stated that the well endowed parts of the world offer a number of different possibilities for making a living, but in some nine tenths of the earth's land area nature speaks out clearly: This land is too dry, too cold or too wet, or too rugged. Any settlers who fail to heed this nature-given limitation must face disaster. Debate on environmental determinism and Possibilism continued into 1960's, 1970's and 1980's and was actively pursued in the United Kingdom in the first decade after the Second World War.

O.H.K. Spate in 1957 proposed the philosophy of Probabilism in which physical environment is not considered as powerful to determine every human actions, it does, nevertheless make some responses more likely than others- 'human action was represented as not choice or compulsion, but a balance of probabilities. Haggett said 'Probabilism is a compromise position between environmentalism and possibilism that assigns different probabilities to alternative patterns of geographic behaviour in a particular location or environment.' Fleure, Spate, Woolridge and East, Roxby and Herbertson have expressed their ideas on man-environment relationship in terms of man's adjustment to nature and have also given due weightage to the modern scientific development. Thus the debate among geographers about whether people are free agents in their use of earth (environment) or whether there is a 'nature's plan slowly dissolved as the antagonists realized the merits in each case.

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UNIT 2 □ LANDSCAPE MORPHOLOGY—CULTURAL EXPRESSION OF CARL SAUER

Structure

- 2.1 The Morphology of Landscape
- 2.2 Concept
- 2.3 Conclusion
- 2.4 Selected Reading

2.1 THE MORPHOLOGY OF LANDSCAPE

Introduction— Landscape is a polysemic term referring to the appearance of an area, the assemblage of objects used to produce that appearance and the area itself.

Carl O Sauer (Dec 24, 1889 July 18 1975) an American geographer introduced the term 'Morphology of landscape' in 1925. The influential article drew on the concept of 'land schaft' developed by German geographers most predominantly Passarge and Schultze. Carl Sauer used the term 'landscape' to denote the concept of geography to characterize the particularly geographic association of facts and suggested that equivalent term for landscape might be area or region. Sauer's thinking about cultural particularism and relativism was influenced by the work of Alfred Kroeber (1876-1960) and Robert Lowie (1883-1957). They were the members of the anthropology faculty at University of California. Kroeber was keen to explore how the particular associations of cultural traits are mapped the distinctive feature of particular people, but also how those traits interacted to map the total way of life, of a tribe of Californian Indians or the first peoples to domesticate plants. Kroeber put it this way. The concept of cultural area is a means to an end. The end may be the understanding of cultural processes as such, or of the historic events of cultures. A few years later Carl Sauer echoed these words precisely - a geographer 'is interested in discovering different patterns of living as they are found over the world - cultural areas. Geographer is, therefore, properly engaged in charting the distribution over the earth of the arts and artifacts of man to learn whence they came and how they spread what their contexts are in cultural and physical environments. Sauer went back to the writing of Passarge's land schaft, chorology (the science of region) associated with Richthofen, and studies of how natural landscape are transformed into cultural ones, associated with Hettner to conceive geography as a cultural history in its regional articulation.

2.2. CONCEPT

Sauer used the term 'landscape' to denote the unit concept of geography, to characterize the particularly geographic association of facts and suggested that equivalent terms for landscape might be area or region. Sauer was a fierce critic of environmental determinism, which was the prevailing theory in geography when he began his career. He proposed instead an approach variously called 'Landscape Morphology' or 'Cultural history'. This approach involved the inductive gathering of facts about human impact on the landscape over time. His goal was to re-establish geography as a respective science - a task all the more important because no other discipline had claimed for itself the 'section of reality' that comprise geography. That section of reality -one that he asserted was 'naively given' by the very nature of the world -was the landscape (Leighly, 1963, 316-17) Sauer therefore argued that the task of geography was to establish 'a critical system which embraces the phenomenology (science of phenomena which can be perceived as objects, occurrences or facts) of landscape in order to grasp in all of its meaning and colour the varied terrestrial scene' (Leighly, 1963, 320).

The first step in the Morphology of Landscape approach was to make an elementary distinction between the cultural and natural landscape. According to him - "The design of landscape includes 1. The features of the natural area and 2. The forms superimposed on the physical landscape by the activities of man, the cultural landscape. The man is the latest agent in fashioning of the landscape"(Sauer: 1927, 186)

In the Morphology of Landscape, Carl Sauer presented his model on the derivation of a cultural landscape. In this model it is shown that the culture is the factor that begins the process. Sauer downplayed the subjective aspects of the concept of landscape and stressed that landscape was an objective area to be studied scientifically through observation. In case of landscape morphology it has to be studied as an area made up of a distinct association of forms both physical and cultural. Sauer's position was that geographers should proceed genetically and trace the development of a natural landscape into a cultural landscape.

Actually the natural landscape existed as pure natural only before the introduction of man's activity in a particular area. Any natural scene Sauer averred, begins as a set of factors, geognostic (the underlying geology), climate, vegetation and so on. Over time these factors interact with each other to create the specific landscape forms (climate, geomorphic features, soil, specific association of vegetations etc.) that comprise the morphology -the shape and structure of the natural landscape itself. Such description of natural landscape (including the description of the processes a work overtime that give shape and structure to them) was according to Sauer, merely preliminary. The natural landscape is being subject to transformation at the hands of

man, the last and for us (geographer) the most important morphological factor which can change the shape and structure of physical landscape. By his culture man makes use of the natural forms, in many cases alters them, and in some destroys them.

The cultural landscape is fashioned from a natural landscape by cultural groups. Sauer wrote, 'Culture is the agent, the natural area is the medium and the cultural landscape is the result.....The natural landscape of course is of fundamental importance, for it supplies the materials out of which the cultural landscape is formed. The shaping force however lies in the culture itself. Every social group imparts its cultural imprint on the natural landscape. In time this imprint produces what Sauer called a cultural landscape, which includes settlement patterns, distinctive structures, and transportation systems, all attributes of a society. The cultural landscape is therefore an effect and culture (working with and against nature) is a cause upon which we look. Sauer developed a powerful methodology for understanding the processes through which landscape is developed.

FACTOR		MEDIUM	FORMS
Culture	-time-	Natural landscape	...Population density, mobility, housing ...Cultural Plan, structure, Landscape production, Communication etc.

Carl Sauer's schematic representation of the morphology of landscape (Mitchell, 2000, 29) notes that in contrast to environmental determinism, 'culture' becomes the primary agent of change and the results of that change -the cultural landscape is what is to be explained.

Over time the cultural landscape has changed and has become complex with each 'introduction of a different- that is alien culture' in an area a "rejuvenated of the cultural landscape sets in, or a new landscape is superimposed on remnants of an older one" (Leighly, 1963, 343).

Sauer and his numerous students developed the methodology laid down in *The Morphology and Landscape* to show how cultural development and transformation is (including conquest of indigenous peoples by imperial powers) constantly created and recreated at the places and landscapes where people live.

According to Mitchell, if Sauer's 'morphology' directed geographers to a more subtle notion of causality than that espoused by environmental determinism a notion that sought to understand how people lived in place and thus shaped it, rather than vice-versa - and if it also directed attention to the agency of human cultures, it also reasserted a renewed importance for descriptive studies. After all, one of the purposes of studying the landscape was to determine just what the evidence of 'culture' was.

Sauer himself suggested that geographers needed to concern themselves with the description of cultural forms that comprise the landscape. This is a strictly geographic way of thinking of culture.

2.3 CONCLUSION

Time and change are basic concepts of Carl Sauer's cultural landscape. The roots of Sauer's anti-evolutionism are found in his early rejection of environmental determinism for an empiricist and chorology of material culture traits and in his connection with contemporary anthropologies. 'The morphology of landscape' is of great importance because it essentially ended with the influence of environmental determinism in American geography. Sauer was the important founder of two geographical sub disciplines, cultural ecology and cultural geography. He was also one of the first geographers to express concern about the negative impacts of cultures on the natural environment. At his death in 1975, the American people as a whole lost one of the most articulate scholars this century has yet produced.

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UNIT 3 □ HARTSHORNE—SCHAEFER DEBATE ON REGIONAL DIFFERENTIAL AND SPATIAL ORGANIZATION

Structure

- 3.1 Hartshorne—Schaefer Debate (Regional tradition : Areal differentiation)
- 3.2 Spatial tradition
- 3.3 Conclusion
- 3.4 Suggested Reading

3.1 HARTSHORNE—SCHAEFER DEBATE (Regional tradition : Areal differentiation)

The significance of the Hartshorne-Schaefer debate in the development of tradition in geography after World War -II focused on a shift from a more idiographic, specific perspective to a more nomothetic, law making, and generalized perspective.

Regional tradition : Areal differentiation-during 1920's the focus of many American geographers moved away from man land relationship to a concern with regional studies. In the late 1930's, Richard Hartshorne wrote a monograph 'The Nature of Geography : A critical survey of current thought in the light of the past' (1939) which sought a logical rationale for geography as an academic study. For nearly two decades this work was cited as defining areal differentiation as the main stream of geographical scholarship.

According to Nicholas Entrikin (1989) it was symbolic of a particular style of descriptive regional geography with roots in German geography, especially the ideas of Alfred Hettner. Hettner defined geography as the study of the earth's surface, according to the causally related differences—the science of areal differentiation of the earth's surface. According to Hartshorne- "Geography seeks to acquire a complex knowledge of the areal differentiation of the worldphenomena significant to areal differentiation having areal expression. Consequently, geography depends first and fundamentally on the comparison of maps. In systematic geography, each particular element or element complex, that is geographically significant, is studied in terms of it's relation to the total differentiation of areas. In regional geography, all the knowledge of the interrelation of all features at given places— obtained in part from the different systems of systematic geography is integrated, in terms of the interrelations which

these features have with each -other, to provide the total geography of those places(Hartshorne 1939, 463-5). He stated that geography is basically a regional study dealing with unique combination (interrelations) of characteristics in specific areas of the earth's surface; it is also largely descriptive 'no universals need to be evolved', other than the general law of geography that all areas are unique', (Hartshorne 1939, 468). Hartshorne contented that the purpose of geography is to provide accurate, orderly and rational descriptions and interpretations of areal or regional variability, it seeks to acquire a complete knowledge of the areal differentiation of the world, and therefore discriminates among the phenomena that vary in different parts of the world in terms of the geographic significance, i.e. their relation to the total differentiation of areas. The principal purpose of the geography, according to this tradition, is synthesis, as an integration of relevant characteristics to provide a total description of a place - a region -which is identifiable by its peculiar combination of those characteristics.

There is a close parallelism between history and geography. While history organizes facts chronologically, geography organizes them chorologically. So, history provides a synthesis for temporal sections of reality where as geography studies the spatial sections of the earth's surface.

This regional tradition became very popular and man research works emerged in the fields of urban geography, political geography, and social geography. While defining the 'new' field of social geography, Watson (1953) saw it 'as the identification of different regions of the earth's surface according to associations of social phenomena related to the whole environment.

3.2 SPATIAL TRADITION

This tradition had faced sudden death because of the emergence of a new research tradition in the mid 1950's, in the form of the single Annals article published in 1953 by a scholar Fred Schaefer, entitled 'Exceptionalism in geography, A methodological examination. (In the Annals of the Association of American Geographers 43, 226-244)

In his paper he argued that the regional tradition implied the study of inherently unique or exceptional objects, regions and science is about the construction of generalization that cover groups of objects. He then pointed out that the object of such geographical study "to claim that findings of the individual systematic sciences were arrogant and that in any case its products were somewhat lacking instartlingly newer and deeper insights".

So, from regional traditions all of us can construct different boundaries to any region, such as the Great Central Valley (e.g. fluvially, structurally and politically);

and justify our choices logically and there is no universal way to choose one set of boundaries over another.

Schaefer believed that as a social science, geographic research should explore regularities in spatial patterns. The definition of geography should not emphasize chorology as advocated by Hartshorne, but rather it should be developed as a science of those factors governing the spatial distribution of certain features on the surface of the earth. It is the spatial arrangement of phenomena, not the phenomena themselves, that Schaefer believed should be the subject of the geographers' search for generalizations. Geographic methodology should be the basis for formulating generalization that can be stated as hypotheses to be tested against a large number of cases. If the hypotheses can be verified, it should be possible to formulate geographic theory.

Debate

Hartshorne claimed that geography does not share the methodology of other sciences because of the peculiar nature of its subject matter which include the study of unique places or region. But Schaefer opined that geography is not peculiar in its focus on unique phenomena; all sciences deal with unique events which can only be accounted for by an integration of laws from various systematic sciences, but this does not prevent the development of those laws. In case of history, historians must integrate laws of social science to explain what happened at a certain time.

Schaefer also pointed out some problems of applying nomothetic approach to geography as a spatial social science. These problems include experimentation, quantification and methodological selection.

In the three of his major publications (1955, 1958 and 1959), Hartshorne expressed his reaction to Schaefer's attack and criticism to his regional paradigm. He claimed that Schaefer's view ignores the normal standards of critical scholarship, and in effect offers nothing more than personal opinion, thinly disguised as literary and historical analysis (S.A.P.207).

Hartshorne's most bitter rebuttal of Schaefer's criticism was published in his monograph entitled 'Perspective on the Nature of Geography' (1959) in which he defined geography as that discipline which "seeks to describe and interpret the variable character from place to place of the earth as the world of man." He considered that human and natural factors do not have to be identified separately - any prior insistence on this was a function of the arguments of environmental determinism. He made an important distinction between 'expository' description and 'explanatory' description. 'Geography is primarily concerned to describe the variable character of areas as formed by existing features in interrelationships.....explanatory description of features in the past must be kept subordinate to the primary purpose'. Thus historical geography

should be the expository description of the historical present but the purpose of such dips into the past is not to trace developments or seek origins but to facilitate comprehension of the present. But the spatial tradition of Schaefer encourages the kind of specialization that can get you to the research frontier in a particular topic. The particular spatial distributions can be strictly human phenomena (language, religions, etc.), strictly natural phenomena (earthquake epicenter, vegetation association etc) or some sort of relationship between society and nature. So, any geographer does not have to learn about everything else in a region.

On the question raised by Schaefer 'Does geography seek to formulate scientific laws or to describe individual cases ? Hartshorne replied in the negative and pointed out the following difficulties in establishing such laws through geographical investigation-

1. Scientific laws must be based on large number of cases, but geographers study complex integrations in unique places.
2. Scientific laws can be best established in laboratory experiments which allow only a few independent variables to vary, but such type of work is impossible in geography.
3. Interpretation requires skills in the systematic sciences which are beyond the capacity of geographers and
4. Scientific laws suggest some kind of determinism but this is inappropriate to the human motivations which are in part the causes of landscape variation.

For these reasons the search for laws is irrelevant to geography. Hartshorne's was a positive view of geography; geography is what geographers have made it. Schaefer's was a normative theory of what geography should be, irrespective of what it had been (Johnston, 1983).

3.3 CONCLUSION-

'Universities were expected to produce problem-solvers.....Statistics and models were ideal tools.....' Hence the shift to Schaefer's utilization of numbers and laws-making from Hartshorne's observational approach. Academia wanted more concrete proof of data and theory than the earlier approach could provide and wanted to complete more 'scientific' in their approaches to problem solving. After the Hartshorne-Schaefer debates of the early 1950's there began an evolution from the qualitative approach to quantitative approach in geography. Geography was able to expand to a larger degree with the invention of new technology, most notably GIS (Therston). This spatial tradition enjoyed the dominance from the late 1950's to the mid 1970's but this dominance has been challenged since the 1970's by various radical, post

modern, and deconstructionist approach, many forms which attack the legitimacy of science it self.

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UNIT 4 □ NOMOTHETIC AND IDIOGRAPHIC APPROACHES IN GEOGRAPHY ; SYSTEM AND ECOLOGICAL APPROACHES IN GEOGRAPHY.

Structure

- 4.1 Nomothetic and Idiographic approaches in Geography**
 - 4.1.1 Development of Idiographic approach**
 - 4.1.2 Development of Nomothetic approach**
 - 4.1.3 Conclusion**
- 4.2 Ecological approaches in Geography**
- 4.3 Concept and Meaning of Ecology.**
 - 4.3.1 Geography and Ecology**
- 4.4 Systems approach in Geography**
 - 4.4.1 Application of Systems in Geography**
 - 4.4.2 Conclusion**
- 4.5 Suggested Reading**

4.1 NOMOTHETIC AND IDIOGRAPHIC APPROACHES IN GEOGRAPHY

Geography deals with the phenomena which occur in association on the Earth's surface, with distinct areal expressions and variations. But to study these phenomena some specific approaches are needed. More than twenty four centuries ago different ancient Greek scholars from Miletus like Thales, Anaximander, and Hactaeus represented the apparent dualism between those who seek to formulate generalizations and those who seek to describe unique things. In modern times these two points are described as nomothetic meaning law seeking and idiographic, meaning descriptive things.

There was a great controversy among the historians about the methodology of study. In the latter part of the nineteenth century Windelband, Dilthey, Rickert and other historians, chose to differentiate between those subjects which they regarded as idiographic method (the exploration of particular connection) and those which were

concerned with establishing generalization and were nomothetic in character. The term 'idiographic and nomothetic' were first used by Wilhelm Windelband in 1894.

In geography, although these two approaches appeared at Miletus more than twenty four centuries ago but the dualism developed only in the late eighteenth century in an organized manner.

The idiographic or empirical approach places primary emphasis on the description of particular grouping of nations and people in terms of lands, seas, countries and places. It does not seek to develop laws but to find out how phenomena account for the *genus loci*, the character of a place and its relation with other places.

The nomothetic approach seeks to establish theories relevant to the location and interrelation of places and to establish laws and make deduction on the basis of laws. These are the basic and traditional approaches in all geographical inquiry and their contrast and conflict have become more marked and difficult to bridge as knowledge of the surface of the earth has increased (Adhikari, S. 1992, p-65).

4.1.1 Development of Idiographic Approach

Immanuel Kant (1724-1804) is regarded as father of exceptionalism. Exceptionalism is the belief that geography and history are methodologically distinct from other sciences because they are peculiarly concerned with the study of the unique and particular.

Kant apparently characterized the position of both geography and history in relation to the other sciences as follows: 'We may classify our empirical knowledge in either of two ways; either according to conceptions or according to time and space in which they are actually foundThrough the former we obtain a system of nature, such as the Linnacus, through the latter, a geographical description of nature.....Geography and history fill up the entire circumference of our perception: Geography that of space, history that of time (Hartshorne, 1939, 134-5)'.

Kant opined that geography is a spatial science and deals with particular things rather than mere descriptions for generalization or explanation. The Kantian thesis was apparently used by Hettner to establish that geography, along with history and certain other disciplines, was an idiographic rather than a nomothetic science.

In the nineteenth century's Germany, there emerged a new concept of new Kantianism, the followers of it, made a distinction between the cultural and historical sciences with physical sciences. The cultural and historical sciences deal with an intelligible world of 'non sensuous object of experience' which have to be understood so, they are idiographic. The natural sciences deal with the 'sensible world of science' which could be explained and which is thus concerned with the nomothetic.

But the Kantian thesis became important during the 1920's and 1930's because of

the strong reaction against so called determinist school and a consequent rejection of crude laws put forward as aids to explanation by writers such as Semple, Huntington and Griffith Taylor. Research thus tended to focus on small areas and this type of research generally included the uniqueness of areas and the idiographic method as its major tool.

French geographer Vidal de la Blache adopted this method and supported the idea of small natural regions (pays). Such small natural regions are manifestations of intimate relationship between man and nature that is developed through the centuries. The study of such small natural regions, each one of which is unique, should be the task of geographers. Lucien Gallois, Jean Brunhes, Camille Vallan etc were the supporters of Vidal.

According to Hartshorne, the ultimate purpose of geography is to study of areal differentiation of the world. Phenomena significant to areal differentiation have areal expression—not necessarily in terms of physical extent over the ground, but as a characteristic of an area of more or less definite extent. Some writers have accused Hettner of defining geography as essentially idiographic. Both Hettner and Hartshorne considered region to be a functional unit -an organism which was more than the sum of its parts. Sauer pointed out in 1925 that although geography was formerly devoted to descriptions of unique places as such the geographers had for a long time been seeking to formulate illuminating generalizations about the earth and man's place on it (Sauer 1925, 27).

4.1.2 Development of Nomothetic Approach

During the latter half of the nineteenth century, research workers attempted to develop the subject as a nomothetic science to a greater extent than might have been expected because of the Darwinian impact on geographical research. Scientists were looking for the governing laws of nature (and the materially conditioned social laws) and to considerable extent adopted a nomothetic or law - making approach. The contributions of Peschel, Richthofen, Ratzel, Gerald and Partsch etc are important in this sense.

At that time the inductive explanation was replaced by hypothetic -deductive method, which was especially a characteristic of the natural sciences. Scientific knowledge, obtained through the hypothetic -deductive explanation is a kind of controlled speculation. The method, known as positivism, was developed by a group of philosophers working in Vienna during the 1920's and 1930's (Harvey, 1969, 35). It is based on a conception of an objective world in which there is order, waiting to be discovered.

According to Schaefer, geography should be conceived as the science concerned with formulation of the laws governing the spatial distribution of certain features on

the surface of the earth. It is these spatial arrangements of phenomena and not the phenomena themselves, about which geographers should be seeking to, make law like statements.

Schaefer, with his 'spatial organization paradigm' initiated what may be called the quantitative and theoretical revolution in geography which replaced an earlier idiographic concern with areal differentiation by a nomothetic search for models of spatial structure. E.L.Ullman, Garrison, Jhon.Q.Stewart, Christaller, Zipf, B.L.J. Berry, M.Dacey, R.Morrill, W.Tobler, W.Warntz etc were important researchers who attempted to make geography as a law making discipline by producing different theories and models.

So, the new quantitative geography aimed at analyzing spatial data, development of spatial theory, construction and testing of mathematic models of spatial process - reflective of a paradigm-shift from the earlier regional inductive approach to systematic and deductive nomological approach (Fotheringhaur,2000).

4.1.3 Conclusion

Despite the dichotomies, the period from 1960 experienced a vigorous expansion of geographical research using quasi-scientific methods with emphasis on the law-seeking approaches and model based paradigms. Geographers were over many years concerned with the term 'uniqueness' because geographical phenomena on the surface of the earth are unique and distinguishable, as well as complex in character and causation. It is the idiographic attitude (Hartshorne, 1939/1961, 378-97). But this approach is not totally correct because a collection of unique causes might nevertheless confirm or reject a hypothesized relationship. If the causal relationships were themselves unique and changed inconsistently from place to place and from time to time then hypothesis testing would not be possible and in case of nomothetic or law seeking approach, generalization considering geographical system is always not possible because it is a dynamic system and change in all the variables are not equal.

Every observation has to do with things that are unique in time and place. But it is not even possible to identify any other feature as unique until there is some kind of empirical generalization with which to compare it. A very fundamental part of the scientific method consists in learning how to distinguish the relevant from the irrelevant, and this cannot be done with out a frame work of ideas. Geographers have always observed unique things, but they have also sought to formulate those illuminating concepts that make sense out of the apparent disorder of indirectly related parts. So, according to Hettner and Hartshorne geography is both idiographic and nomothetic, as indeed almost all other fields of learning must be (Hartshorne, 1959, 146-172).

4.2 ECOLOGICAL APPROACH IN GEOGRAPHY

Ecological approach is considered as recent progeny of geographical approaches and the main theme of this approach is to view the man -environment relationship in a single frame work of organic system. This organic system or ecosystem have been present since the non human world .In geography organic analogies have been considered antiquity but its application increased after the Darwinian revolution .Organic theories of the state go back at least to Plato and formed the basis of Hobbes's Leviathan in pre Darwinian times. After Darwin, Freidrich Ratzel in Germany, E.C.Semple in the USA, and E. Huntington in great Britain used the natural laws over every thing else.

As against this environmental deterministic view another view was also developed stating that the physical environment tends to provide the opportunity for a range of possible human responses and on the basis of intelligence, creativity people have to choose between them. This is known as possibilism and the supporters of this view were Vidal de la Blache, Jean Brunhes, Lucien Febvre etc.

So, from this two opposite views another view is developed as alternative approach to central theme in geographical inquiry, that of the relationship of man and environment in area. This approach is not similar to environmentalism rather it should be viewed in the sense that man and environment are inseparable and are constituents of the same organic system. One of today's major problems concerns the influence of scientific and technological progress of the environment or biosphere. As a result of revolution in science and technology, mankind's interaction with its environment is becoming complex, and due to the rapid industrialization, advancement of civilization, urbanization etc. one can observe shortage of natural resources, decline in their reproduction ,and a deterioration in their quality that exert a toxic influence on living organisms including man. In Justice, Nature and the Geography of Difference (1996)

David Harvey draws our attention to four facets of the interactions among living organism that create the complexity of the world. These are—

1. Competition and the struggle for existence (the production of hierarchy and homogeneity)
2. Adaptation and diversification into environmental niches (the production of diversity)
3. Collaboration, Cooperation and mutual aid (the production of social form)
4. Environmental transformation (the production of nature) (Harvey 1996, p 190)[1]

Man as one of the parts of natural environment so, thus requires a clarification of the meanings which are attached to the concept of ecological approach.

4.3 CONCEPT AND MEANING OF ECOLOGY

In 1859 St. Hilaire Isodore Geoffroy, a French Zoologist proposed the term 'ethology' for the study of the relations of organisms within the family and society in the aggregate and in the community. The term ecology was coined by combining two Greek words 'okios' (meaning house or dwelling places) and 'logos' (meaning the study of) to denote the relationship between the organisms and their environment. Although there is some controversy about the original coining of the term but there is consensus that German biologist Ernest Haeckel first gave substance to this term. He used this first in 1886 but defined for the first time in 1870. Some of the important definitions of ecology are-

1. Ecology is defined as the study of the relations of the organisms or groups of organisms to their environment or the science of the interrelations between living organism and their environment (Odum).
2. Ecology is the study of plants and animals in relation to their environment (Haggett)
3. Ecology is the science of the mutual relationship of organisms to their environment (Monkhouse and Small).

The term ecosystem was proposed by A.G Tansley in 1935 in his book 'Ecology' and once again in 1946 in his book 'Plant ecology'. He said "ecosystem as a general term for both the biotic the whole complex of organism -both animals and plants - naturally living together as a sociological unit [2] and its habitat. All the parts of such an ecosystem organic and inorganic, biotic and habitat, may be regarded as interacting factors which in a mature ecosystem, are in approximate equilibrium: it is through their interaction that the whole system is maintained[3]."

From the concept of ecosystem we can get four properties or pillars of geographical investigations. These are -

1. Monistic view : Because ecosystem brings environment, man, plant and animal world in a single frame work, so it is considered as monistic and closes the age old dualism between determinism and possibilism.
2. Structure : Ecosystem is structured in a more or less orderly, rational and comprehensible way. From geographical point of view if the structures are identified then they may be investigated and studied.
3. Function : In ecosystem, there is continuous flow of matter and energy. So, from the input and output of matter and frame work of the system we can quantify the interactions and interchanges between component parts.
4. General system : Ecosystem is an open system and in a steady state possesses the property of self regulation, i.e. homeostatic mechanism. In geography, the study of ecosystem is important to explain the cause —effect relationship.

The evolution of the concept of "ecology" appears to have passed through the followings stages.

Stage -1 :

In the second half of the nineteenth century (1859) Darwin's second major theme which made significant contribution to geography was the idea of organization and ecology which dealt with the interrelationship between all living things and their environment. Huxley in his 'Man's Place in Nature' (1863) attempted to show how man had emphatically become a subject for scientific speculation, and Darwin treated modern man on the same level as other living things. [4]

Stage -2 :

Marxism, which created a scientific understanding of the laws that govern social development, distinguishes between man and the remaining world of animals. It views man as a socio biological phenomenon and human population above all as social formation. In this way it placed boundaries on the sphere to which a bio ecological approach may be applied in explaining the conditions of man's existence and especially the major characteristic of social life. [5]

Stage -3 :

Recent studies of the substance of the present revolution in science and technology and its influence on environment have widened the concept of ecology and have led to the use of different terms like Human Ecology, Social Ecology, and Political Ecology etc.

The term Human Ecology was proposed by Harlan H Barrows in his presidential address before the Association of American Geographers in 1922. 'Adjustment' as Barrows used the word was not caused by physical environment but was a matter of human choice. Barrows felt however, that although the subject matter of geography had been lost in other disciplines, so, he sought for a unifying theme that would bring coherence to the study of geography. The unifying thing, he argued, could be provided by restricting attention to human ecology (Preston .E.James) [6]

The concept of Social Ecology came in to scientific uses in 1920's by the work of American urban sociologist R E Park and E W Burgess. Social ecology is defined as a set of socio-ecological laws which may not fit into the old scheme of hard and first divisions of laws in to social and natural. These may be termed as socio-natural laws, maintaining the integrity of society-nature system. This society-nature relationship is viewed as constant rise and resolution of an ecological contradiction by ever better means leading to the gradual evolution of the organic world. [7]

Political ecology looks ecology to provide both knowledge about nature and theoretical analogies that can be applied to the study of culture and society, this has not led to much conversation between the disciplines.

Stage-4 :

The ecological approach has gained momentum during late 1960's to 1970's. In that time there was a great controversy developed between environmental protection and development. People began to think that the human existence would be threatened unless they adjust their relationship with environment. Different conventions and conferences have increased the importance of ecological approach in geography. Among those the most important are Stockholm conference (1972), Rio de Janeiro (1992), Kyoto Protocol (1997), Johannesburg earth summit (2002) etc. The public representation has been crucial to its successful vascularisation and its expanding influence. Ecology has entered the public imagination through a number of routes - popular books like Rachel Carson's *Silent Spring* (1962), Paul and Anne Ehrlich's work, natural history, documentary film and television (Mitman, 1999). [8]

Because of the impact of this awareness programme, the direction of researches in ecological studies in geography inclined around some of the comprehensive fields like bio diversity, climatic change assessment, Environmental Impact Assessment (EIA), Carrying Capacity, Sustainability etc.

4.3.1 Geography and Ecology

Geography has always studied the environment taken as a whole (as a system) including its natural and anthropogenic (technogenic) components. Ecological approach in geography means to look the whole things on the earth surface including society, culture, institution, and economy at ecological point of view to overcome the problems of resource crisis, adverse environmental conditions etc. Geographers have suffered from tensions between nomothetic and ideographic commitments because theoretical statements are now often made in mathematical form. So geographers should have their own contribution in the sense that ecology is not totally similar with geography though they are interrelated. Actually ecology deals with natural systems, where as geography deals with man's interactions with natural system.

Harvey's suggestion that we can find a common language in recognizing competition, adaptation, and the productions of the social forms and environmental transformation as points of shared insight should be pursued.

So, as a geographer we can engage with ecologists as potential allies in a wide range of conscious socio-ecological projects because many ecologists have abandoned the imaginary world in which humans are not found.

Only with the help of geographers, ecologists can say biodiversity is a process, not a state and that to protect and maintain that process will require substantial changes in the practice and rules that structure human life. Geographers work has a purpose, not to understand the world but to change it. As Harvey (2000) suggests.

"To continue ourselves (geographers) as 'architects of our own faith and fortunes' is to adopt the figure of the architect as a metaphor for our own agency, as we go about our daily practices and through them effectively preserve, construct and reconstruct our life world" [9]

4.4 SYSTEMS APPROACH IN GEOGRAPHY

Geographers have certainly made considerable use of systems since the beginning of the discipline of geography. But the system approach related to the abstraction rather than reality appeared to have developed before the twentieth century because of its complex nature. During twentieth century the systems concept appears absolutely central for methodological and empirical explanations in Geography. The concept of systems is often associated with particular theorizing styles, i.e. positivism or functionalism. However, Williams (1983) observes the relationship between systems concepts and structuralism. At a time when geography appears to be adopting the new systems based paradigm, it seems quite important to evaluate the concept for its ambiguity. So, the theory of systems, particularly the interpretation given in General systems. Theory which is the framework for unifying all scientific thinking is therefore relevant, nevertheless, it is useful to identify some points where misunderstanding can arise and to attempt some evaluation of the claims of General System Theory as a unifying framework for all scientific thought and in particular, for geographical thought.

Ludwig Von Bertalanffy (1950) is credited with the development of the general systems theory.

According to James, a system may be defined as a whole (a person, a state, a culture, a business) which functions as whole because of the inter-dependence of its parts. A system comprises of three components

- (a) a set of elements;
- (b) a set of links (relationships) between those elements; and
- (c) a set of links between the system and its environment.

Every system has three basic aspects: structure, function and development. The structure is the sum of the elements and the connections between them. Functions concern the flows (exchange relationships) which occupy the connections. Development represents the changes in both structure and function which may take place over time. (Johnston, 1983, Holt-Jenson-1981). The structure of the system can be treated in two separate frameworks - closed system and open system.

CLOSED SYSTEM :

There is no input and output of matter.

[E] ——— [E] Closed system

OPEN SYSTEM :

These systems have both inputs and outputs of energy to maintain the system.
Input through put output.

[E] — [E] — [E] —

Open system

TYPES OF SYSTEM :

There are various types of systems but we will concentrate only on those types of systems which are more suitable for analyzing complex spatial interactions. These systems include homeostatic, adaptive, dynamic and control systems.

HOMEOSTATIC SYSTEM :

Homeostatic systems are one that maintains a constant opening environment in the face of random external fluctuation (Rose, 1967, 106). Such systems resist any alteration in environmental conditions and exhibit a gradual return to equilibrium or steady state behaviour after such an alteration.

ADAPTIVE SYSTEM :

These systems are similar to homeostatic systems in much respect, but possess some special characteristics. The study of such systems provides a mode of approach to systems that are usually thought of as 'goal - seeking' or teleological sense. Such systems clearly rely upon feedback mechanisms of some kind in order to achieve the preferred state. This feedback may operate in a number of ways. Most analytic studies have conceptualized the problem by postulating that feedback effects the condition of the environment and thus alters the inputs until the desired responses (or preferred output) are achieved.

DYNAMIC SYSTEM :

Both homeostatic and adaptive systems show a change of state overtime as they move towards steady or preferred state. In truly dynamic systems, however, feedback operates to keep the states of the systems changing through a sequence of unrepeatd states that is usually termed the trajectory or line of the system (Ashby, 1963, 25). Feedback may, for example, cause new preferred states to be identified (this is a characteristics of the learning process itself). Economic growth models, such as the circular and cumulative causation model, may be regarded as dynamic system.

CONTROLLED SYSTEM :

In these systems the operator has some level of control over the inputs. The controlled systems are of great interest in systems engineering and are of major concern for cybernetics (Harvey, 1969).

4.4.1 Application of Systems in Geography

The notion of system is not new in geographical thought. In geography from the very beginning systems are used in the form of functional approach, organismic analogy, and in the concept of regions as complex interrelated wholes and also in the ecological approach etc. But in the classical period the concept of systems remains on the periphery not at centre because elements of systems is identified in the work of Ritter, Vidal de la Blache, Brunhes, Sauer and others. The cause-effect relationships lead to the concept of systems and during the last few decades the position of systems concept has changed from the periphery to the centre.

The ecological approach is a good example of systematic view, Hartan Barrows (1923) claims that geography is the science of human ecology. Tansley in developing the concept of ecosystem as a fundamental organizing concept in geography, identifies the major characteristics of it and say: (a) it is monistic and brings the man, environment, animal world in a single frame-work for which interaction between component can be analyzed; (b) ecosystem has structure and (c) function, that involves continuous through-put of matter and energy (d) ecosystem is an open system tending towards a steady state under the laws of open system thermo-dynamics.

R.J. Chorley is the first geographer to have introduced general systems theory in geography. His paper 'Geomorphology and General Systems Theory' (1962) was the first major contribution devoted exclusively to a systems approach. He attempts to reformulate thinking in geomorphology in terms of open-system thermo-dynamics.

More recently Woldenberg and Berry (1967) have used systems concepts to analyze central place and river patterns, while Curry (1967) has also attempted to analyze settlement locations patterns in a systems framework. 'Spatial organization' of Haggett is also related with systematic view.

The most comprehensive attempt to forge a systems approach to geographical study has been done by Bennett and Chorley in their book entitled 'Environmental system: Philosophy, Analysis and Control' (1978) with the intention of providing unified multi-disciplinary approach to the interfacing of 'man' with 'nature'. The book was prepared for three main reasons - 1. to explore the capacity of systems approach to provide an inter-disciplinary focus on environmental structures and techniques.

2. to examine the manner in which a systems approach aids in developing the interfacing of social and economic theory and also physical and biological theory.

3. to explore the implications of these inter-facings in relation to the response of man to his current environmental dilemmas.

It is hoped to show that the systems approach provides a powerful vehicle for the statement of environmental situation of ever-growing temporal and spatial magnitudes,

and for reducing the areas of uncertainty in our increasingly complex decision-making arenas (Adhikari, S 1992-233). This approach is widely used in both human and physical geography.

4.4.2 Conclusion :

Systems approach in geography is very essential because it gives a framework from which we can analyze the interaction pattern or study the 'organized complexity with which geographers deal. Once the system has been successfully modeled, it can be manipulated using control theory which is a dynamic optimization technique permitting optimal allocation along the time horizons, and shifts emphasis from mere model construction to model to use. (Haggett, 1980) Systems analysis thus provides us with a convenient calculus for examining geographical problems.

Gregory (1978) attempts to criticize both systems analysis and general systems theory on the ground that they are intrinsically associated with positivism. The concept of one systems theory which is relevant for all the sciences may be seen as a fruit of the positivist concept of one science, one method. He further said that prominence given to control system may lead to instrumentalism.

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UNIT 5 □ RADICALISM

Structure

- 5.1 Radicalism In Geography
- 5.2 Effects of radicalism in Geographical studies
- 5.3 Radical stream
- 5.4 Conclusion
- 5.5 Suggested Reading

5.1 RADICALISM IN GEOGRAPHY

Radicalism refers to political and social movements and ideologies that aim at fundamental change in the structure of the society. The advent of radicalism in Geography in the late 1960's marked the return of a 'dissenting tradition' (Blaunt, 1979). Radicalism in geography offers both revolutionary theory and revolutionary practice.

RISE OF RADICALISM

Geography was by the late 1960's developed as a well established university discipline, part of the settled fabric of 'normal' educational life in most western countries. But the middle and late 1960's was an era of protest related with inequality, racism, sexism, environment, and many incidents like civil unrest, student riots, anti-war campaigns, anti colonial struggles have taken place due to many causes. One of the major causes of dissatisfaction was the American involvement in Vietnam War which increased the unrest among young generation because they considered the government decision as imperialist and anti freedom. These struggles were held not only in America but also in France, Britain and other countries. It was this difference between academic geography and real world socio-economic problems and struggles that inspired the early radical geographers like William Bunge, Blaut, and Richard Peet to call for a people oriented geography in which geographers would - (i) study for crucial social, economic and environmental problems with (ii) an eye to devising viable solution in (iii) a way that included the ordinary people subject to those problem and solution.

So, Frustration with the apparent instability of conventional geographic theory to provide a meaning foundation for a more relevant and more radical geography led a number of geographers towards an engagement with theories of social justice and ultimately Marxism with in human geography can be attributed to the dearth of

alternative within the discipline and the fact that prior to the 1960's —especially in comparison with other social with other social sciences -there was little in the way of social theory in geography beyond positivist idealism.

This then was a form of geographic activism in which research was focused on politically charged questions and solutions and in which geographers actively involved themselves with the people and communities. The first conspicuous attempt to radicalize human geography research was pioneered by the American geographer William Bunge, who in 1968 founded the 'Society for Human Exploration' at Detroit. It was believed that by becoming a person of the region in question, the geographer, by virtue of the experience gained, shall be able to appreciate better the kind of inputs required to improve the lot of the local residents. Such a participatory field work prepares the geographer to take the planning with the people rather than planning for them (R.D. Dikshit-1997).

5.2 EFFECTS OF RADICALISM IN GEOGRAPHICAL STUDIES

The radical movement had taken a number of different forms, leading to the inevitable division between liberals and radicals. The former stream supported the policy of incremental change within 'the system' where as the latter group of scholars held on the view that nothing short of revolutionary socialism could create a just society out of the modern capitalist corporate state. Radical geography was the impetus for two subsequent types of development regarding academy and activism.

LIBERAL STREAM

Among the academically oriented geographers, there was a concreted effort aimed at changing the focus of our discipline from earlier involvement in the study to the study of urgent problems of the day. So, the less radical welfare geography emerged which sought to use existing scientific geographical theories and methods in a more socially relevant and useful way (Smith, 1977). Welfare Geography deals with problems of inequality, poverty, hunger, discrimination, crime, racial tension and access to social service. The concept of welfare was divided into three sets by Knox in 1975. According to him these included physical needs (nutrition, shelter, and health), cultural needs (education, leisure, recreation, and security) and higher needs (that could be purchased with surplus income). Smith and Knox set forth the tradition of the welfare approach in geography in an organized manner.

A number of such works, suggesting spatial policies for social improvement, were done in 1970's. Harries (1974) studied spatial variation in crime rates and the administration of justice, and argued that predictive models of criminal patterns could aid in the organization of police activities. Morrill and Wohlenberg (1971)

investigated the spatial variation in poverty in the united state, providing both social policies and spatial policies. Bunge (1971) prepared a 'geobiography' for a part of the black ghetto of Detroit, which has a deep humanitarian orientation for the future of mankind, which he interprets as a need to ensure a healthy existence for children.

Richard Morrill, who criticized the revolutionary premises of the New Left, still maintained that the academic's role was "to help bring about a more just, equal and peaceful society "and search for more 'radical' ways and means to achieve change.

From the middle of 1960's and onwards, articles dealing with more 'socially relevant' geographical topics began to appear in some of the discipline's main stream journals, and in 1969, 'Antipode', a radical journal of geography was founded at Clark University in Worcester, Massachusetts.

According to Smith (1994a) 'The welfare approach logically requires an holistic social science perspective' because it extends beyond the limits of a single discipline (Smith, 1994 a, P.676).

5.3 RADICAL STREAM

Among the activist, the dominant focus was on the search for more suitable models of organizational change. This stream was developed in the 1970's and 1980's with a number of full blown critical paradigms like Marxist and Feminist geography.

There have been many milestones in the march of activism with in geography over the part 30 years. To name a few, we might include, the formation of the Journal Antipod (1969), the Detroit/Toronto Geographical Expeditions (1973, 1975) pioneered by Bill Bunge, the organization of the union of socialist Geographers in the early 1970's, the formation of the IBG women and Geography Study Group in the same decade, the establishment of Gender, place and culture, and the fronting of a range of political, social and cultural issues of note to geographers in the Environment and Planning series, the creation of a range of specially groups with in the Association of American Geographers to nurture critical interests, the recents formation of the International Critical Geographers etc. .

The first geographer to initiate Marxist thought and new trend in geography was David Harvey (1972). To Harvey, Marxist theory provides the key to understand capitalist production from the position of those not in controls of the means of production -an enormous threat to the power structure of the capitalist structure. It is helpful for understanding of the origin of the present system, with its many faceted inequalities, but also propounded alternative practices which would avoid such inequalities. For Peet (1977), the Marxist science begins with a material analysis of society, proceeds through a critique of capitalist control of the material base of society and proposes solution in terms of social ownership of that material base.

However, Peet (1977) has argued that the early 'radical' work by geographers in the late 1960's was liberal in its attitude and with changing time he also moved to a Marxism position replacing his earlier paper on poverty by a Marxism interpretation, based on assumption that inequality is inherent in the capitalist mode of production. David Harvey in his book 'Social Justice and the city' (1973) made a major contribution to the case for Marxism inspired, materialism theory development within geography. Marxism and the knowledges of environment and space (hardly the least significant of human understandings) produced powerful theoretical insights into profound issues of human existence, and these in turn produce disciplinary power in its many guises. Neil Smith's *Uneven Development* (1984) can be taken as symptomatic of the best of Marxist geography. 'Political ecology' emerged from Marxism inspired theories of society - nature relation in 1970's and early 1980's. Many of the Marxist concepts survive into the present geographical status and activist geographers continue to work with unions, farm, workers, homeless people, prison populations, high schools around issues of racism, classism, sexism, post colonialism, imperialism and many other forms of oppression, precisely because of deep personal and long term connections that draw people to particular activities and communities. Ruth Gilmore's work with prison population, Bennett Harrison's work with unions, David Slater's work with the Third world NGOs, Jan Monk's work with women's organizations and NGOs in both the Third and First world, Audrey Kobayashi's work against racism, Nick Bloomley's work with neighbourhoods on the eastside of Vancouver, Don Mitchell's work with high school teachers, Linda Peake's work with the women of Red Thread in Guyana to name a few - all works are developed due to effect of radicalism in geography.

5.4 CONCLUSION

According to Bloomley (1994), in the early 1990's, some leftist geographers were once more complaining of a chasm between geographical 'activism and the academy'. Some geographers advocated a return to grass-root involvement, while other like Tickell (1995) argued that geographer should more actively involve them in the local, and national 'state apparatus' in order to influence public policy. The radical geography characterized by social relevance and intense political activism, thus attempted to change the extent of the subject. The critique of conventional geography commented that it was an irrelevant gentle manly concern and also about its spatial fetishism - that is geography's restriction of causality to the spatial realm. But according to radicalists, geography could not conceptualize natural causation without resorting to a mechanical version of environmental determinism, because it lacked too the mediation of production as the main focus of nature society relation. According to Peet, reeling from criticisms of environmental determinism, lost for years in the by

ways of regional description, geographers in the 'quantitative revolution' rushed into a spatial 'science' which discovered and increasingly significant of life (space) only to fail to link it with other 'equally' important aspects of existence. This failure of linkage produced continued (if ameliorated) intellectual and theoretical isolation for the discipline of geography. So, for all its supposed deficiencies, Marxism saved geography from extinction, irrelevance or worse still, becoming a poor relative of regional science (Peet 1998).

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UNIT 6 □ GEOGRAPHY OF INEQUALITY AND GEOGRAPHY OF GENDER

Structure

- 6.1 Geography of Inequality
- 6.2 Causes of Inequality
- 6.3 Types of inequality
 - 6.3.1 Economic inequality
 - 6.3.2 Social inequality
 - 6.3.3 Political inequality
 - 6.3.4 Educational & Cultural inequality
 - 6.3.5 Gender inequality
- 6.4 Geography and inequality
- 6.5 Geography of Gender
- 6.6 Development of Geography of Gender
 - 6.6.1 The first wave of feminism
 - 6.6.2 Second wave of feminism
 - 6.6.3 Third wave of feminism
 - 6.6.4 Liberal feminism
 - 6.6.5 Marxist and socialist feminism
 - 6.6.6 Radical feminism
 - 6.6.7 Eco feminism
- 6.7 Conclusion
- 6.8 Suggested Reading

6.1 GEOGRAPHY OF INEQUALITY

Introduction— During the 1960's and the 1970's geography experienced what has been called a 'conceptual revolution'. One of the distinct consequences of the conceptual revolution in the contemporary human geography was the emergence of welfare geography in 1970's. It is an approach to human geography that stresses on

questions of inequality. Inequality implies distinctiveness along a dimension where one position is graded as better, bigger, larger or somehow superior to another. But what are the key dimensions of inequality?

In sociology classical writings provide clear messages on this topic. There are three fundamental aspects of inequality -class, power and status. Class conceptions are widely derived from Marxist idea about a person, position with regard to process. Simply, two classes are mentioned -Bourgeoisie (who own means of production) and Proletariate. Power is to get others to act in a way that is your own best interests, even though they might not wish resources (money, employee etc) for resources need to be used to achieve desired goals, and there is unevenness in the ability to use resources effectively to achieve desired ends. In contrast with class and power, status refers to social prestige or respect.

But despite their centrality to conceptualizations of social hierarchies and the complex debates over their interrelations ,these concepts still omit much which is clearly evident from the publication of social well being concept. According to Coates et al. (1977, p -9)social well being refers to a family of overlapping concepts that include level of living ,quality of life ,social satisfaction, social welfare, and standard of living etc. Nine basic components of social well being were identified-nutrition, shelter, social stability, the physical environment and surplus income. So, inequality does not mean the difference only produced from class, power and status but it can also be developed from uneven use of space. As for example women commonly feeling excluded from particular places, at least of at specific time of the day for fear of violent crime (Pain, 1997). This brings out a combination of insights of inequality in living conditions ranging from their uneven impact on people in same location ,their temporal specificity and also the way in which non events are integral to inequalities(Martin Phillips,2005 p-481)

6.2 CAUSES OF INEQUALITY

There are many reasons for the inequalities growing in societies. These causes are not distinct rather interrelated, non-linear and complex. Economic, political and social structures and their interrelation may produce different types of inequalities. In all complex societies, the total stock of valued goods is distributed unequally. The term social stratification refers to the complex of social institutions that generate observed inequalities of this sort. Acknowledged factors that impact inequalities in society include income, education, race, gender, culture, wealth consideration and development pattern. As for example, education is responsible for different types of inequalities. Education has resulted in an increase in wages for those with higher education, but has not increased the wages for those without an education. This may lead to greater inequality .Access to education may be able to transform the culture of society which

play a crucial role for societal development in terms of living standard, housing, medical facilities etc. Gender inequality also results from lack of education and psycho social factors. In many countries individuals belonging to certain racial and ethnic minorities are more likely to be poor. Proposed causes include cultural differences amongst different races or educational achievement gap and racism. Power is the ability to exercise, power takes a number of different forms but all involve the idea that it means the ability to get your own way with others regardless of the ability to resist you. Power can produce inequality in large scale. Out of the power various social systems are produced, with power some groups have the right to oppress another group which is powerless. Now a days the impact of globalization increases inequality in between rich and poor and in between developed and developing countries. In a recent reviewed article on globalization Mauro Geeillen writes that the evidence unambiguously indicates that there are more inequality across countries than ten, twenty, fifty or even hundred years ago. According to him, the widening gap across countries is caused by rising incomes, not by rising income inequalities. Not only the economic, political and social structures are responsible for inequality but also physical environment is one of the main causes to produce inequality. Different environment gives different types of opportunities or possibilities and material circumstances are also not same to all environmental conditions. So there are differences in nature, life style, working ability etc as well. According to Richard Lynn, the working ability is partially responsible for producing race and gender group difference in wealth, though this assertion is highly controversial.

At last, Global society at the twenty first century is rapidly moving towards social, economic and political integration. The rapidity of this development has caused many clashes and difficulties for nations, states as well as for groups, organizations, citizens for individual countries.

6.3 TYPES OF INEQUALITY

On the basis of social stratification we may classify inequality into different types, although the inequalities are not caused for one reason but it is very complex in nature. It has multiple and quasi independent dimension. The broad subdivisions of inequality are—

6.3.1 Economic inequality

It is expressed through the unequal distribution of wealth in society. This has obvious ramifications in terms of the location, is limited. Developed and developing countries are the results of economic inequality which have divided the whole world into haves and have nots. The core aspects economic inequalities are distribution of production and exchange process. According to Marx, there are two classes, one is

Master or owner and another is Labour. Now the advancement of civilization, globalization and free trade decreases the wage of labour and created a situation of vast unemployment which again develops inequality and poverty in a society. As for the possibility of the disadvantaged seeking better opportunities elsewhere, for most people the capacity to change their place, from poorly endowed to richly resourced location or state may be limited.

6.3.2 Social inequality

Sexism, racism, discrimination on the grounds of ethnic groups, faith, political opinion, social status or sexual orientation is clear indicators of social inequality. No society can survive sustainable or allow its members to live in dignity if there is prejudice and discrimination of any social group. Social inequality is the expression of lack of access of housing, healthcare, education, employment, opportunities and status. It is exclusion of people from full and equal participation. Because of the nature of our society in post industrial, competitive, capitalist, and commercially driven and consumer oriented- economic inequality and social inequality are inextricably linked. Social inequality is also produced by the impact of culture, religion and racism. Division of caste and their status may form psycho-social inequality, untouchability etc. So, our social system and structure is also responsible for inequality to some extent. Racial discrimination is also an important injustice which produces inequalities. There is some inbuilt inequalities in our society to maintain system of it self. As for example, the work forces the government, legislation and legislature.

6.3.3 Political inequality

The important goal of any political system is to be gain effectiveness in terms of superiority and power concentration which has opposite sense to equality. These concentrations are more in those countries where population is large and management system is complex. Although everyone has the right to vote to select representatives, but there is great division between powered people and general citizens. According to Anderson (1999) democratic equality is a need which aims to abolish socially created oppression, rather than following luck egalitarianism in correcting what is taken to be injustice generated by the natural order, a relational theory against the concern of the equality of the fortune perspective with a pattern distribution.

In the countries where democracy is transformed into military power or religion power, inequalities increase rapidly. Afghanistan, Pakistan etc. are examples.

6.3.4 Educational and Cultural inequality

There is distinction in terms of education and culture in every society. Educational and cultural inequality has great interrelation with economic opportunity. Rate of development is more in rich or economically supported countries, because they can afford the cost of higher education and technology from those countries where more

advanced culture emerged. In the same way culture and education also required for better economic support. On the basis of high technology and educational facility 'digital gap' has originated which is also a type of inequality. The countries with high information technology may differ from those countries of low access of these technologies, giving rise to digital gap.

6.3.5 Gender inequality

Social equality is fundamentally linked to gender equality. Global statistics place women behind men in relation to health, education, nutrition levels, political participation, legal rights, equal pay for equal work, amongst many other aspects of life. Gender inequality remains pervasive in all countries of the world.

6.4 GEOGRAPHY AND INEQUALITY

Social inequalities are mirrored in unequal access to space and desirable location so that social and spatial inequalities go together. As a result a number of geographers adopted a more humanistic approach in geography and concern for welfare geography. Bunge (1971) was so struck by the inequalities from his study of Detroit that he adopted rather emotive terms for his division of the city and emphasised the ways in which the poorer income groups and ethnic minorities of the city, were being exploited by the rest of the city, particularly by the elite business, entrepreneurial and professional classes who occupied his city of superfluity-pleasant suburbs and rural dormitory areas. Cox (1973) investigated the urban crisis in the light of racial tension and riots, municipal bankruptcies and the role of government in the urban economy. In fact, he presented his analysis in terms of conflict over access to sources of power.

This concern for social inequalities what Harvey called 'Social Justice and the city' is not new. Burgess and Park, two eminent sociologists who studied the social problems of Chicago during 1920's, such as housing, racial tension, and social deprivation. Harries (1974) studied spatial variation in crime rates and the administration of justice, and argued that predictive models of criminal patterns could aid in the organization of police activities. An interesting work on variations as the provision of health care facilities was done by Shannon and Dever (1974) who also suggested for spatial planning for the improvement of medical services being offered to the sick. Morrel and Wohlemberg (1971) investigated the spatial variations in poverty in the United States, providing both social policies and spatial policies [Adhikari, S.2006, P.263].

But despite long standing engagement with matters of social concern, it is only recently that geographers in Britain and elsewhere have begun to explore links with the subject of ethics (Smith, 2003). This conception may right or wrong, good or bad is implicated in any human activity, all geographers are in some sense moral creations.

However the term 'moral geography' has been adopted in recent years as a label for a particular style of geographical investigations with a moral dimension. A major feature of geography's recent moral turn has been resurrection of interest in social justice (Smith 2000). In this approach the term equalization is used and they recognize that achieving equality is virtually impossible, but the moves in this direction are possible and morally justifiable. The process of equalization might be constrained by the 'difference principle' proposed by John Rawls (1971, P 302) which requires social and economic inequalities to be arranged so that they are 'to the greatest benefit of least advantaged'.

6.5 GEOGRAPHY OF GENDER

Geographers have sadly not given much recognition to the concept of gender. It is a phenomenon of remarkable variation from place to place, as well as from time to time and class to class. Despite geographical variations, class variations and individual variations, the world wide theme of the geography of gender is female subordination. Gender is a social phenomenon which is socially created. Some people consider gender as a purely social construction, independent of biology, while others define it as derived, directly or indirectly, from the interactions of material culture with the biological differences between the sexes. In either case, gender is socially constituted while sex is biologically determined (Oakley, 1972, Rogers 1980). As it is socially determined, the meaning will vary with society yet in the history of geography of humanity, women's subordination is omnipresent, no society has so constituted gender as to produce male subordination. The forms of subordination differ greatly, but all over the world, women's work tends to be defined as of less value than men's and women tend to have far less access to all forms of social, economic and political powers.

Feminine Geography was developed by the impact of radical-Marxist approach in geography. The women and Geography study Group of the Institute of British Geographers (IBG) collectively had written introductory text on feminine geography. The main theme of them was to remove gender inequality through social changes which might express long term real equality between men and women in terms of economic; political and social activities and profession. Since 1960's there has been a great upsurge in feminist writing and feminist thought has become much wider in scope and much profound in its impact. In terms of academic geography, an analytical focus on the intersection of production and reproduction spaces allowed geographers to incorporate gender as a fundamental parameter in environmental process (Rose 1984). Women and Geography study Group advocated 'change' not simply by adding women to geography, but by developing 'an entirely different approach to geography as a whole'. Feminine Geography looks at how socially created gender structures

from and transform space in a project dedicated to ending gender inequalities through social change. The geography of gender has a vital role to play in improving our understanding of the rapidly changing spatial mosaic of gender relations in world. Geography has lagged far behind the other social sciences in its appreciation of the impact of gender. Zelinsky, Monk and Hansen (1982) suggest two reasons for these both related to the nature of the subject: much of the work on women is done by women scholars and the proportion of women in geography is very low (Henshall Momsen 1980). Secondly, many geographers were unlikely to come face to face with women's issue in their research.

The period of middle to late 1980's saw two kinds of divides opening in feminist radical geography, which are outlined by Mc Dowell.

The differences are between feminist and masculinist and between perspectives within geography especially as post structural or post modern theory entered in the geographical scene. According to Mc Dowell the three central themes of Feminist approaches in geography are space, place and nature. The geography of gender involves spatial variation in gender relations, the social construction of gender identities in particular milieu, the ways nature is related to gendered distinctions and similar issues.

6.6 DEVELOPMENT OF GEOGRAPHY OF GENDER

Feminist theory and feminist geography grew together; history of women's movement has great influence on feminist geography, which is divided into three waves—

6.6.1 THE FIRST WAVE OF FEMINISM

According to Jane Freedman 'in the 1840's the women's rights movement has started to emerge in the United States with the Seneca Falls convention of 1848 and resulting Declaration of Sentiments which claimed for women the principles of liberty and equality, right to earn equal wages, inherit property and right to vote expounded in American Declaration of Independence.

Rupp quotes the arguments of Chaftz and Dwarkin (1986) that industrialization and urbanization play a critical role in the emergence of women's movements. In industrialized and urbanized societies, a large middle class develops, women get access to education, married women enter the labour force in large numbers and the resulting role expansion and conflict results in the gender based and ultimately feminist consciousness (Rupp-2001, 5470)

6.6.2 SECOND WAVE OF FEMINISM

The second wave of feminism began with radicalization of women during the anti-

Vietnam war and civil rights movements of the 1960's. The main theme of first wave feminism was equal rights and for second wave feminism it may be termed as 'feminism of women's liberation'. The First National Liberation women's Conference was held in Ruskin College, Oxford. This was a time of optimize, debate and the publication of feminism's formative literature. As for example Germaine's. *The Female Eunuch* (1970) Eve Figs's, 'Patriarchal attitudes' (1970), Shulamith Firestone's 'The Dialectic of sex' (1970), Kate Mittett's 'sexual politics' (1970), Betty Friedan's 'The Feminine Mystique' (1963), Gayle Rubin's essay 'The Traffic in women: Notes on the Political Economy of Sex' (1975).

6.6.3 THIRD WAVE OF FEMINISM

Third wave is a continuation of the first and second wave but there is a shift from logo centric to pluralistic approach to feminism. A number of factors shaped the development of the third wave known as 'Post feminism'. Women in the third world have been involved with issues like economic, environmental, legal, military, cultural and physical threats and violence against women. Their inclination has been only towards feminine agenda but they organize around different environmental issues as well.

On the basis of theoretical families, development of feminism may be classified into three groups. Liberal feminism, Socialist or Marxist feminism, and radical feminism. This classification has reproduced many research activities like psycho-feminism Post modern; post structural feminism, eco-feminism and so on.

6.6.4 LIBERAL FEMINISM

Based on the classical theoretical tradition of liberalism which views man as active, rational, and independent to have free choice to from government and enjoying equal rights and opportunities inherited not from any human authority or from God but from nature by birth, classical liberal feminist claim equal social and political rights for women. They did not claim any special privilege for women but asked only for equality. Contemporary liberal feminists have switched from equality to inclusion. Main supporters of this view were Mary Wollstonecraft (1759-97), J.S. Mill (1806-73), and Harriet Taylor (1807-1858), Elizabeth Cady Ctanton (1815-1902) and Virginia Woolf (1882-1941) [Classical liberal feminists] Betty Frieden (1963), Radcliffe Richards (1982), Okin (1989, 1990) [contemporary liberal feminists].

6.6.5 MARXIST AND SOCIALIST FEMINISM

Socialist and Marxist feminists believed that women's subordination is a socio-economic product, without abolishing capitalist society or establishing socialist society women's emancipation is not possible. To Engles, women's subordination results from the institution of class society and is maintained because it serves the interests

of capital. Socialist feminism calls for reproductive democracy, including family and procreative decisions, as well as control over commodity production. The socialist feminists claim that capitalism and patriarchy are mutually interdependent and therefore, women's subordination is to be understood by both class and gender dynamics. Juliet Mitchell in *Women's Estate* (1971) states that women's position is determined by four structures-(i) Production - as member of work force (ii) Reproduction - reproduce human species. (iii) Socialization - caring and socialization of children. (iv) Sexuality - as sex object.

Hartmann (1976) views women's subordination as a result of the interlocking of the system of capitalism with patriarchy. He opines 'the same features such as division of labour, often reinforces both patriarchy and capitalist society, it is difficult to isolate it from the mechanism of patriarchy.

6.6.6 RADICAL FEMINISM

Radical feminism considered that patriarchy is the root cause of women's oppression and subordination. Figs (*Patriarchal Attitudes*, 1970) pointed out that it is the patriarchal system which pervades the culture, philosophy, religion, and morality of the society and gives to the women an inferior status. In '*Sexual politics*' (1969) Kate Millet commented that relation between sexes is based on power, so it is political and from ancient time it is socialized through the family.

So, it is natural and in order to destroy patriarchy, family is to be destroyed because they are based on power and not on love.

Fire's tone (*The Dialectics of Sex* 1970) put more emphasis on biology rather than social condition for subordinate position. The natural capacity of women is to bear and rear babies. She believes modern technology may relieve women from the burden of pregnancy by artificial production in test tubes and in the way genuine sexual equality is established.

Radical feminism differs from Marxist feminism in the view that problem of Women can never be solved either by legislation or by revolution because both are controlled and led by man.

According to Pratt feminist geographers are also expanding their consideration of geography including environmental concerns.

6.6.7 ECO-FEMINISM

Eco-feminism is a movement that sees a connection between the exploitation and degradation of the natural world and the subordination and oppression of women. French feminist Francoise d' Eubonne [Eaubonne 1980; 44-45] first coined the term eco-feminism in 1974. Eco-feminists consider women and nature both as subject to the destructive socio- economic and technological systems of modern male-dominated

society. Eco-feminism became popular only in the context of numerous protests against environmental destruction. The conference at Mile Island in the 80s prompted large number of women in the USA to come together in the first eco-feminist conference. In patriarchal thought, women are identified as being closer to nature and men as being closer to culture. Nature is seen as inferior to culture. Maria Mies and Vandana Shiva, the famous eco-feminist want to propound the need for a new cosmology, different from capitalist patriarchy, in which life in nature is maintained by means of cooperation, mutual care and love. Only in this way it can be possible to respect and preserve the diversity of all life forms as true sources of well being and happiness of all.

6.7 CONCLUSION

Feminist study in geography is not very old rather it is in early stage of development with more theoretically oriented. It is now entering a new phase. The recognition of feminist geographers is increased for variety of work related to women's experience of oppression. The crude dichotomy of polar opposites -male and female, nature and culture, hetero and homo-sexuality, public and private, production and reproduction -are now being challenged in feminist theory and practice. New areas of theory and research are beginning to have an impact upon the discourse of feminist geography. McDowell and Ford identified three areas of emerging focus in research, namely (i) analyses of cultural representation (ii) works on sexuality, subjectivity and social relations and (iii) new developments in studies of the interrelationship of race, class and gender [R.D, Dikshit, 267].

Gender geography is related with class, religion, race, gender that means with whole social environment. It needs to develop alternate theories of space, place and environment which speaking the experience of oppressed peoples despite the problems of speak for other.

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UNIT 7 □ POST MODERNISM

Structure

- 7.1 Concept of Post modernism
- 7.2 Modernism and Post modernism
- 7.3 Main features of Post modernism
 - 7.3.1 Basic concepts of Post modernism
- 7.4 Post modernism in Geography
- 7.5 Criticism
- 7.6 Suggested Reading

7.1 CONCEPT OF POST MODERNISM

Post modernism is a complicated term or set of ideas, that emerged in academic studies in the mid 80's of the last century. It is also hard to define, because it is a term which appears in many different disciplines, such as art, architecture, music, film, literature, sociology, communication, fashion, and technology. According to the Oxford Dictionary of Geography (2nd edition, 1997, 338) the term 'post modernism' refers to an architectural style which is composite of past styles, characterized by a variety of colours, stylistic details from many periods and what is claimed to be a return to a vernacular type..... It is a philosophical stance which claims that it is impossible to make grand statements—meta narratives—about the structures of society or about historic causation because everything we perceive, express and interpret is influenced by our gender, class and cultureNo interpretation is superior to another. It has brought to geographers recognition that space, place, and scale and social constructs, not external givers. Some geographers claim the post modernism challenges the dominance of time and history in social theories and instead stresses the significance of geography and spatiality.

For Lyotard, Post modernism is to be seen as a state of mind, as a way of describing the social, cultural and intellectual changes since the turning point of the 1950's, which marked the end of the post war period and opened a period of expansion in all fields of activity and generalized social change. This state of mind encourages rejection, be it of one way representations of the world, of totalizing visions of dogmas and also of the effort to identify articulate meaning. It manifests itself as an erosion of landmarks, a blurring of established ways of seeing and understanding and a loss of confidence in theories. In Lyotard's view, the priority for philosophy is to

avoid both the ambient positivist pragmatism and dogmatism; both are hegemonic, for moment the only solution is to operate by micrology [Benko, Strohmayr, 1997, P 8].

Post modernism may be said to represent a radical attack upon the mimetic theory of representation and search for truth. According to Duncan and Ley (1993) -It is anti foundational in that it explicitly rejects totalizing ambitions of modern social sciences. Such as epistemology, if taken seriously, is inescapable and radically relativist. Post modernism presents itself as a movement of deconstruction, intents on dismantling the hierarchy of knowledge and values, undermining all that gives meaning and all that has been developed as paradigm or model. It has been said that it is possible to live happily in a universe without explanation. For its detractors, Post modernism represents a cynical brand of compromise and opportunism, a widespread and affected nihilism, and acceptance born of passivity and common place effects, it is content with ambiguity, and has nothing to contribute to a political or Utopian programme.

As a method, post modernism is critical of the idea of totality and assumes that meaning is produced in language, not reflected by it, that meaning is not fixed but is constantly on the move and that subjectively does not imply a conscious, unified and rational human subject but instead a kaleidoscope of different discursive practices. In turn, the kind of method needed to get at these conceptions will need to be very flexible, able to capture a multiplicity of different meaning without reducing them to the simplicity of single structure. Derrida's deconstruction, Foucault's genealogy, Leotard's paralogism, the post modern ethnography of anthropologist such as Clifford (1988), the discourse analysis of various social psychologistsall these are attempts to produce a method that can capture history as a set of overlapping and interlocking fields of communication and judgement.

7.2 MODERNISM AND POST MODERNISM

The period of modernity started in the 16th century at the time of the renaissance and the emergence of capitalism. The philosophical movement of modernism arose in the time of Enlightenment (18th century) where the belief in universal human progress and sovereignty of scientific reasoning became important. The philosophers were searching universal laws and modernism was dominant until the 60's of 20th century.

Knox and Marshton (2004) defined modernity as a forward looking view of the world that emphasizes reason, scientific rationality, creativity, novelty and progress. At the time Scientists were more interested to disclose the truth.

Another important thing of modernism has been the growth of dichotomies and going out of boundaries of the main subject matter of geography.

According to Lyotard, modernism was based on three starting points or 'grand recits'-

1. The subjection of and total control over nature (economic rationalization)
2. The subjection of and total control over politics (Political rationalization)
3. The possibility of gaining objective knowledge (Scientific rationalization)

According to modern philosophical thought as people could think rationally, they could obtain objective knowledge (positivism) from which it was possible to create their best living environment and at least complete rational society would be developed and also history would be conquered.

To understand post modernism, it is necessary to know what Lyotard (1984) means by the term modern. According to him modern means 'to designate any science that legitimates itself with reference to a meta discourse-making an explicit appeal to some grand narrative, such as the dialectics of the spirit, the hermeneutics of meaning, the emancipation of rational or working subject or creation of wealth' or to put it in another way. Societies which anchor the discourses of truth and justice in the great historical and scientific narratives (recits) can be called modern (Adhikari, S.-2006, P-345).

In the space of 20 yrs. post modernity has become one of the most widely used concepts in discussions about art, literature and social theory. Geography, sociology, philosophy, literature, architecture, the plastic arts -all have entered their post modern period. It is hardly surprising that the term 'post'-is ambiguous in all these contexts. The term can imply continuity or change. But if it is continuity then why use a prefix to form a new term? Objectively, it separates, yet semantically it fails to establish a difference. 'Post' is suggestive for continuous and the liner-To break with modern, the post modern has to repeat the modern.

As an umbrella term for a wide variety of tendencies, post modern suffers from a definitional imprecision that reflects its heterogeneous content. As one of the leading theorists of post modernism has explained, it is an equivocal, disjunctive category, doubly modified by the impetus of the phenomena itself as by the shifting perceptions of its critics (Benko, Strohmayr, 1997, P-10).

Post modernism emphasizes the unclarity, the fragmented, and the multiformity, the missing of real conformity and of big ordering principle in society. This is not one universal truth, but there are multiple views or theories which always are bounded to place and time. Post modernists think the past as manifold of events; one event can't be seen separately because every event is not the same as the other, and these events also happened in another time where the world was different. There is no universal best culture, but there is a best culture for each individual.

7.3 MAIN FEATURES OF POST MODERNISM

Fredric Jameson (1984) has identified two significant features of post modernism: Pastiche and Schizophrenia. He said that the great modernisms were predicted on the invention of a personal, private style. But in a world in which stylistic innovation is no longer possible, all that is left is pastiche. The imitation of dead style can be seen in the 'nostalgia film'. We have lost our ability to locate ourselves historically.

Post modernism has a peculiar notion of time. Jameson (1991) seeks to explain what he means in terms of Lacan's theory of Schizophrenia. The originality of Lacan's thought in this area is to have considered Schizophrenia as a language disorder. It emerges from the failure of the infant to enter fully into realm of speech and language. It is because language has a past and future, because the sentence moves in time, that we can have what seems to us a concrete or lived experience of time. The schizophrenic, in short, experiences a fragmentation of time, a series of perpetual presents. Jameson (1991) contends that experiences of temporal discontinuity, similar to those maintained above, are evoked in post modernist works.

Derek Gregory (1989) has also identified three basic features of post modernism in geographic perspective—(i) post modernism is another type of post paradigm because post modern writers are immensely suspicious of any attempt to construct a system of thought which claims to be complete and comprehensive.

(ii) Post modern writers are hostile to the totalizing ambition of the conventional social sciences.

(iii) Post modernism has sensitivity to heterogeneity, particularly and uniqueness. Difference is a 'leit motif' of the post modernism.

7.3.1 Basic concepts of Post modernism :

1. **Deconstruction** : In Post modernism according to Jacques Derrida deconstruction of language occurs which means that every single word in a text can have thousand different meanings. In other words, the text has been seen to fail by its own criteria, the standards or definitions which the text set up were used reflexively to unsettle and shatter the original distinction.
2. **Phonocentrism Logocentrism** : Speech has been regarded as prior because it is closer to the possibility of presence than writing. Derrida called it phonocentrism. Besides being 'phonocentric' western philosophy is also logocentric. Logocentric is a substitute for meta-physics in order to foreground that which has determined metaphysical systems of thought (which depends on a foundation, a ground or a principle) their dependence on a 'logos'. 'Logos' is an essence or truth which acts as the foundation of our entire beliefs- example, Idea, Matter, the World Spirit, God etc.

Derrida developed a concept which he called 'difference' and that referred 'to differ' -to be unlike or dissimilar in nature, quality or from- and 'to differ' to delay, to postpone. Language is the play of difference which are generated by those differences. Derrida attempted to incorporate into the meaning of 'Difference' the sense of deferring. Difference is itself endlessly deferred.

3. **Metaphor** : In the past metaphor was often studied as an aspect of the expressive function of language, but it is actually one of the essential conditions of speech. An influential post structuralist thinker Michel Foucault was particularly fond of using geographical metaphors such as territory, domain, soil, horizon, geopolitics etc. Spatial metaphors include position, field etc. Metaphor determines to a large extent what we can think in any field.
4. **Spatiality and historicism** : Foucault suggested earlier that there has been a devaluation of space. Space was treated as the dead, the fixed, the undialectical, the immobile, time, on the contrary, was richness, fecundity, life, dialectical (Foucault, 1980). From the epistemological view point the single most important contribution of post modernism has been to connect the bias towards historicism 'by putting spatial at the centre of explanation, spatial dialectic along the historical dialectics. The historical imagination is never completely space less. Historicism has been defined in three different ways by Raymond Williams (1983)—
 - i) Neutral - a method of study using facts from the past to trace the precedents of current events,
 - ii) Deliberate- an emphasis on variable historical conditions and contents as privileged frameworks for interpreting all specific events,
 - iii) Hostile an attack on all interpretations and prediction which is based on notion of historical necessity or general laws of historical development.

Lefebvre's spatial project provides a new dimension about spatialized dialectic, an insistent demand for a fundamental change in the ways we think about space, time and being about geography, history and society, about the production of space, the making of history and the constituting social relations and practical consciousness.

Heterotopia

Foucault clarified its concept of heterotopia which means the characteristics of spaces of the modern world. The heterogeneous spaces of sites and relations, called heterotopias' are constituted in every society but take quite varied forms and change over time, as history unfolds in its adherent spatiality.

Convergence of three spatiazation

Soja (1993, 61) identifies three different paths of spatialization that tend towards a creative convergence: 'Post-historian', 'post Fordism' and 'post modernism'.

The first is rooted in the fundamental reformation of nature and conceptualisation of social being that reassert space, challenging the dominance of history.

The second spatialization is directly attached to the political economy of the material world and the most recent phase of socio- spatial restructuring of post Second World War era:

The third spatialization has a framework of a cultural and ideological reconfiguration with recognition of a new post modern culture of space and time. It overlaps with post historicism and post Fordism as a theoretical discourse.

7.4 POST MODERNISM IN GEOGRAPHY

Post modernism is a way of thinking came after modernism. This was also the case in geography. The post modern way a thinking in geography was also a sort of reaction on the modernistic way. Post modernism has taught geographers a lot. The most important, that is learned from it is that 'observation are steered and selected, colored and organized by the ideas, expectations of the observer'. Post modernism lays the emphasis on the meaning of Geography instead of the material aspects of geography.

In correlation with the shift to the meaning of geography is the rise of the cultural geography. Since the rise of Post modernism, the interest in aspects of the daily life in the Western culture was rising first, and thus also cultural geography was rising. Through cultural geography, some new themes are introduced in geography, as for example race, gender, sexuality, language, subcultures and identity. Some works related with post modernism are-Post industrial society (Bell, 1973; Touraine, 1969), post development (Escobar 1992), Post urban (Kling et al.1991), Post capitalist (Vakaloulis1994), and such as Post Marxist (Peet, Watts, 1993). Many theories have been modernized by becoming 'Post'; post modernized simmel (Weinstein, 1993), Post Weberian industrial location (Scott, 1988, Benko 1991), Post television culture (D.Agostino, Tafter) and even public administration and marketing have become post modern. Post modernity has become coupled with feminism (Bondi 1990, Nicholson 1990, Soper 1990), ecology (Ferry 1992), Environmental Problems (Grandy 1996), religion (Bhatt 1996, Gellner 1992), Planning (Dear 1986, 1991, Soja 1993), and space (Bonnet, 1992, Harvey 1990).

7.5 CRITICISM

The impact of post modernism in geography and many other social sciences and humanities have been considerable. Five philosophical arguments associated with post modernism are - (a) Distrust of metanarrative and grand theory (b) emphasis on difference, (c) the problematisation of representation (d) recognition of situatedness of knowledge (e) its particularization social critique - each of these has been the subject of criticism [p,71] Harvey for example, has been highly critical of post modernism particularization of social critique, claiming that post modern thinking shut -off other voices from access to more universal sources of power by ghettoizing them with in an opaque otherness (Harvey, 1989 P, 117)

Harbermas who claimed post modernists such as Lyotard and Foucault were guilty of performative contradiction in that they often failed to enact their own argument fully. He suggests that while post modernists disparage meta narrative and grand theories, they often employ them in their own writing.

Kellner argued that Lyotard's account of post modernism employs a master narrative of the decline of the meta narrative of modernity and set up a grand, totalizing concept namely the local knowledges can not communicate with each other. Honneth rejection of meta- narratives is contradicted by the repeated emphasis on respecting difference and local knowledge.

The emphasis given to notions of difference, otherness and the incommensurability of language has also been criticized for neglecting other aspects of social life, such as commonality and collectively.

Post -modernists insist that the field of the social science is heterogeneous and nontotalizable. as a result, they rule out sort of critical social theory which employs general categories like gender, race and class. In their view there is nothing to be gained in the critical analysis of large -scale institutions and social structures.

7.6 SUGGESTED READING

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UNIT 8 □ RECENTS TRENDS IN GEOGRAPHY IN METHODS AND CONTENTS

Structure

- 8.1 Introduction
- 8.2 Geographical trends from late 19th century to 1940's.
- 8.3 Geographical trends in 1950's and 1960's.
- 8.4 Geographical trends in 1970's and 1980's.
- 8.5 Geographical trends after 1980's.
- 8.6 Suggested Reading

8.1 INTRODUCTION

All academic disciplines evolve and geography is not an exception. Geography is a unique science because it integrates various disciplines like physical, economics, social, political, historical and medical sciences in relation to space and environment. Education philosophers and theorists such as Kuhn (1962) and Schlanger (1983) have developed models to understand how academic disciplines and fields come into existence and how they change over time. Kuhn in his classic book, 'The Structure of Scientific Revolutions' defined paradigm as the entire constellation of beliefs, values, techniques and so on shared by the members of a given community (Kuhn 1970,p-175) In the traditional Kuhnian formulation, it is not the accumulation of knowledge that causes changes in science, such changes are caused by a revolution. In this formulation change is effected through a linkage of events :

Paradigm A —> Normal science —> Anomalies —> Crisis —> Revolution —> Paradigm B

Methodology of a discipline is the logic used in the explanation. The major philosophical, methodological, theoretical view points in a discipline at any given time constitute the thought of the discipline. Whether that discipline is paradigmatic or not depend on the degree of dominance of any specific view point or view points. The dominance of view points are called as trends.

8.2 GEOGRAPHICAL TRENDS FROM LATE 19TH CENTURY TO 1940's.

The scientific milieu in the latter half of 19th century and early twentieth centuries

was dominated by Darwinian ideas and hypothesis of determinism received a new scientific dimension and became a law making approach from generalization. This new scientific method gradually replaced the inductive teleological philosophy of Ritter and sought to offer a mechanical explanation or more precisely the hypothetic deductive method. Deductive, Newtonian cause and effect and systematic study were important methods at that time. The nineteenth century's Darwinian tradition seems to have well continued to the first half of twentieth century with much scientific precision, explanation and validation. William Morris Davis stated that geography was concerned with the analyses of the relationships between inorganic control and organic response which was again the notion of Newtonian cause and effect relationship. Concept of ecology was also developed at that time.

But with the advancement of society and material culture of people, there has been a reaction to the extreme generalization of the environmental determinism which doubted their universal application. Therefore an alternative approach 'possibilism' was developed revolving around Vidal's works of the lifestyles (*genres de vie*) that developed in different geographic environment. So, the method of field work and case studies were applied hereby so that in same environment the causes of difference between groups could be explained. Although Possibilism and regional geographical school established a new trend, but it did not immediately displace its predecessor and survived side by side up to 1960's.

During the period 1919 -22, works of Sauer ('Economic Problems of Ozark High land of Missouri' in 1919, 'Geography as Regional Economies' in 1920, Problems of Land Classification' in 1920 and 'Objectives of Geographical Study' in 1922) were regarded as significant contribution to geography. His ideas fully developed in 'The Morphology of Landscape'. According to him geographer's role is to investigate and understand the nature of transition from natural to the cultural landscape and the successive stages through which the cultural landscape has passed during its transformation.

The concept of Chorology as an approach to study geography was first developed by Richthofen and redefined by Alfred Hettner. Hartshorne was a supporter of regional geography. Hartshorne used the term 'areal differentiation' to characterize the way in which geographers dealt with the wide variety of phenomena, physical, economic and social which exist together in area and distinguish them from other areas (Taaffe, 1974 p-6). Hartshorne believed in synthesis method based on field work and mapping.

It should be noted that these debates and different approaches occurred without any revolution. The modification of both chorology and landscape view gave rise and spatial organizational trend in 1950's and 1960's.

8.3 GEOGRAPHICAL TRENDS IN 1950's AND 1960's.

1950's and 1960's were characterized by great changes in both methods as well as contents in geography. Taaffe described the background for these changes. According to him "as the integrative studies of the forties and fifties produce, the absurdity of attempting genuinely holistic studies with and without clearly stated selection criteria soon become evidentMost geographers were not really trying to synthesize everything in an area, nor were they trying to synthesize all phenomena of significance to man which had significant spatial expression. These increased awareness of spatial bias in the selection of problems led in the fifties and sixties to increasingly explicit statements of the spatial view in geography"(Taaffe, 1974,6-7).

Schaefer brought this paradigm shift by criticizing the exceptionalists's claims made for the regional paradigm. Bunge's 'Theoretic Geography' (1962), Haggett's 'Vocational Analysis in Human Geography' (1966) and David Harvey's 'Explanations in Geography' (1969) were basically elaborations of Schaefer's original criticisms. Subsumed under the umbrella of spatial organization, numerous studies on spatial interaction, spatial system, social planning and regional taxonomies were developed. Schaefer, with his spatial organization, paradigm, initiated what may be called the quantitative and theoretical revolution in geography. This spatial organization paradigm associated with a specific philosophy of logical positivism.

The method of study persisted in this time included the mathematics and statistical techniques to formulate models and laws for the explanation of phenomena. It is applicable to those phenomena that can be expressed in terms of quantity. It is an analytical method of enquiry related to geographical problems. At the same time the development of information technology, use of computers; GIS techniques etc were able to change the sphere of geography. So, the methods behind the geographical research changed rapidly and led to a shift from a descriptive type to an empirical law making scientific study.

Due to the methodological change, geographical contents became rich with the inclusion of many scientific theories and models like gravity model (Reilly), Principle of Least Effort (Zipf), Diffusion model (Hagerstrand), Theory of Games and Economic Behaviour. Von Neuman, Morgenstern, The volume on cybernetics (Norbert weiner) Bunge's monograph on Theoretical Geography, etc. According to Gould the major development and respectability that geography has are due to the elucidating works by mathematically talented geographers. Tobler's work led to the development of true cartographic research, Darcy's work have extended geographic theories, Wilson's work in entropy maximization models has changed the way we look at the world. (Gould, 1979, p148-9). He commends Webber's ability to translate geographic observation and hypothesis from the verbal to the more manipulatable language of mathematics (Gould, 1979, p148)

8.4 GEOGRAPHICAL TRENDS IN 1970's AND 1980's.

As a result of dissatisfaction from spatial analysis, many geographers of 1970's and 1980's sought alternative approaches to geographic problems. Methodologically quantitative techniques were not valid in human geography; it obscures the more fundamental social questions. To replace it, humanistic and behavioural geography were emerged. Because of the weakness of positivism, many geographers have suggested alternate philosophical approach to study the spatial system. During the 1980's, geographical thinking truly got revolutionalised as increasingly geographers got engaged in research on not only the relationship between space and society or space and social theory but went further to establish the significance of theory and philosophy as the basic identity of the discipline (Dear and Flusty 2002). Pragmatism provided a suitable philosophy in the 1980's for those who would like to use value based scientific methodology to solve human problems. In the view of Pragmatism, space is functional; and the meaning of space is functional of the practical consequences of that space. Space is a composite of error and knowledge. But a credible alternative to positivism is phenomenology. It is a philosophy that seeks to disclose the world as it shows itself before scientific inquiry, as that which is pre-given and pre supported by the science. Idealism, on the other hand accepts that there is a real world outside the individuals' consciousness. Idealism implies one type of Hermeneutic approach which is the theory of interpretation and clarification of meaning. Realism is a alternative explanation to idealism.

On the basis of these philosophical changes, methodologies of the geographical study transformed. It turns inductive from hypothesis-deductive and the main aim of these studies is to build general statements out of observations of ongoing processes. Inductive method involves moving from particular instances of relations among variables to the formulation of hypotheses and from these to the development of propositions. Many scientists had claimed that laws and theories were derived from the observation of repeated regularities, and historical dialectical method. Different trends developed because of critical revolution in geography in 1970's will continued to be important in the 1980's. Among them the most important are Environmental causation, Sustainable development, welfare approach, Marxism, Feminism, Globalization and International Trade.

8.5 GEOGRAPHICAL TRENDS AFTER 1980's.

By the late 1980's a new issue had arisen in geographical thought. It can be summerised under the heading of post modernism. Post modernism is a confusing term because it represents a combination of different ideas. As method it is critical of the idea of totality. In particular, this body of work assumes the following : that

meaning is produced in language, not reflected by it; that meaning is not fixed but is constantly on the move and that subjectivity does not imply a conscious, unified and rational human subject but instead a kaleidoscope of different discursive practices. In turn, the kind of method needed to get at these conceptions will need to be very supple, able to capture a multiplicity of different meanings without reducing them to the simplicity of a single structure. Derrida's deconstruction, Foucault's genealogy, Lyotard's paralogy, the discourse analysis of various social psychologists—all these are attempts to produce a method that can capture history as a set of overlapping and interlocking fields of communication and judgement. In the 1990's, both inside and outside Marxist geography, initiatives started building up to initiate debates on critical studies in theory and practice. For the first time, such a move extended beyond the Anglo-Saxon coverage, incorporating Europe, Latin America and Asia. These endeavours joining with other contemporary geographical praxis [Harvey 2000, 2001, Dear, Flusty, 2002, Johnston, Taylor and Watts, 2002, Amin and Thrift, 2002, Smith 2000] have been raising crucial questions about the relevancy of the subject in the Post Fordist, Post Modernist world and focusing on the significance of space in social theory (Guha, Banerjee, S., 2004).

The scientific and technological revolution can release man from the bondage of space allowing the whole land to be his home, as boundaries demarcation groups of men disappear as faster modes of transportation and communication come into existence.

Geography at the end of the 20th century was engaged in fathoming the depth of disparity on a world scale and even within states, its spread and nature and ways to overcome it. So, sustainable development became the main issue. In the 21st century the world may witness globalization of a different kind—uneven distribution of resources and development leading not to dominance but to cooperation at a much higher level.

Geography as a regional science will have moved miles from what Isard (1960) made it look like when he created the idea of such science linking geography, economics and planning.

8.6 SUGGESTED READING

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Notes



মানুষের জ্ঞান ও ভাবকে বইয়ের মধ্যে সঞ্চিত করিবার যে একটা প্রচুর সুবিধা আছে, সে কথা কেহই অস্বীকার করিতে পারে না। কিন্তু সেই সুবিধার দ্বারা মনের স্বাভাবিক শক্তিকে একেবারে আচ্ছন্ন করিয়া ফেলিলে বুদ্ধিকে বাবু করিয়া তোলা হয়।

—রবীন্দ্রনাথ ঠাকুর

ভারতের একটা mission আছে, একটা গৌরবময় ভবিষ্যৎ আছে, সেই ভবিষ্যৎ ভারতের উত্তরাধিকারী আমরাই। নূতন ভারতের মুক্তির ইতিহাস আমরাই রচনা করছি এবং করব। এই বিশ্বাস আছে বলেই আমরা সব দুঃখ কষ্ট সহ্য করতে পারি, অন্ধকারময় বর্তমানকে অগ্রাহ্য করতে পারি, বাস্তবের নিষ্ঠুর সত্যগুলি আদর্শের কঠিন আঘাতে ধুলিসাং করতে পারি।

—সুভাষচন্দ্র বসু

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