

**Subject: Geography CBCS HONOURS**

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**Semester: VI**

**CC13T: EVOLUTION OF GEOGRAPHICAL  
THOUGHT**

**UNIT: 1- POINT: 4.**

## The Myth and Reality about Dualisms

### MEANING OF DUALISM AND DICHOTOMY IN GEOGRAPHY

The word '*dualism*' simply connotes the state of being divided. For any domain of knowledge therefore, it means two conceptually contrasted stances. Dualism finally leads to '*dichotomy*' which means the bifurcation of any subject into branches of knowledge.

Ever since its inception as a domain of knowledge, geography has been encountered with several methodological issues that eventually gave birth to several dualisms and dichotomies in the subject. Such sort of dualism was prevalent even in the classical or medieval periods of geographical history. Greek scholars like Aristotle, Herodotus or Hecataeus emphasized on physical geography; Roman scholars like Strabo insisted on regional geography while Ptolemy stressed on mathematical geography; and, the Arab scholars like Al-Masudi, Al-Biruni or Al-Idrisi highlighted on the importance of the physical environment. However, such dualisms were very equivocal and abstruse.

It was in the post-Renaissance period that geography witnessed the evident rise of dualism and since then, the subject has been branched off into several exclusive domains on methodological grounds. Over time the divisions have been further sub-divided into different sub-disciplines.

Some of the most conspicuous dualisms known to have existed in geography were:

- General (Systematic) Geography versus Regional Geography.
- Physical Geography versus Human Geography.
- Historical Geography versus Contemporary Geography.

## SYSTEMATIC GEOGRAPHY VERSUS REGIONAL GEOGRAPHY

The dichotomy between systematic and regional geography was essentially rooted in another dualism that existed in the *approaches to study geography*. This dualism was between the ***Idiographic or Inductive Approach*** and the ***Nomothetic or Deductive Approach***. The dichotomy between the two approaches may be explicated as—the idiographic or empirical approach did not seek to develop laws but mainly focused on the description of particular places in the context of their lands, seas or places and attempt to find its relation with other places. The nomothetic or deductive approach on the other hand, sought to establish laws and made general deductions based on those laws.

Dualism in geography was formally introduced in the 17<sup>th</sup> century which is often described as the *classical period of modern geography* by the German geographer, **Bernhard Varenius**. Using the terms of **Bartholomew Keckermann** a German philosopher, Varenius in his '***Geographia Generalis***' partitioned geography into-

- ***Special geography*** essentially concerned with the description of particular places on the basis of direct observations. This branch of geography was assumed to have great practical importance for governance and commerce.
- ***General geography*** based on universally applicable mathematical or astronomical laws.

Gradually, general geography evolved into systematic geography by incorporating the methods of the systematics sciences, while special geography evolved into regional geography. In simple words, the two may be expounded as----the study of the natural vegetation of the world is a systematic approach while the study of a continent with respect to its natural vegetation, landforms, climate etc. is a regional approach.

The prominent German geographer **Alexander von Humboldt** followed Varenius and laid the foundation of systematic geography. In his famous book '***Cosmos***' Humboldt asserted that geography was meant to understand the '*harmonious unity of the cosmos.*' He distinguished between ***uranography*** as descriptive astronomy dealing with the *celestial bodies* and, ***geography*** as dealing with the *terrestrial part* with the prime objective of deciphering the unity that exists in the vast diversity of phenomena. It was not only the natural phenomena that Humboldt spoke of but, he also asserted that there existed unity of the human races as well since all the races had a

common origin and therefore, no race was superior to the other. The unity of the phenomena, a viewpoint that Humboldt obtained from the German philosopher **Hegel** was based on the conjecture that there existed coherence as well as some sort of causality among them. The understanding of that unity was supposed to be derived from an understanding of the unity that subsisted between humans and the physical landscape. In fact, Humboldt opined that like other phenomena, *humans were basically a part of the nature*. Knowledge of the natural or physical phenomena was categorized by Humboldt as:

- **Systematic Sciences:** This included sciences like botany, zoology or geology that classified phenomena according to their form and grouped them on the basis of certain commonalities.
- **Historical Sciences:** This dealt with the development of phenomena over time.
- **Geography or Earth Sciences:** This concerned itself with the spatial distribution and spatial relationship and interdependence of phenomena. It included all earth phenomena whether organic or inorganic.

Humboldt in his *Cosmos* stressed on his views that, for a comprehensive knowledge of the cosmos it was necessary to pursue systematic studies of particular phenomena and their interrelationship with other phenomena rather than undertaking complete studies of specific areas.

According to **Carl Ritter**, a contemporary of Humboldt, geography was concerned with '*lokalverhältnisse*' or local conditions which described a spatial unit on the basis of *three* characteristics---

- **topographical**, concerned with the delineation of natural divisions on the earth's surface;
- **formal**, which dealt with the distribution and movement of such phenomena as water, air etc. that constituted the bases of human life;
- **material**, which dealt with the distribution of biotic life, minerals etc.

Ritter provided the above purpose of geography in his famous '*Erdkunde*.' It was Ritter who introduced the inductive method in geography. He sought to develop a regional geography for

which he used '*erdteile*' or continents as his units of study. He was of the idea that all continents had similar physical features and thus divided each continent into a highland core drained by major rivers of the land and, a low-lying coastland at the periphery.

Thereafter, in the late 19<sup>th</sup> century, geographers were highly influenced by the Darwinian doctrine and made significant contributions in furthering systematic geography. The most prominent among them were **Ferdinand von Richtofen** and **Friedrich Ratzel**.

Richtofen perceived geography in the same line as Humboldt as, the science of the earth's surface as well as the phenomena on it that were causally interrelated with it. According to him, the purpose of systematic geography was to provide an understanding of the interrelationship and causality of phenomena on the earth's surface which could be used for deducing about individual regions as well. He provided a guideline for the systematic study of the earth's surface. Richtofen also differentiated between general or systematic geography as analytic and regressive that was based on general concepts and, special or regional geography as synthetic and descriptive dealing with the unique and peculiar.

Friedrich Ratzel in his '*Anthropogeographie*' set a framework for the systematic study of human geography and thus set a new trend in the subject. Prior to him, systematic geography only involved physical geography and, human geography was mainly confined within regional studies. His anthropogeographie was essentially a reflection of the Darwinian viewpoints and emphasized on the concept of natural selection that was used in the natural sciences. Ratzel was of the view that cultural differences of a land were much more prominent than the physical differences. Ratzel's concept of geography was based on *two* propositions---(i) the interrelation of environment and humans and (ii) the interrelations of humans.

**Alfred Hettner** distinguished between systematic geography as that which was interested in formulating general laws and theories and, regional geography as concerned with the study of peculiarities in which the generalisations were tested to improvise on the existing theories.

The regional tradition was again revived by the French geographer **Vidal de la Blache**. He introduced the concept of '*pays*' or small local units as ideal units of study for the geographers which could even be used to arrive at general conclusions. He was contested however, by **Reclus** with his '*Le Terra*' that was centered on systematic physical geography.

The dichotomy between systematic and regional geography subsequently led to the **Hartshorne-Schaefer** debate. While Hartshorne in his '*Nature of Geography*' advocated that geography was regional in its essence and put forward his concept of *areal differentiation*', his views were refuted by Schaefer as '*Hartshornian Orthodoxy*' who called for a systematic scientific approach for geographical studies.

## **PHYSICAL GEOGRAPHY VERSUS HUMAN GEOGRAPHY**

It was **Varenius** again as one of the first scholars to highlight on the differences in the nature and content of physical and human geography. He himself however was not much interested in the latter since human geography could not be subjected to mathematical laws to generate universal principles. He believed that the methods of the natural sciences could be successfully used to draw conclusions about natural phenomena with precision to a considerable extent. But they could not be applied to human groups because they were more subject to probability than certainty. Following him, was **Immanuel Kant** who offered a regular course of lectures on physical geography between 1756 to 1796 at the University of Konigsberg According to Kant, physical geography not only included the features visible on the earth's surface created by natural processes but also by human actions. Kant opined that physical geography was the first part of knowledge of the world and was essential to develop the basic understanding of the earth as the abode of humans and for furthering philosophical studies.

After Kant, it was **Humboldt** who stressed upon the study of physical geography. Since he believed in the '*unity of nature*,' in his opinion, physical geography was the study of phenomena arranged on the earth's surface and mutually related to each other that constituted the '*natural whole*.' Humboldt was of the view that differences in the economic, social and political conditions of different spatial units were largely a function of differences in natural conditions. Thus, according to him, human factors were subordinate to the natural factors. On the contrary, by upholding the teleological view that sought to provide a philosophical interpretation for geographical phenomena, **Ritter's** view of geography was anthropocentric in nature. Ritter conceived the earth as created by God with a '*purpose*' to educate humans and facilitate in their

development. Ritter's anthropocentric geography stated that the way natural phenomena of any spatial unit affected its inhabitants, the inhabitants could also have an influence on the land.

Under the impact of Darwinian ideas, geographers focused more and more on physical geography. In 1848, **Mary Somerville** authored her '*Physical Geography*' and in 1877, **Thomas Henry Huxley** authored '*Physiography*' as the study of nature. In the second half of the 19<sup>th</sup> century, more and more geographers were inclined towards physical geography. It is believed that **Hettner** accorded greater importance to the physical environment in comparison to cultural environment. German geographer, **Albrecht Penck** coined the term '*geomorphology*' as the study of landforms and established it as a distinctive sub-field of physical geography. It was Penck who formulated the principles of '*landform evolution*.' He also highlighted on the importance of relief maps in the systematic study of geographical elements. Subsequently, American geographer **William Morris Davis** also put forward his '*normal cycle of erosion*.' There were other scholars like **Koppen, Martonne, Mill, and Dokuchaiev** who put greater emphasis on landforms or climate as the major focus of geography. **Semple** went forward to explain humans as '*product of the earth's surface*.' **Mackinder, Chisholm, Herberton and Huntington**----all of them recognized physical geography as the core of the discipline of geography. Over the years, several sub-fields of physical geography have evolved like *geomorphology, climatology, oceanography, pedology, biogeography and environmental geography*.

The human element in geography was formally introduced in the work of **Ratzel** which actually gave rise to the dichotomy between physical and human geography. Ratzel in his '*Anthropogeographie*' described geography as the study of humans in the context of different races. But, Ratzel too was influenced by the Darwinian views and incorporated two major Darwinian tenets in his works----(i) *struggle and natural selection* and (ii) *association and organization*. He used these themes in drawing an analogy between the political units and living organisms and thus came to be known as the *father of political geography*. However, it was the French geographer, **Vidal de la Blache** who may be regarded as the founding father of modern human geography. However, Blache was of the opinion that human geography was a natural science. He adopted an inductive and historical approach in putting forth his propositions of human geography. His '*Principles de Geographie Humaine*', had several parts each devoted to

several aspects of human geography. The introductory part analysed the principle of terrestrial unity as well as the concept of cultural milieu. Part first focused on population clusters and density. The second part was a description of man-milieu relationship. The third part dealt with transport and communication which was completed later by Martonne who also added the components of human races, diffusion of innovation and cultural regions in it. The Vidalienne tradition was carried forward by his ardent follower **Jean Brunhes** who propagated Blache's views of human geography not only within France but in other parts of the world as well. French historian **Lucien Febvre** was also inspired by the Vidalienne human geography. He put forward that humankind emerged as a powerful agent of modifying the earth's surface through centuries of their accumulated labour and decision-making. American geographer **Isaiah Bowman** also championed the cause of human approach in geography. In 1924, American geographer **Carl O. Sauer** propounded his '*landscape paradigm*' in which he highlighted on humans as agent of '*fashioning*' the natural landscape.

Over the years, studies in human geography has led to various sub-branches in this field as-----population geography, settlement geography, economic geography, social geography, cultural geography, political geography, historical geography and so on.

The dichotomy that existed between two prominent philosophies of geography namely, *environmental determinism* and *possibilism* could be attributed to the dualism between physical and human geography. In fact, the two revolutions that geography underwent namely, *the positive-quantitative revolution* and the *critical revolution* were somehow related to this dichotomy. This may be justified by the fact that while the former attempted to introduce the methodologies of the systematic sciences in geography as had been mostly done in the field of physical geography, the latter developed as a critique of the former mainly emphasized on the '*humane*' essence of the subject.

## **HISTORICAL GEOGRAPHY VERSUS CONTEMPORARY GEOGRAPHY**

That all history should be treated geographically and all geography historically was asserted by the Greek scholar **Herodotus**. Thereafter, **Immanuel Kant** opined that since any individual's experience was restricted to a specific time and space, his knowledge had to be supplemented



with the experiences of others. Such knowledge derived indirectly from others could be divided into *two* types—(i) narrative or, (ii) descriptive. While history was narrative, geography was descriptive. Thus, history and geography made up the entire gamut of empirical knowledge—the former that of time and the latter that of space.

Therefore, the importance of historical approach to geographical studies was acknowledged. The dichotomy between historical and contemporary geography also came to be regarded as an important dualism in geography. Historical geography dealt with the geographical description of any spatial unit as it had been in the past. The work of **S. M. Ali**, '*The Geography of the Puranas*' in which he endeavored to provide a geographical account of ancient India, could be considered as a remarkable work in this field. The contributions of the American geographer, **Ralph Brown** in the field of historical geography was also of great prominence. In fact, the **Vidalienne** tradition also adopted a historical approach.

However, historical geography could not be treated as a conventional field of geography as of contemporary geography. Hence, limited works could be found in this domain of study. Nevertheless, it incorporated in it both systematic and regional studies and included all the possible aspects of geographical knowledge.

The scope and content of historical geography were centred on the following themes:

- ***The Geographical Factor in History***: In the latter part of the 19<sup>th</sup> century historical geography was conceived to be associated with the study of the mutual relations of phenomena over space in a particular period of time or, to study the impact of geographical phenomena in shaping the history of a region. **Whittlesey** emphasized on the study of historical factors in geography as it was thought to provide a spatio-temporal framework to study any spatial unit.
- ***Changing Cultural Landscape***: Historical geography was also considered to be the study of the cultural landscape as it existed in the past in any area such as, the settlement or the cropping patterns, house types etc.
- ***Reconstruction of Past Geographies***: This was an important aspect of historical geography. Since it embraced all fields of geographical knowledge, reconstruction of past

geographies was essential for contemporary geographers as it enabled them to interpret the geographical phenomena of any spatial unit in present times in a more comprehensive manner.

- ***Geographical Changes through Time:*** The concept of space had always been a central focus in geography. Geographical phenomena over space, whether natural or cultural changed with time which in turn, changed the character of space. The study of these geographical changes with time was of utmost importance to the geographers.

Contemporary geography on the other hand included all the geographical knowledge of modern times. In fact, contemporary geography had also witnessed the emergence of the modern and post-modern era with a constant revamping of approaches and methodologies in the geographical discipline.

### **DUALISMS IN GEOGRAPHY---A MYTH OR A REALITY**

It is a fact that methodological differences had given rise to several dualisms in geography but the question that arises is that, whether the dichotomies that resulted from such dualisms had produced exclusive fields of knowledge or whether they are mutually related and transcended into one another. To be the precise, the question is whether dualisms in geography were a myth or a reality.

Varenus who actually introduced the tradition of dualism in geography, while categorizing between general and special geography asserted that they were mutually interdependent branches of geography. He stressed on the fact that special geography provided the database based on which general geography could infer the general hypotheses and laws. Humboldt recognized the interdependence of areal phenomena and opined that to understand a whole comprised of multiple phenomena it was essential to have knowledge about the constituents of that whole. Similarly, though Ritter adopted an inductive approach he acknowledged the contributions of Humboldt's systematic studies that enabled him to undertake special studies of regions. Richtofen on one hand while attempted to follow the precedence of Humboldt in establishing the affinity between geography and the natural sciences, on the other

hand he also tried to restore the Ritterian tradition. It was Hettner who actually removed the dualism of the idiographic and nomothetic approach in geography. He stated that geography could involve both idiographic and nomothetic methods.

Both systematic and regional geographies could be regarded as the two extreme points of a continuum that gradually merged into the other. In regional studies, the concept of '*compage*' was introduced by **Derwent Whittlesey** to explain that regional geography was not a mere description of phenomena characteristic of any spatial unit but studied the functional association that existed between human beings and their physical, biotic and social environment. Therefore, through these arguments the dualism that is known to have existed between systematic and regional geography seemed to have been blurred. The general could be deciphered only through the particular which in turn, was not independent of the general.

The dualism to follow was between physical and human geography. In this too, the basic question posed was whether humans could be studied in exclusion from nature. At the same time, natural landscapes were occupied by humans. It was not possible to study human phenomena independent of the natural landscape and natural phenomena without their relation with humans. So the major thrust was on the relationship between humans and environment that constituted the central thesis of geography. This relationship however underwent several modifications sometimes according greater importance to nature and sometimes to humans or placed humans in harmony with nature. In physical geography, while explaining the normal cycle of erosion or landform evolution analogy was drawn with the lifecycle of humans, the concept of '*pays*' in human geography involved small '*natural*' regions. Thus, physical and human geography instead of being in contrast rather complemented each other which in turn faded away the dualism between physical and human geography.

Finally regarding the dualism between historical and contemporary geography, it may be stated that contemporary geography would become a part of historical geography over time. To comprehend the present it was highly essential to know the past. Therefore, historical geography provided a base for studying contemporary phenomena and how they have evolved over time. Hence, **Mackinder** asserted that historical geography was basically the study of the historical present. So, even in case of the dualism between historical and contemporary geography it was evident that one eventually led to the other and hence, their dualism also stood as illogical.

**REFERENCE**

**GEOGRAPHICAL THOUGHT BY SUDIPTA ADHIKARI**

**EPATHSHALA- MHRD**