

Man and Environment Relationship!

The concept of geography as the study of man and environment relationship is quite old.

The Greek, Roman, Indian, Chinese and Arab geographers attempted to establish a relationship between man and natural environment. Kant, in the concluding part of the 18th century, advocated the impact of environment on the lifestyle and physical constitution and lifestyle the equatorial, hot deserts, Mediterranean, coastal and mountainous regions. According to Kant, the inhabitants of torrid zone are exceptionally lazy and timid, while the people of the Mediterranean region living in the mild temperature conditions are industrious, hard working and progressive.

The environmental causation continued throughout the 19th century. Humboldt asserted that the mode of life of the inhabitants of the mountainous countries of the Andes mountains differ from that of the people of Amazon basin, coastal plains and islands like Cuba and West Indies. Ritter attempted to establish the cause variations in the physical constitution of body, physique and health of people living in the different physical environmental conditions.

The idea of defining geography in terms of man and environment relationship developed on scientific lines in the later part of the 19th century after the publication of Origin of Species (1859) by Charles Darwin. This seminal work gave a new direction to the discipline of geography. The theory of evolution held that all living species have evolved from pre-existing forms. His geological observations and theories had one thing in common: the idea that things in nature change with time.

He also believed that the face of the earth also changes with the change in environment over the period of time. In this book, Origin of Species, Darwin presented his idea that species evolve from more primitive species through the process of natural selection. In his account of natural selection occurs, known as Darwinism, he pointed out that not all individuals of a species are exactly the same but have variations and some of these variations make their bearers better adapted to particular ecological conditions.

He theorized that well-adapted individuals of a species have more chance of surviving and producing young than do the less adapted, and that over the

passage of time the latter are slowly weeded out. Through his theory Darwin showed how the multitude of living things in our world could have come into being without any recourse to a divine master plan, in a plain, causal, naturalistic way. Darwin argued that a struggle for existence must take place; it followed that those who survived were better adapted to their environment than competitors. This means that relatively superior adaptations increase while relatively inferior ones are steadily eliminated.

The Darwin's concept of man and environment relationship may be summarized as under:

1. Organisms vary, and these variations are inherited (at least in part) by their offspring.
2. Organisms produce more offspring than can possibly survive.
3. On an average, offspring that vary most strongly in direction favoured by the environment will survive and propagate.

The Darwin's theory had a far-reaching impact on the growth and development of geography. It assumed that variations in animals were random. In this way, the older teleological conception (the religious belief that God has a plan and every phenomena of the earth have been created to perform certain functions for man) of nature was profoundly challenged.

Darwin's book upset many established patterns of thought, contradicted firmly held religious tenets (teleological concept) and brought in focus the concept that humans are one species among many that have evolved more primitive one. In his subsequent book, *The Descent of Man and Selection in Relation to Sex* (1871), Darwin provided evidence of human evolution from one primitive species and discussed the role of sexual selection in evolution.

The concept of defining geography in terms of relationship became quite popular in Germany. The work of Darwin influenced Friedrich Ratzel, who published *Anthropogeography* in two volumes in 1882 and 1891 respectively.

In the first volume, he organized the material to show the influence of physical environment on history, culture and the mode of life of the people, while the second volume deals with the geographical distribution of men in the world. It was because of this book in which he discussed the man and

environment relationship of the different tribes of the world that he is considered as the ‘founder of human geography’.

Ratzel, by applying the organic theory to political geography, developed the concept of *lebensraum* (literally living space or the geographical area within which an organism develops). While developing the man and environment relationship, Ratzel, in his book *Political Geography* (1897), equated a nation with a living organism, and argued that a country’s search for territorial expansion was similar to a growing organism’s search for space. Conflict between nations was thus seen as a contest for territory within which to expand, with the fittest surviving.

The concept was appropriated by the German School of *Geopolitik* in the 1920s and 1930s and used to justify the Nazi programme of territorial expansion. In the opinion of Dickinson and Gumplovicz, “Ratzel’s work contains more and more important knowledge concerning the state, than the entire theoretical political science literature of the last 100 years”.

Ratzel’s book *Anthropogeography* had a great influence on the geographic thought of America, France, Britain, Russia and Sweden. Ratzel’s most important disciple was Ellen Churchill Semple. Semple, in the introduction of her book, *Influences of Geographic Environment* declared “man as the product of earth’s surface”. The influence of physical environment on the history of people of the region in any part of the world can be found in her writings. The main cause of variations in the history, culture and lifestyle of the people of plains and mountains can be traced in the physical environment.

Vidal de Lablache was convinced that *genres de vie* were themselves reflective of nature (physical environment), even as they transformed it. He always conceived human geography as natural, not a social science.

Ultimately, geography as the science of relationship appeared in the form of **environmental determinism**. Environmental determinism is the doctrine according to which the human activities are controlled by the physical environment. The environmentalists considered natural environment as the ‘geographic factor’ and their geography was known as ‘pure geography’. In the opinion of environmental determinists, human geography is the study of influence of physical environment on man.

Barrows, in his presidential address (1922), recommended that relationships in geography should be studied “from man’s adjustment to environment, rather than the reverse”. Hettner (1907) also supported the concept of geography as the study of relationship. Thus, both the physical factors and the human factors (cultural environment) are to be studied in their relations to each other. Geography is, therefore, exclusively human geography, or as Barrow stated, geography is ‘human ecology’. Geography is a natural science in the same way as plant ecology is a biological science. Sauer, in his book *Agricultural Origins and Dispersals* (1952), focused upon the patterns of human culture in relation to the natural environment. He also tried to explain how human interactions with physical environment have resulted into various cultural patterns in the different parts of the world.

While examining the lifestyle and history of the people in the different regions of the world, it may be said that there is a close relationship between the environment and the mode of life of the people. Undoubtedly, terrain, topography, temperature, rainfall, natural vegetation and soils have a direct bearing on the culture, economy and society of the people, yet the role of man as the transforming agent of his physical surroundings cannot be ignored. In fact, works of man reveal many facts for which environmental forces alone can give no satisfactory explanation. For example, similar locations may not lead to similar mode of life.

The Eskimos of Tundra region differ markedly in their economic activities and cultural practices from the Tungus, Yakuts and Yukaghirs, etc. The Khasis and Nepalis, living in Meghalaya (India) in the same physical environmental conditions, have the different cultural ethos. Same is the case with the Gujjars and Bakkarwals of Kashmir Valley and the Kashmiris in the state of Jammu and Kashmir. Likewise, the Hanjis (water dwellers) of Dal Lake and Jhelum river in Srinagar have different attitude and mode of life from the inhabitants of Srinagar city. Geography, as the discipline of relationship, though was quite prominent approach, it lost its position after the Second World War. The advocates of spatial science, locational analysis, behaviouralists, radicalists and humanists criticized this approach and declared it just deterministic and unscientific.