

BIOGEOGRAPHY AND SCIENCE BEHIND HISTORICAL EVENTS

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Abstract

There are numbers of ideas that guide the way we think and the way we take things to be, some of these ideas are propagated by the events that occur, the understanding we have with science, the amount of information science provides and the kind of changes science provides to previous explanations or ideas. As a matter of understanding the changes and the drift of our thoughts, this paper will be looking into the events that have changed some of the ideologies we have had from the past concerning the occurrences of some phenomenon. Building the knowledge we have about matter and physics, we need an account of events that change some aspects of our thinking concerning the world we live and the changes that are be witnessed through science or through events.

Introduction

As a point of scientific approach to explaining the changes that we have witnessed in the past through to date, we focus the attention of this research to the biogeography discipline of science, this will be to account for major changes that we have seen through the distribution of life across the landscape of earth. Biogeography is a field of science that deals with distribution of animal species and plants along the dimension of climate, topography and altitude on earth.

Biogeography as it deals with the specific accounting of life, where and how it

is distributed also focus on the aspects that have led to the changes in the way the events occur. We all believe that during the Stone Age there was some form of life.

We also believe that fossils were evidence of extinct animal lives. What we do not understand can rely on science for a clear accounting is that the fact might be those fossils represents some form of life that existed back then and not evidence of extinct animals. Science explains that man evolved from the ape, the chain of changes has a chronological order through which they appear. Believing that the existence of man was from a form of some ape and to the man we have to day, we could as well argue that life for other forms of animals, birds and marine creatures was also developing from some earlier form of life that has gone through evolution to the ones that we see today.

Plants have a way of adapting to some weather aspects, it's through this weather patterns that we get a certain type of vegetation growth in one geographical area and not the other. To explain this, we can focus on the causes of the changes of adaptation of one plant to a certain climatic zone and not on another. The same case applies to the case of animals, some animals do well, or exist in certain climatic zone only and not on others, changing the habitats of these animals would be a disastrous case for loss of life to the form of life at hand. E.g. kiwis are only found within the Antarctica regions and not in any other regions, they have adapted to the conditions because that is the primary region they have known to exist in, transfer of a kiwi from that region to another can see a series of events happening like, death, notable change of color, feeding habits and an increase or decrease of the breeding scale.

Events of Changing Phenomenon in Biogeography

In the past there was only one big ocean that submerges the land all over except of one remarkably large island that emerged. This was the primary land that the continents subdivided themselves from and where vegetation grew and animals lived all together. This was according to the Swedish naturalist Carolus Linnaeus (1707 - 1778), he explained that the existence of life was then as an event of gathering all animals by Noah and into his ark that accounted to this event of all animals having been living together then, he alleges that the Noah's Ark landed at the top of Mount Ararat. The fact that initially land one big mass, explains how it was easy to flood the island during the events of Noah, Carolus here took a scientific approach and merged with the scriptures to explain a factor of distribution of life. He took the aspect of the island initially as the focus point that led to the dispersing of the animals and vegetation to their natural habitats that they are found today. At Mount Ararat, Carolus argues that there was a variety of climatic and adaptation zones for the animals, so they were drawn instinctively by the condition to their habitats that they are found in presently. (Carolus 1760: 188)

Comte de Buffon (1707-1788) was drawn in by the explanations of Carolus as to how their dispersing of life occurred. He argued that parts of the earth that do experience the same climatic conditions tend to have a distinct form of life in terms of animals and plants habituating on them. He alleges and points that same animals and plants are sometimes found in different conditions and it would not be true if some animals would survive in habitats that were not designated for the survival of such animals and plants.

Buffon had a set of explanation on the concept of dispersal of life across the globe, he argued that life originated from the north hemisphere and spread to south (southern dispersal) as climates cooled, this on the case of adaption he argued that while life both animal's and plant's was concerned, they were

moving south adapting to the climatic changes that they were experiencing. The movement of the animals from the north towards the south was a result of temperatures starting to get unbearable for a number of animal species, this was a fact that some forms of flora life were unable to survive as the conditions got cooler and cooler on the northern hemisphere.

Buffon helped the majority of scientists that major in biogeography in his law (Buffon's law), that points that environmentally alike but isolated regions do have different form of animal and plant life. This means that, all climatic region that we have, some have similar conditions and others vary, in the case of the ones that share similar conditions, do not share the same kinds of plants and animal specials. As we know to day, climate and species are changeable (mutable). A factor that modern biogeography takes to account in considering the explanation of geography and the diversity of species dispersal. The factor that biogeography through the scientific approach and explanation of Buffon hold in our minds is that the distribution patterns of species are controlled by ecology. (Buffon 2008: 121)

From Carolus point of view of earth having been one big ocean with an island emerging from it, Karl Willdenow (1765-1812) supported this view in his novel of the distribution of plants across the European countries; he argues that with the marginal array of the continent we have today, it is likely that primary to what we see today, they could have been joined together. In support of Buffon's view on dispersal of animal and plant life, he argues that although the margins show an outline of continuity that factor does not mean that the areas that were originally or seem to have been joined do not necessarily share similar species of plants and animals. (Wilfred 2004:167)

Contrary to Carolus and Buffon points of view and explanation of distribution of species, Alexander Von Humboldt (1769-1859), argued that life and it's

existence in one geographical area has had nothing to do with the precision of coastlines that seem to have been joined. The separation of Africa and Latin America occurred many years ago before the existence of living organisms and there was no chance the Buffon's theory would explain a distribution chain of species from the North southwards. To fill the gap of misunderstandings he argued that all plants existed in one area and the fact that some different climatic zones would have the same species of plantation is in the fact that ocean currents from one region to another would help in the dispersion of the plants. He believed the history of earth and the history of species were one and the same thing in terms of explanation being linked. The fact of species coming from the same region and dispersing to the rest was wrong according to Carolus theory.

Earth's climate is considerably changeable. Animals are and have never been dynamic, though fossils had been found in areas that they were never discovered in showed that animals were able to adapt to the climates and condition they were subjected to (Charles Lyell) and the fact of distribution of life and species, is not by regional climatic adaption but through inheritance (Alfred 1876: 105) were also other scientific approaches as to how biogeography was a factor of diverse possibilities. It's through this we point that the event of swans falling from the sky in USA (CNN) might have been a factor of inhabitable conditions that led to those deaths. The deaths of Whales across the coast of south Asia, in spite of the possibility that they could have suffered poisoning, it can still be pointed out that the in-dynamical nature of animals led to the deaths due to subject of new conditions.

Implications of historical events on our scientific understanding

March 11th, 2010 Japan Earthquake and the Tsunami that Followed

Given everybody has an idea of what earthquakes bring about besides loss of property and life; there are aspects of the knowledge we happen to be missing. As a result of the 8.9 magnitude earthquake that struck Japan around mid March, it has been clear that what we thought was the ultimate cause of tsunamis would no longer be the case to go by. As the earthquake struck on the mainland towards the eastern coast of Japan, people would believe that the tsunami that was felt as far as Hawaii was as result of earthquake taking place on the Pacific Ocean. It is through this knowledge that people had that brought science in to the mapping of ideas. Scientists undertook studies that were aimed at filling the gaps of knowledge that we had about this case scenario.

Through this case of Japan earthquake, it has been explained had fed to our brains that tsunamis aren't caused by earthquakes happening only at the sea. Deep at the floor of the sea is where the origin of the tsunami takes place; this isn't as a result of an earthquake or a matter of an epicenter of an earthquake, rather, if earthquakes happen at other areas from the sea, it would it would result to a vertical drift of the sea's floor. This results to a major trigger of wave that tends to be propagated by adjacent follow-up water, originating from the floor to the surface of the ocean. At the surface, the visible wave that could be seen in this case would be a moderate one of considerable small height. The wave visible according to our earlier knowledge would be a factor to access the strength of the wave, contrary to this type of judgment; the truth is that beneath the surface, a volume of water comparable to the scale of large river

is travelling at high speed. Upon reaching shallow ends of a coast line, the prevailing wave slows down and becomes a backlash, the adjacent follow-up water volume smashes upon the backlash at high speed thus causing an enormous wave as a result of the impact. (Aljazeera/English)

The waves produced at this level serve against the wishes of the residents of that coastline. Our general understanding on factors of science are overshadowed by the occurrences of this nature, it furthers the ideas we had and at times demolishes the understanding we already had. In the case of the Japan quake, Hawaii felt the impact through a different result of the same initial happening.

The knowledge of most scholars and people in general is that, the magnitude of an earthquake would be a factor that influences the size and the effects of a tsunami. This has been corrected by science in which it is detailed that the occurrence of a quake will affect or cause a tsunami if only there is a major vertical change in the floor of a sea. This also depends on where this earthquake happens, e.g. an earthquake at Colorado River and the surrounding will not cause an earthquake, this is because the terrain of the adjacent land and the topography of the area would fill in the quake displacements and not causes a displacement at the sea floor.