OKUNOYE IBUKUNOLUWA OLUWABUSOLAMI

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INTERNATIONAL REALTIONS AND DIPLOMACY (SMS)

GST 118

HISTORY AND PHILOSOSPHY OF SCIENCE

ASSIGNMENT

In not more than 2 pages, do a review of Chapter 8 of Temidayo D. Oladipo and Noah O. Balogun, History and Philosophy of Science: A Brief Survey. Ibadan: Hope Publcations. Pages 86-95.

The Dark Ages was a period in history when religious beliefs reigned supreme. The Pope was the highest and final authority. Women and men were burned at stake if they were found guilty of sorcery and/or witchcraft by the church. The church also waged wars to exterminate the heathens. The intellectual community saw this as a threat to happiness and survival of humans. Consequently, they began to emphasize the benefits of using reason to arrive at justified conclusions, just like Plato, Aristotle and Socrates did in their time.

This was the beginning of positivism, which is the belief in the ability of science and/or the application of science to any issue. It came about because the success recorded in the natural sciences in the eighteenth and nineteenth century had a great effect on the social and intellectual life of the people. Hence, the people of Europe began to trust scientists’ opinions and seek it in matters far removed from science.

Positivism grew in the Renaissance and Enlightenment period. The period was named Renaissance because the people began a revolution to return to their Greek heritage of using reason, rather than religious dictates, to judge matters of public concern. In addition to positivism, Greek worldviews were hidden in the fabric of music and arts, making this period to become known as the classical period of Romanticism. Naturalism and Humanism emerged from Romanticism, and works of art and literature of this time were consequently called classics. Bertrand Russel identifies major differences between the modern and medieval period, noting that in the modern period, there was an evident diminishing of the authority of the church as well as the increasing authority of science. He further goes on to say that this separation from the church in the modern period promoted individualism, almost to the point of anarchy.

Positivism is a movement which rejects theoretical speculations not based on facts or experience as a means of obtaining knowledge. It is modelled on empirical sciences, and this is why it has a methodology. Positivism claims that all propositions that cannot be verified by experience, such as metaphysical statements are false. This view however, is somewhat problematic, because:

1. The observation upon which the basic justification of positivism came is laden with error.
2. There is also the fact that that observations are concept laden, hypothesis laden, theory laden, value laden, interest laden and laden with culture specific ontologies.

It is important to note that the scientific approach to issues grew out of a philosophical concern for these same issues. However, science was restricted to studying only natural phenomena, as they were only predictable objects of study. It was not until August Comte, a French social philosopher, began to use science to study other things apart from natural phenomena, that social sciences began. He opined that society behaves in a regular pattern much like natural phenomena, and this behavior can be studied and accurate predictions made. This marked the genesis of the study of social sciences.

Social science is an area of study dedicated to the explanation of human behavior and interaction, either as an individual, society, or collectively as a group, including norms and institutions created by such interactions. Disciplines in this field of study include economics, psychology, archaeology, political science, sociology and so on. This subject dates back to early philosophers, such as St. Augustine, 14th century philosophers: Karl Marx, John Locke, and so on, who wanted to study how society functioned. The father of social science however is August Comte. Social scientists seek to employ the scientific methods in the investigation of social phenomena, taking the human person as an object of study, with objectives such as

1. The understanding of humans in historical and cultural development as well as the context and factors responsible for such development or change.
2. The ability to predict human behavior based on the pattern of interaction, belief system, social norms and other factors influencing behavior, especially concerning economic and political activities.
3. The discovery and possible manipulation of laws governing most of human behavior.
4. The influencing and grooming of social behavior as well as the steering of it towards socially desirable conduct.
5. The advancing of the knowledge of characteristic temperaments associated behavior of a person or group, beyond merely armchair philosophy.

Philosophy of social science arose out of a curiosity to find out if the central focus of social science can actually be achieved, because man is a conscious being and so his actions can sometimes not be predicted. An essential function of scientific explanation is to provide a causal connection between an event and its cause. The principle of cause and effect states that for every event in the universe, there is a set of conditions such that if the conditions are all fulfilled, the event will invariably occur.

Ernest Nagel presented David Hume’s explanation of this concept in bullet points.

1. Cause and effect must have an invariable or constant relation such that whenever a cause occurs, the corresponding effect must occur.
2. Cause and effect must occur in approximately the same location or be related by a chain of events that are spatially linked.
3. Cause and effect must be temporally related such that cause must precede effect and effect must follow cause.
4. Cause and effect must have an asymmetrical relation; an occurrence of the cause must be an actual event, bringing about the effect and the effect must not be part of the original conditions necessary and sufficient for its own occurrence.

However, because of the human agents this concept sometimes deals with, it is now a complex matter as humans are sometimes very unpredictable. There is also the question, should reasons be defined as causes, are they the same? Some scholars, such as J.S Mill and Auguste Comte, believe that we should accept that reasons are not causes but motives or intent, and so they cannot replace causes. However, Robin Collingwood posits that reasons and causes are the same, naming reasons as the ultimate causal power of humans.

Another challenge in the study of social sciences is the fact of man’s rationality and freewill, as well as his emotions and desires, which make him difficult to predict. These make the methodology of science inapplicable. An example is the law of demand of supply, which sometimes is proved wrong by humans when they demand for certain goods at higher prices.