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COURSE TITLE: HISTORY AND PHILOSOPHY OF SCIENCE

A REVIEW OF ‘HISTORY AND PHILOSOPHY OF SCIENCE CHAPTER 8.

In the beginning of the chapter 8 of this book, it is rightly posited that natural science in the eighteenth and nineteenth century Europe was so successful that individuals trusted the opinions of scientists even on matters unrelated to science and this is as a result of the change in the socio-cultural milieu at the time; this is thus why the belief or application of science is referred to as positivism.

Furthermore, the socio-cultural milieu is called the *Renaissance* and the *Enlightenment period*. The name renaissance is thus given because it was a period when people started a revolution to return to their Greek heritage that involved using reason in matters instead of religious dictation which were so extreme to the point of one people being burned because the church found them guilty of witchcraft or sorcery. The enlightened community saw religious dictation as a major threat to human life so they infiltrated literature with the aim of using reasoning to reach justified conclusions. Greek world views were infused in arts and music which became known as the classical period of *Romanticism,* which gave rise to *Humanism* and *Naturalism.*

It is noted that scientific approach was restricted to natural phenomena as it was believed to be predictable and regular, until *‘*August Comte*’*  brought forth the opinion that society behaves in a regular pattern, much like material things, and this behavior can be studied and predicted ; This is the beginning of Social sciences, and this is why till date Comte is regarded as the father of sociology and social sciences. It is further made known that positivism rejects speculations that are not based on facts of experience to obtain knowledge. But positivism has it shortcomings, the first being the flaws of observation.

Social science is described as ‘An area of study dedicated to the explanation of human behavior, interactions, manifestations either as an individual in a society or collectively as a group; including the institution, norms and more such interactions’. The main objectives of the discipline listed in the book include ; understanding humans in a historical and cultural development context, being able to predict and influence human behavior. A problem with this discipline is the fact that human beings do not behave in the exact way objects in the natural sciences behave ; that is, there is an unsuitability in using the method of scientific enquiry for natural sciences to study human and his society. In the true sense, to understand this problem with social sciences, one needs to understand the principle of cause and effect, which is a scientific method or mean of getting a reasonable conclusion. According to Ernest Nigel, for anything to be the cause of another, the cause and effect must; A) Have an invariable or constant relation in the sense that whenever the alleged cause occurs, the effect must also occur. B)Be spatially contiguous , that is the events should be linked by either location or chain of events. C)Be temporally related such that the cause precedes the effect and the effect follows continuously from the cause. D) Have an asymmetrical relation , in that the occurrence of the alleged cause must be actual event which brings out the effect and the effect must not be necessary in the original conditions for its occurrence.

The idea of employing the scientific method of cause and effect in studying human behavior is adequately depicted as problematic; this is because the scientific method broadly separates the cause of a behavior and the reason for a behavior, which in a layman’s sense can be substituted for one another. A way given to solve this issue is to understand and accept that reasons are not causes but motive or intent. Another problem in social science is that scientific methods become inapplicable in social sciences because the subject matter of the study is man, a rational being with ideas and other sentient characteristics that determine his action and reactions, and these characteristics undermine the predictability of behavior with which natural science deduces their principles and laws. But then again, man is not always a rational being and also, some certain phenomena influences the behavior of man; so what happens to the principles and laws made from reasonable assumption of man? Can it still be required as a scientific law even if it is not absolute and indefinite? .