

POSITIVISM APPROACH

Meaning of Positivism

Philosophers do not agree upon what is meant by science and knowledge. This means that there are different views on the understanding of what science is. There are two traditional views: positivism and humanism. Positivism is a set of philosophical approaches that seeks to apply scientific principles and methods, drawn from the natural and hard sciences, to social phenomena in order to explain them. So in this way it is a logical system that bases knowledge on direct, systematic observation.

Positivism is a philosophical theory stating that certain ("positive") knowledge is based on natural phenomena and their properties and relations. Thus, information derived from sensory experience, interpreted through reason and logic, forms the exclusive source of all certain knowledge. Verified data (positive facts) received from the senses are known as empirical evidence; thus positivism is based on empiricism.

Positivism is a set of philosophical approaches that seeks to apply scientific principles and methods, drawn from the natural and hard sciences, to social phenomena in order to explain them. The term positivism designates the thought of the French philosopher Auguste Comte (1798–1857). Auguste Comte is widely acknowledged as the father of positivism. He argued that social research prior to the nineteenth century was speculative, emotive and romantic and as a result it lacked rigour and analytical reasoning. Unwin (1992) details that Comte used the term 'positive' to prioritize the actual, the certain, the exact, the useful, the organic, and the relative. In other words, he posited that it is more useful to concentrate on facts and truths – real, empirically observable phenomena and their interrelationships.

Comte argued that social research, until the nineteenth century, was speculative, emotive and romantic and that as a result it lacked rigour and analytical reasoning. Therefore Comte rejected metaphysical and normative questions as they could not be answered scientifically. Instead he posited to concentrate on facts and truths in order to explain and predict human behaviour. Positivism is characterized by the importance of observation, a belief in verification or falsification, the belief that causality is nothing more than repetition, a suspicion of non-observable theoretical entities, a unity of method and the ardent denial of metaphysics.

Positivism in Geography

In Geography, positivism was introduced in the 1950's. Before that time Geography had very much been a descriptive science but many argued geography should be more scientific and focus on finding laws to explain processes. The Quantitative revolution (1950's) changed Geography from an ideographic to a nomothetic science.

In the 1980's and 1990's positivist methodology received more and more criticism. Critics doubted the objectivity of positivism, they did not believe in the purely objective and neutral scientist. Positivism did not take agency and structure into consideration, it assumed social

systems were closed which is hardly ever the case, and many doubted whether the natural sciences approach was the appropriate methodology to study complex human relationships. Also, by limiting research to observable facts, positivism ignored a lot of geographical questions. Although there's criticism positivism stays strong within the field human geography today. Many geographers agree that geography is based on scientific principles and laws.

Types of Positivism

There are various forms of positivism. The two most discussed are *logical positivism* (based on verification) and *critical rationalism* (based on falsification). Logical positivism was further developed by the Vienna Circle in the 1920's. In 1930, a group of scientists, known as 'logical positivists', was founded in Vienna—also known as 'Vienna Circle'. They were against everything which could not be verified empirically and investigated by controlled methods. They saw Nazism as a mixture of irrational prejudices and ideological dogma. In their opinion social laws can be tested by doing measurements with large sample sizes and in this way laws can be verified. Critical rationalism was developed in response to logical positivism by Karl popper. In his opinion the truth of a law doesn't depend on the number of verifications but whether it can be falsified.

Essence/ Philosophy/Nature of Positivism

Positivism is also called empiricism. It is a philosophical viewpoint that limits knowledge to facts that can be observed and to the relationships between these facts. The proponents of positivism advocate that science can only concern itself with empirical questions. Empirical questions are questions about how things are in reality. In this context, reality is defined as the world which can be sensed. In empirical inquiry, it is assumed that facts 'speak for themselves'. It means science is concerned with objects in the world. The subject or subjects for which there is a world or worlds are excluded from the field of interest. Thus, what is not derived from the evidences of the senses is not knowledge. Reliable knowledge can only come from basic observations of actual conditions. To be scientific is to be objective, truthful and neutral. The positivists also gave emphasis on the unity of science.

Positivism is a philosophical movement, characterized by an emphasis on science and scientific method as the only source of knowledge (a sharp distinction between the realm of fact (data) and value (cultural), and a strong hostility towards religion and traditional philosophy, especially metaphysics.

Positivism also holds that society, like the physical world, operates according to general laws. In positivism, Introspective and intuitive knowledge is rejected, as are metaphysics and theology because metaphysical and theological claims cannot be verified by sense experience.

The essence of positivist philosophy is that ideally speaking science is value free, neutral, impartial and objective.

Scientific status is guaranteed by a common experience of reality, a common scientific language and method ensures that observations can be repeated. Since science has a unified method, there can only be one comprehensive science. In other words, the entire system of science grows under the principles of physics, chemistry, biology, psychology and social sciences which can be linked together logically.

Thus, positivism is a philosophy which is anti-idealism (a view that reality is mental or mind dependent). Positivists further stress that since we cannot investigate and test moral norms (e.g., values, beliefs, attitudes, prejudices, customs, traditions, taste, aesthetic values, etc.) we should keep away from normative questions. In other words, our tastes, traditions, likings, attitudes and aesthetic satisfactions cannot be justified scientifically. The essence of the positivist philosophy is that ideally speaking science is value-free, neutral, impartial, and objective. The followers of positivism regarded metaphysical (which lies outside our sense perceptions or is independent of them) questions also as unscientific.

In the most general terms, positivism determined the scientific status of its statements through:

(a) Empiricism:

The modern view of scientific method is that both experience and reason play an important role in science. Reason or imagination provides speculative hypothesis; experience helps to weed out those which are false. Their grounding in a direct, immediate and empirically accessible experience of the world which gave observation statements a peculiar privilege over theoretical ones, and which guaranteed their generality through :

(b) Unified Scientific Method:

A unitary scientific method, accepted and routinely drawn upon by the entire scientific community; this depended on:

(c) Formulation of Scientific Laws:

The formal construction of theories capable of empirical verification; their successful proof would serve to identify universal laws which had:

(d) Exclusion of Normative Questions:

A strictly technical function, in that they revealed the effectivity or even the necessity (but not the desirability) of specific conjunctions of events; thus value- judgements and ethical utterances (beliefs, values, customs, attitudes, prejudices, aesthetic values, etc.) were ruled out of the scientific court because they could not be empirically tested, and the statements which remained could be brought together by:

(e) Unification of Scientific Laws:

The progressive unification of scientific laws into a single and incontrovertible system.

The cumulative effect of these five claims was to move from the immediate through the unitary to the universal: to close the system around a particular version of the present and to refuse admission to alternative ways of being in and acting on the world.

Philosophers, like other scientists, should not concern themselves with such speculative methods but should study what they could of grasp material objects and given circumstances. This approach was to be recommended as positive approach. The positivist movement broke a range of taboos and religious beliefs against empirical investigations.

As stated above, the followers of positivism believed that alongside the natural sciences there should also be a science of social relationships (sociology) to be developed on the same principles. As natural sciences discovered the laws of nature, so scientific investigations of communities would discover the laws of society. Comte averred that social development took place in three stages: (i) theological, when man explains everything as God's will; (ii) metaphysical; and (iii) positive, when causal connections are discovered between empirically observed phenomena.

One of the main characteristics of positivists is that they are anti-authoritarian. Positivism suggested that we could not accept authority simply because it was authority, but only give credence to things for which there was scientific evidence. This empirical research led positivists into confrontation with dictatorial regimes.

Criticism to Positivism

Positivist work in human geography has been criticized by realists, and Marxists, because it seeks 'laws' of the superstructure which are unrelated to the processes in the infrastructure, and which in any case cannot exist because of the change that is inherent in the infrastructure.

The assertion of the positivists that value-free, objective research is possible, has been vehemently criticized by the proponents of humanistic approaches, especially by the idealist structuralists, existentialists, Marxists behaviouralists, and phenomenologists. The positivistic laws, mathematization and value-free analysis are difficult to achieve.

According to the positivists, there are technical solutions of all problems and value-free research is possible. In practice, it has been observed that subjective elements enter at many stages of the research process, especially at the stage when researchers choose their research topic from the many available.

We can, for example, guess that a researcher, starting from his own well-established and strong opinion as to what the distribution of world's food supply should be, will choose to investigate the empirical question as to how the food supply is actually distributed. Even if the research worker does not deliberately consider what the distribution should be, it would be difficult for him wholly to exclude his own view at the stage of problem formulation and

the interpretation of results. Once the findings are available, the description of existing distribution will influence the view of many decision-makers, as to what the distribution should be. In this way, it can be said that scientific activity in itself shapes reality and thus it is no longer a passive observer.

The positivists' assertion about the unity of science has also been criticized. So far, social scientists have not been able to develop the ideal of unified science. Each discipline (sociology, psychology, economics, political science, geography) has its own approach to the analysis of the world. They express the reality according to their cognitions and methodologies.

A serious criticism of positivism lies in the fact that natural and social sciences are not and cannot be of the identical nature from the experimental point of view. The same methods, however, cannot be applied in social sciences. In social sciences scientists deal with man who cannot be taken as a 'thing' because he has brain and possesses thinking process. In fact, we cannot consider human behaviour the same way as animal behaviour, because men have intentions, imaginations, beliefs which cannot be translated into 'thing' language of the natural sciences. Thus, the element of subjectivity is a must in the study of normative things with a view to make social laws.