

POSITIVISM: An approach to Human Geography

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 logical system that bases

knowledge on
direct, systematic
observation.

The term
positivism
designates the
thought of the
French philosopher
Auguste Comte
(1798–1857).

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.

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.

Positivism within geography can be described as the use of modern scientific method.

Although undoubtedly more influential within physical geography, this has had a significant impact within human geography as well. Quantitative methods are used to collect data.

Researchers use law like statements and verify their statement through empirical observation, the way it is done in the natural, 'hard' sciences.

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.

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 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. Karl Popper, proposed that the criteria for validity in science should not be that there are examples which prove it, but that there could be those which would disprove it. In other words, the strength of a theory is not

that it is sufficiently general that it appears to explain, but that it is sufficiently narrow and focused that if a prediction proved untrue the theory would be exposed. This is the criterion of falsifiability. For Popper, and others, this meant that the explanatory claims of much social science were not

scientific at all. In social science and human geography more specifically, this led to the development of a number of quantitative and statistical techniques. The aim was to ground geography as a spatial science, with the removal of value judgments and the utilization of scientific methods. This is

sometimes known as the quantitative revolution in geography. David Harvey's 1969 book *Explanation in Geography* was a key text in this field, but it also extends to some forms of cartography and locational analysis. It also provides much of the conceptual foundation to the claims of

Geographic Information Systems (GISs), which in practice is strongly associated with Empiricism.

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

(Kitchen, 2003).