

Level	Undergraduate (CBCS)
Subject Name	Sociology
Paper Name	Introductory Sociology I (CC1/GE1)
Sub topic	Sociology: Discipline and Perspective
Module	Sociology as science
Pre requisites	Background knowledge about the scope of sociology and scientific methods to gather knowledge.
Objectives	This module describes two opposite opinions about the way of studying human society and tries to make balance between the opinions.
Key words	Positivist, interpretive, postmodernist, human behaviour, natural law, objectivity, subjectivity

Introduction.....	1-2
Learning outcome.....	2
Positivist approach.....	2-6
Interpretive approach.....	6-7
Conclusion.....	7-8
Self-check exercise.....	8
References.....	8-9

1. Introduction

This module describes two contrasting opinions on studying human society and tries to make balance between the opinions. There is a prominent argument about the nature of Sociology. The issue of argument is “is sociology a science or not a science”? Sociologists are divided between themselves into two opposite groups. Therefore, we find two different groups with different opinions about the nature of Sociology. One group of Sociologists said Sociology is a science because Sociology adopts and applies the scientific method to study. Sociologists like Auguste Comte, Emile Durkheim and others support this view. The other group said Sociology is not a science, sociology can be studied through interpretation. Main supporters of the second group are Max Weber, George Simmel.

To form our opinion regarding this we need to know the scope of sociology and elements of scientific method.

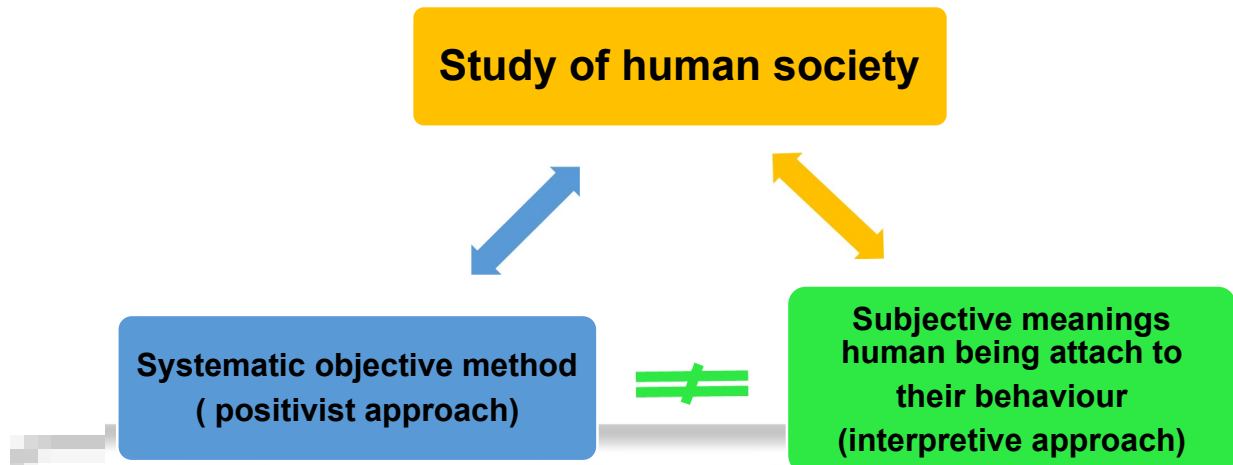
Sociology means the study of human society. And Science is systematic knowledge based on reason and evidence. Science gathers facts and links them together in their causal sequence to draw valid inferences. Scientific methods include observation, experimentation etc.to gather knowledge.

The main question is, how is the study of human society conducted?

Is it through the application of systematic objective methods of research?

Or

Is through the search for subjective meanings human being attach to their behaviour?



The debate is continuing. Both groups have their rationale behind their thinking. So, the ultimate answer depends on the perspective or values of the particular sociologists.

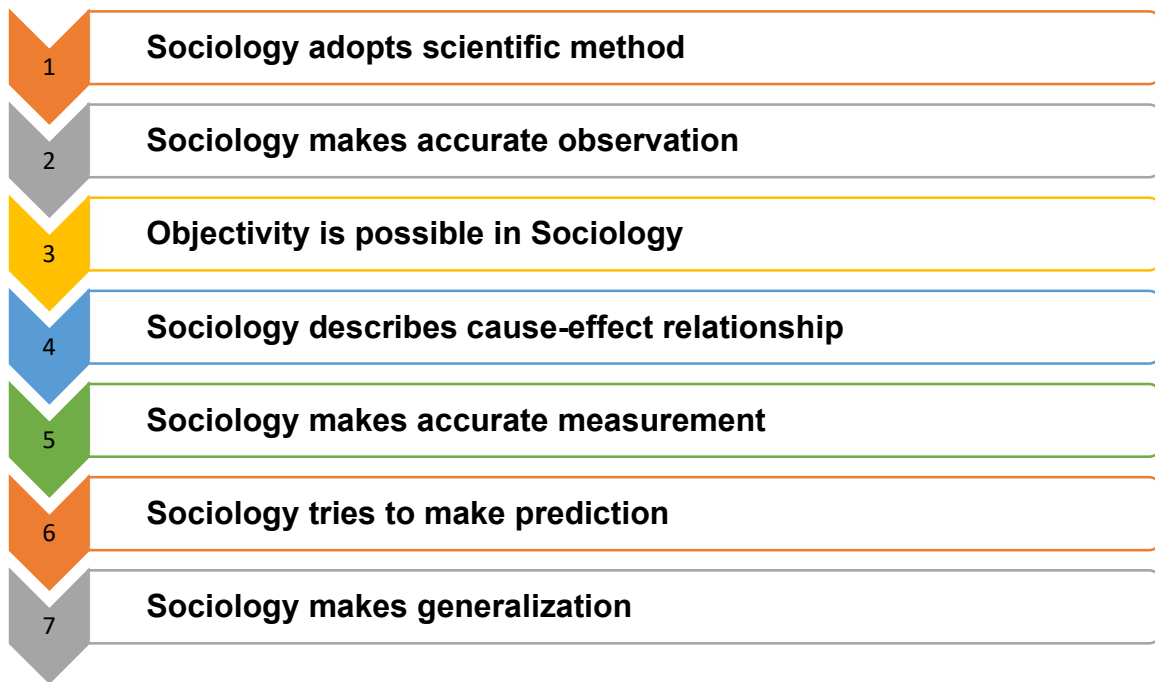
2. Learning Objective

After studying this module, readers will be able to know the rationale behind perceiving sociology as science and not science. You will be able to have a clear idea about different eminent sociologist's views on this. Above all you will be able to develop your own perspective to support a particular approach in your social research.

3. Positivist approach

Some sociologists believe that human behaviour can be observed scientifically. Since scientific methods of research help to establish law or pattern of behaviour, with the application of scientific method laws of human behaviour can be formulated which can be used to explain how human society can function. This is the rationale behind the use of scientific methods in sociological study.

Sociology is a science due to the following reasons:



<https://www.yourarticlelibrary.com/sociology/sociology-is-sociology-a-branch-of-science-answered/6252> (Key points taken)

(1) Sociology adopts scientific method:

Sociology studies social events by adopting scientific methods. Though we cannot do experiments with human-being in a laboratory, human’s social behaviour is subject to scientific investigation like a natural phenomenon. It applies scientific methods as case study, interview, sociometry scales, and questionnaires which are exercised to quantitatively measure social phenomenon.

(2) Sociology makes accurate observation:

Observation can be feasible in the study of sociology even if it does not have its own research laboratory. But accurate observation can be performed outside the laboratory. The total society is the laboratory of sociology. Even Newton did not discover his laws inside a laboratory. Sociology makes observations of the recruitment process at the time of occurrence. Although Sociology does not possess a laboratory still it makes accurate observations. Hence Sociology is a science. Besides, laboratory experiments are not the only criteria of science.

(3) Objectivity is possible in Sociology:

Like natural sciences, Sociology also makes objective study. The statement that unemployment is a social evil is an objective statement which is based on facts collected by sociologists. Further surveys and revivification prove that sociology may perform objective study of social phenomena. Novel procedures and methods are also introduced to make social phenomena more objective. Hence Sociology is a science.

(4) Sociology describes cause-effect relationship:

Like natural sciences, Sociology also traces the cause and finds the answers. While studying employment situation growth, Sociology has traced the relationship between education and poverty. Unemployment is the cause of poverty. Thus, sociology describes cause-effect relationships in unemployment and poverty. Hence sociology is a science.

(5) Sociology makes accurate measurement:

Sociology, like other natural sciences, also accurately measures social phenomena or relationships. By using statistical methods, socio-metric scale, scales of measurement sociology effectively and accurately measure social relationships. Hence Sociology is a science.

(6) Sociology tries to make prediction:

We can witness the advent of an era of a paradigm shift from correlation and causality to social prediction (Chen et al.,2021). “With the development of computer algorithms for specific data (Athey, 2018), social scientists have been able to process large-scale social data, highlighting the academic value of social prediction (Hofman et al. 2017)”(Chen et al.,2021 pp.2-3,). Although Kaplan (1940) realised the difficulty of prediction, he believed that social behaviour was even more predictable than natural phenomena at the microlevel. Cuvier opines this predictive value of Sociology is improving day by day. As Sociology grows up gradually it foresee more accurately.

(7) Sociology makes generalisation:

The notion that generalisations drawn by social sciences are not universal is proved to be wrong. Like natural sciences Sociology became able to draw generalisations which are universally applicable. The concept of skill directly related to proper education and proper employment is a universal truth.

Sociologists who have a positivist approach support this. They believe that it is possible to establish **objective facts** through **scientific research methods** and the thorough collection and analysis of **empirical evidence**. They argue that social research can follow the steps of scientific method as follows:

Inductive research Approach



Exact Observation



Blue print Identification



Emerging a hypothesis or initial conclusion

Followed by

Deductive research approach



<https://www.scribbr.com/methodology/inductive-deductive-reasoning/>

Classic sociologists Comte, Durkheim are positivists who think sociology can be studied with scientific methods.

Auguste Comte developed positivism theory in the 19th century. He perceived that to understand and to improve society we need to apply investigation and analysis using methods of natural science. He thought sociology is also a natural science and the queen of sciences and needed it to be such in their quest to discover the absolute truth of natural laws that govern human society.

Durkheim said that sociology is the study of social facts which can be realised through scientific observations and comparisons. Durkheim studied the social fact “suicide” as natural scientist. Durkheim tested his hypothesis against a range of “variables” (e.g., religious belief) to understand the effects of these social aspects had on suicide rates.

Other positivists also criticised Durkheim's study on suicide regarding the reliability of his data and the application of scientific method. Some key concepts in the study (social cohesion, social control etc.) are very difficult to operationalise. Such concepts are almost impossible to be turned into quantitative data and yet any other measurement will be unscientific.

However, all sociologists did not agree that positivist methods lead to the discovery of absolute truth. Although sociology can apply scientific methods, the result yielded will not necessarily lead to the discovery of universal laws of behaviour. Karl Popper reasoned that positivist sociologists actually failed to be scientific because it used inductive reasoning instead of deductive reasoning. It can be said that they are not trying to falsify their hypothesis rather they are trying to find data to refute it.

Other positivists like Keat and Urri countered Popper's argument by highlighting that there are many overlaps between the natural sciences and sociology.

According to Lynch sociology can be science by concluding from research that scientists make assumptions when there are ambiguities in their results. Therefore, sociology can be a science when it uses scientific methods of the research and the fact of making assumptions during the course of sociological analysis is also scientific.

Tomas Kuhn asserts that scientific research is not engaged in the objective search of knowledge rather their knowledge located within a framework of perspectives which seeks to explain social life. Consequently, to Kuhn, sociology is a science.

Positivists see little difference between natural science research and sociological investigation. Both have a rival standpoint and make assumptions when there are doubts. It is difficult to state with absolute certainty that the use of scientific methods in the study of human society will yield accurate information. Not all aspects of human society can be studied through the use of scientific methods.

4. Interpretive approach

Interpretivists argue that the study of human society must go beyond empirical and supposedly objective evidence to include subjective perspectives, opinions, emotions, values, things that cannot be directly observed and quantified. These social phenomena require explanation. Most interpretivists would also suggest that research cannot truly establish social facts, that society is all subjective values and cannot be explained and understood by scientific means.

Hence, they conclude not only that sociology is not a science, but also that it should not try to be one. Humans are not like chemicals or components, about which theories can be developed and confirmed. Each human is exclusive and has the capacity to make his or her own decisions.

When sociologists try to make sociology scientific, positivists escape reality rather than exploring it. With effort to make everything measurable and reliable, they stopped it from being real. Human feelings and meaning of social action can not be counted in percentage. This debate, then, needs to be as core of the discussion about the merits and demerits of the research methods.

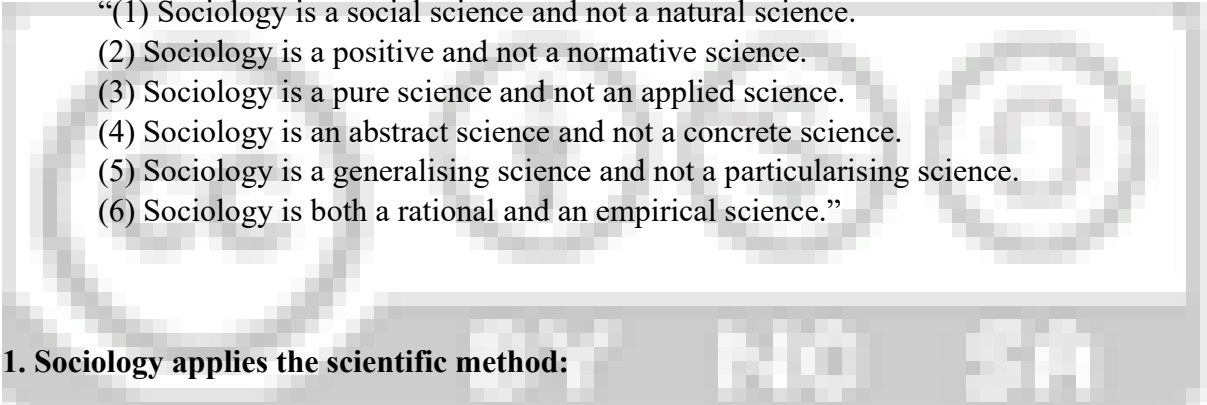
Postmodernists argue that sociology cannot and should not attempt to be scientific; Theories that claim to be scientific metaphors: just big tales, with no real validity. However, as we have seen, they do not limit this analysis to sociology.

The problem is that if sociology should not be a science: then, what is it? How useful is sociology if it focuses on subjective perspectives, interactions, meanings and events? Research results may be interesting, but does it constitute a serious study topic? Ultimately, telling the inside story of a violent gang or a group of housewives is useless unless it can be used to develop general theory.

Weber, seen as the founder of the social action approach, nevertheless said that sociologists should approach their studies in a completely objective way, although they should be interested in the subjective views of the people they study.

5. Conclusion

Eminent Sociologist Robert Bierstadt (1963) in his book “The social order: An Introduction to Sociology” unambiguously explain the character of Sociology in the below mentioned way:

- 
- “(1) Sociology is a social science and not a natural science.
 - (2) Sociology is a positive and not a normative science.
 - (3) Sociology is a pure science and not an applied science.
 - (4) Sociology is an abstract science and not a concrete science.
 - (5) Sociology is a generalising science and not a particularising science.
 - (6) Sociology is both a rational and an empirical science.”

1. Sociology applies the scientific method:

Sociology uses the scientific method in the study of its subject matter. The techniques and methods used by sociologists may differ from those of the physical sciences, but they adopt the same scientific method to systematize knowledge. In case of hypothesis testing and generalization of study, data, classification and tabulation etc. different steps of scientific method are used in sociology.

2. Sociology is factual:

In sociological research social relations and activities have a common problem in the description of social processes. Thus, sociology is the scientific study of facts and the general principles associated with them. Comte described this as social physics.

3. Principles of Sociology are Universal:

The principles of sociology are always and everywhere proven true. Unless conditions vary, the policy remains without exception. For example, the principle that unemployment and lack of education depend on each other is true at all times and everywhere.

4. Sociological principles are verifiable:

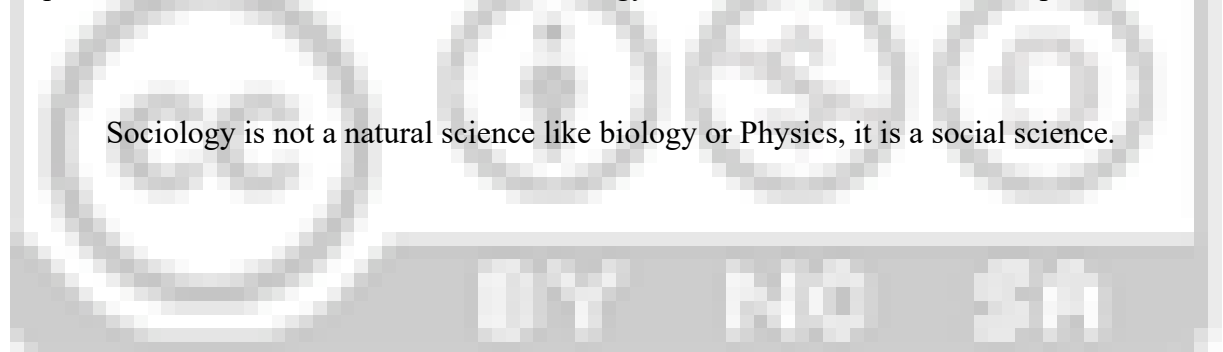
Sociology can be verified at any time. For example, we conclude that lack of proper education is the cause of unemployment among people. Now this statement will be considered a scientific fact only when we can verify from our own observation that the proportion of unemployment among the uneducated is higher than that of the properly educated.

5. Sociology describes causality:

Sociology has discovered cause effect relationships between social phenomena. As an example, it can be considered as a rule that lack of skill development accelerates unemployment growth. In this case lack of skill development is a cause and unemployment is one of its effects. Similarly, unemployment can lead to poverty among people.

6. Sociology can predict:

On the basis of cause-and-effect relationships **sociology** makes predictions about social relationships, activities, events, etc. If Industry 4.0 exists now, appropriate Education 4.0 is needed to develop appropriate skills, which can predict the nature of future work and the skills required in the workforce of the future. Sociology makes laws and tries to make predictions.



Self-check exercise:

Long question:

1. Evaluate the view that sociology is a science. (15 marks)

Short questions:

2. Justify the view that sociology can not be value free (5)
3. Enumerate two criticisms of the view that sociology is a science (5)

References

Athey, S. (2015). Machine Learning and Causal Inference for Policy Evaluation. Paper Published at Proceedings of the 21th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, 10–13 August, Sydney, NSW, Australia. <https://doi.org/10.1145/2783258.2785466>.

Bierstadt, R. (1963). *The Social Order: An introduction to Sociology* [E-book]. McGraw-Hill.

Chen, Y., Wu, X., Hu, A. et al. (2021). Social prediction: a new research paradigm based on machine learning. *Journal of Chinese Sociology*. 8(15). pp. 1-21. <https://doi.org/10.1186/s40711-021-00152-z>

Comte, A., & Bridges, J. H. (2018). *A General View of Positivism* [E-book]. Franklin Classics Trade Pres.

Durkheim, E. (1982). *Rules of Sociological Method* (2nd printing ed.) [E-book]. Free Press.

Hofman, J.M., A. Sharma, and D.J. Watts. (2017). Prediction and Explanation in Social Systems. *Science* 355(6324): pp. 486–488.

Kaplan, O. (1940). Prediction in the Social Sciences. *Philosophy of Science* 7(4): pp. 492–498.

Kuhn, Thomas. (1962). *The Structure of Scientific Revolutions*, University of Chicago Press,.

Popper, K. R. (2014). *The Logic of Scientific Discovery* [E-book]. Martino Fine Books.

Weber, M., & Sica, A. (2011). *Methodology of Social Sciences* (1st ed.) [E-book]. Routledge.

Website:

<https://www.scribbr.com/methodology/inductive-deductive-reasoning/>

<https://www.yourarticlelibrary.com/sociology/sociology-is-sociology-a-branch-of-science-answered/6252>

Content Writer	Dr. Mahua Patra	Assistant Professor, Department of Sociology, Maulana Azad college, Kolkata Email: mahua.patra@maulanaazadcollegekolkata.ac.in Ph. M +91 9007917416
-----------------------	-----------------	---

Mahua Patra