

# The Status of Sociology as a Science: Problems and Prospects

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## Abstract

This paper attempts to draw the picture of the status of Sociology as a science. It is also intended to throw light on the problems and prospects of this discipline as a science as there is a great controversy among the thinkers as to the status of it. Even, those who are sociologists have confusion about this issue for a long time. Maybe this has divided the sociologists into three main groups. As a result, three views and approaches to this issue are available. For one group, sociology is a science and it is almost similar to natural sciences. Another group thinks that sociology is not a science at all. Again, there are some sociologists who hold different view and opine that it is a science which does not mean that it can be treated as the natural science. Hence, an attempt has been made in this paper to find out the scientific status of Sociology as a separate branch of knowledge. Required and relevant data have been collected from the secondary sources. The article may give some necessary directions for academic benefits. As a contribution to knowledge, it may focus on micro level investigation to understand the problems and prospects of Sociology as a science. Besides, it has dealt with a study of scientific status of this subject. So, the outcome of the study may also advocate the learners of sociology understanding the real identity of it as a pure science.

## I. INTRODUCTION

There are several views regarding the status of sociology— whether it is science or not. There are three different groups of three different opinions. For one group of Sociologists sociology is a science because Sociology adopts and applies the scientific method. Founding fathers of sociology— Auguste Comte, Emile Durkheim, Karl Marks— and others subscribe to this view. Durkheim saw sociology as the study of social facts [1]. Sociologists, he said, should study social facts in as much the same way that chemists study chemical facts and biologists study biological facts. For Durkheim, the goal of sociology was to discover the laws that govern social behavior—just as Newton had discovered the laws that govern planetary behavior[2]. The pioneer English

sociologist Herbert Spencer believed that society was governed by laws in much the same way that the physical world was[3]. Others hold different views and opine that Sociology is a science but the subject matter of Sociology differs from that of the natural sciences. According to German Sociologist Max-Weber, following the natural sciences model would leave sociological work incomplete [4]. He thinks that human beings have important qualities that set them apart from the objects of the investigation of the natural sciences. Thus, said Weber, sociology must go beyond the natural science model and be an interpretative science[5]. In this respect Yogesh Kumar Singh points out that sociological research is not as exact as research in physical science. No two human beings have ever been found to be alike[6]. Giddens thinks, studying human beings, however, is different from observing events in the physical world and sociology should not be seen directly like a natural science[7]. Kuhn mentions two kinds of sciences: normal and extraordinary sciences. He thinks, disciplines like sociology did not have a well established set of theories or a proper methodology like the natural sciences so as to be called a normal science[8]. Again there is another group who argue that an objective science of society is not possible maintaining that sociology can never be free from ideology. An increasing number of sociologists argue that a value-free science of society is not possible. They argue that the various theories of society are based, at least, on value judgments and ideological positions[9].

## II. OBJECTIVES OF STUDY

As objectives, a research summarizes what is to be achieved by the study. These should be closely related to the research problem. It must be interrelated, brief and realistic rather than vague and highly ambitious. Here it should be mentioned that “the sole purpose of the science is to understand the world in which man lives.”[10] Again, Sociology studies society where man lives. So, the purpose of science and sociology are the same in this sense. Considering this spirit, the main objective of the study has been set to clarify the status of sociology as a science and the specific objectives of the study have also been fixed to find out its problems and prospects.

### III. METHODOLOGY

Methodology means a general orientation about how research is done.[11] This study is basically based on the review of primary and secondary literature including books, articles from journals, research reports, theses, seminar papers, workshop handouts, conference proceedings etc. on science, sociology, and the relationship between these two. That is, secondary sources have been used as a method of data collection. As secondary data means, the use of data or records that has already been collected[12]. The study broadly used these types of data.

### IV. RESULTS AND DISCUSSION

Before going to the discussion it is better to mention here that the sociologists agree with disagreement. Besides, the sociological terms and concepts are also self explanatory and dubious in nature. So, it is very difficult to establish an opinion on a single thinking. From this spirit it may be easy to discuss this thing from the view points of various sociologists. For the easiness of discussion, the meaning of science can be discussed first.

### V. MEANING OF SCIENCE

At the outset of the discussion of the meaning of science, it can be said that there is no agreed upon definition of science, nor should there be! Generally science refers to a body of systematic knowledge. It is based on reason and evidence. Science collects facts and links them together in their casual sequence to draw valid inferences. It adopts scientific method. Haray likens the view of science as a 'God-Trick' because it proposes to see everything from nowhere, as value free and omnipresent[13]. Scientific knowledge is acquired through observation, experimentation, generalization etc. Science has the following characteristics such as objectivity, observation, accurate prediction, experimentation, accurate measurement, generalization and cause-effect relationships. The ethics of science is "it is better to know than not to know." [14] As sociology tries to know about the social facts in society, it is undoubtedly a science. Another ethics of science is "knowledge is superior to ignorance." [15] It is also defined as a systematic body of knowledge and it must possess following characteristics. (i) Science employs scientific method and social institution; (ii) It is the study of facts; (iii) Scientific principles are universal; (iv) Science discovers the cause-effect relationships in its subject matter and provides valid laws; (v) Scientific laws can be verified and examined at any time and it proves true at all places; (vi) Science can make predictions on the basis of universal and valid laws relating to cause-effect relationships. These are the characteristics or preconditions, on the basis of which a branch of knowledge can be called a science.

### VI. THE CERTAIN PROBLEMS CHALLENGING THE SCIENTIFIC STATUS OF SOCIOLOGY

In sociological research there are some problems which weaken its status as science. These are

#### A. *The Problem of Objectivity*

The objection which is raised to question the claim of sociology being called a science is that an unbiased and objective study cannot be made in sociology. When a phenomenon is observed in its true form without being affected by researcher's own views it may be termed as objective observation. Objectivity should ensure that "the conclusions arrived at the result of inquiry and investigation is independent of the race, color, creed, occupation, nationality, religion, moral preferences, and political predisposition of the investigator." [16] It is argued that objectivity is more difficult to be achieved in case of sociology. A sociologist cannot maintain complete objectivity with the objects of his experiment as a physicist does. Man has his own prejudice and bias. It is very difficult that sociologists may visualize abstract and subjective things like custom, attitude etc. in the same manner. The above argument is not without counter criticism. A closer examination reveals that neither does science possess the degree of objectivity which people imagine it does, nor does sociology lack completely an element of objectivity. Psychological research has proved that the manner in which we perceive the knowledge of physical and social phenomena is the same. Thus, the argument of subjectivity due to perception does not hold good. A scientific study requires researcher to take a detached, impersonal and unprejudiced view of the phenomenon being studied, describing what is and not what ought to be. Sociologists are accused of being subjective in their research, seeing what they want to see, expect to see and are conditioned to see. Sociologists, like other social scientists, allow their perceptions to be distorted by cultural and personal biases. Objectivity attempts to undo such distortions— a task difficult to achieve while dealing with human beings. It is claimed that an unbiased and objective study cannot be made in sociology, and hence, free sociology is not possible. Because sociologists are part of the social world they study, being value-free in conducting social research is difficult. Sociologists claim that these biases and subjectivity can be minimized by the practice of new methods of scientific research.

#### B. *The Problem of Accuracy and Reliability*

Since the entire world and its people are subject of sociological research, it is argued that such research cannot be totally accurate or reliable. Responses differ from person to person, from place to place and from time to time. Response of an individual may also differ over a period of time or at different intervals. Therefore, reliability and accuracy of sociological studies comes under scrutiny.

### **C. The Problem of Predictability**

Human behavior is too complex to allow sociologists to predict precisely any individual's action. Each individual in the society has his own individualistic approach towards society, which is spontaneous and can be impulsive. This human character or nature makes it difficult for sociologists to predict future responses.

### **D. The Lack of Laboratory Research**

Sociological studies suffer from complete lack of laboratory research. The laboratory method is only one general procedure of accurate observation. Besides the whole social setting is the laboratory of the sociologists. They study on various aspects of people in society. So, laboratory research like natural sciences is difficult in sociology. The physical sciences can have laboratory tests under specified conditions. In this regard, sociology completely lacks such facility. We cannot put human beings to laboratory tests. Society is so complex and variable that it is not possible to separate and analyze its different elements as it is possible in case of physical sciences.

### **E. The Problem of ex-activity**

Sociology cannot be called a real science because various reasons are responsible for this. Firstly, its laws and conclusions cannot be expressed in precise terms. Secondly, its findings are often limited in time and space, owing to the fact that social phenomenon is too vast and human motivations are too complex.

### **F. The lack of Experimentation:**

The term science as used for physical sciences includes the twin processes of experiment and prediction. But it is argued that the universally accepted scientific method of observation and experiment cannot be applied in the study of society. It does not possess the instruments like the microscope and the thermometer to measure human behavior. This argument, though correct, cannot debar sociology from being called a science or being dealt through scientific methods. Some of the physical sciences too like astronomy cannot be put to laboratory test, but nobody can deny that it is a science. As science grows, it is not unlikely that a larger number of social problems may be decided by laboratory tests. According to Karl Pearson, "The man who classifies facts of any kind whatever, who sees their mutual relation and describes their sequences, is applying the scientific method and is a man of science. When every fact has been examined, classified and coordinated with the rest, then the mission of science is completed".

### **G. The Lack of Measurement**

It is further argued that sociology is not a science because it cannot measure its subject matter.

In physics or chemistry the subject matter is exhaustively measured by instruments. Sociology does not possess instruments to measure urbanization, cultural assimilation quantitatively. On the basis of above argument it can be said that sociology is not a science. It can be stated that qualitative and quantitative measurements are only different stages in the growth of science. In the beginning most of the sciences are qualitative in nature, but as they gradually develop and become more refined, devices to measure them are adopted. In sociology we notice this kind of tendency. More and more emphasis is being laid upon the use of statistical method and quantitative measures, and various kinds of rating, ranking and scaling techniques have been evolved for this purpose.

### **H. The Problem of Unpredictability**

It has been pointed out that one of the characteristics of science is its predictability. In case of physical sciences a remarkable degree of predictability has been achieved. But it is not so in case of social phenomena. Social behavior is sufficiently irregular and unpredictable. Hence, sociology cannot make predictions. The argument too is partly correct. It is true that behavior of any individual cannot be predicted but behavior of the whole group can certainly be predicted with sufficient accuracy. According to Lundberg, "Apparent unpredictability of group behavior is due to present limited knowledge of the nature of stimuli and responses operative in such groups. As our knowledge of social phenomena increases and we are able to judge the effect of various variables involved, it will be possible for us to predict social events with much greater accuracy". The capacity of sociology to make predictions is constantly increasing.

### **I. The Problem of Generalization:**

Sociologists have not been successful in arriving at law like generalization through their studies. The reason for this failure lies in the very nature of the subject matter of the sociology. Human behavior does not follow recurrent patterns like physical objects. The positivistic program advocated by Comte aimed at removing sociology from the realm of speculation and establishing it as an objective of research science. The argument against the scientific character of sociology is that sociologists have not yet produced anything resembling a natural law. The two virtues of natural laws are precision and generality of scope. The sociological laws lack these virtues. However, one cannot deny the possibility of constructing general laws from the causal connections and empirical correlations which sociologists have established. Max Weber's analysis of the relations between Protestantism and the rise of Capitalism established a causal connection. There are other social phenomena, as Bottomore suggests, "for which rates can be calculated (homicide and other types of crime), and which might also be related in various ways to the

degree of group integration.” In this way a more general law may be constructed” covering social integration of which suicide rates would be one instance”. Sociology tries to deduce general laws from a systematic study of its material. It is true that sociology is a science ‘sui generis’. It cannot be an exact science like physics, chemistry etc. Sociology is a social science and not a natural science. It can claim to be called a science because it employs scientific method. In sociology nothing is assumed, and nothing is taken for granted. Research, enquiry and observation are fully drawn upon. Over the time more sophisticated methods have come to be developed and followed.

**J. The problem of terminology:**

Sociology also suffers from exact and clear terminology in the sense that same words convey different meanings to different persons. It has not developed an adequate set of scientific terms.

**VII. THE CERTAIN PROSPECTS PROVE THE SCIENTIFIC STATUS OF SOCIOLOGY**

There are some strong characteristics of sociology which give its position as a science. To put it another ways, the role played by the sociologists are like the other sciences. These are

**A. Sociology employs scientific method:**

The scientific method is a procedure used in seeking knowledge on the basis of certain assumptions. Karl Pearson mentions in his *Grammar of Science* that “the unity of all science consists alone in its method, not its material”[17]. All the methods used in sociology are scientific in nature. Sociology makes use of scientific methods in the study of its subject matter. Sociology employs techniques which apply quantitative measurements to social phenomenon. So, these techniques are comparable to the methods of experimentation. The techniques and methodology used by sociologists may differ from those of physical sciences, but they adopt the same scientific methods to systematize knowledge. There are several steps in scientific method in sociology such as formulation of problem of study, collection of data, classification and tabulation of data, testing of hypothesis and generalization etc.

**B. The Principles of Sociology are Verifiable:**

The laws of sociology can be verified at any time. For example, the statement “we arrive at the conclusion that illiteracy is the cause of criminality among the people” would be regarded as a scientific fact only when we can verify from our own observation that the number of criminals among the literate is smaller than that among the illiterate.

**C. Sociology delineates cause-effect relationships:**

Sociology has discovered a cause-effect relation between the social phenomena. To take an

example, one can consider the law that the increase in the number of divorce indicates acceleration of family disorganization. In this case, divorce is a cause and family disorganization is one of its effects. Similarly, illiteracy may be a cause of criminality among the people.

**D. Sociology can make predictions:**

On the basis of cause-effect relationships sociology can anticipate the future and make predictions concerning social relationships, activities, incidents etc. If disorganization in the families becomes definite, it can make predictions concerning the number of divorce, illicit relationships and many other things. Sociology frames laws and attempts to predict it.

**E. Sociology makes accurate observation:**

Observation is possible in the field of sociology even if it does not possess a laboratory. Accurate observation is also possible outside the laboratory. The whole social world is the laboratory of sociology. Newton did not invent the laws of gravity inside a laboratory. Sociology makes observation of tribal marriage at the time of occurrence. Even if Sociology does not possess a laboratory still it can make accurate observation. As a matter of fact, laboratory experiment is not the only criteria of science. Hence Sociology is a science.

**F. Objectivity is possible in sociology:**

Like natural sciences Sociology also makes objective study. The statement that dowry is a social evil is an objective statement which is based on facts collected by sociologists. Further Survey and revivification proves this. Sociology can also make objective study of social phenomena. New techniques and methods are also introduced to make social phenomena more objective. Hence Sociology is a science.

**G. Sociology makes accurate measurement:**

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

**VIII. THE MAIN CHARACTERISTICS OF SOCIOLOGY AS A SCIENCE**

Sociology is one of the several social sciences. Each of the sciences represents a particular way of looking at a common subject matter-human behavior. But famous sociologist Robert Bierstedt in his book *The Social Order* clearly explains the nature of sociology in the following way: (1) Sociology is a social 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 generalizing science and not a particularizing science. (6) Sociology is both a rational and an empirical science. Comte, the father of sociology, called sociology the 'queen of sciences'. Since then many sociologists have come to view sociology in terms of natural sciences. The most eminent among them are Durkheim and Radcliffe-Brown. This view has been opposed by those philosophers and theorists who think that sociology is not a science. It is more like history or philosophy. There are no hard and first boundary lines between the social sciences since each of these perspectives has implications for each of them. Still, it is useful at the outset to have a survey of the characteristics of sociology to distinguish its particular perspective from those of other social sciences. The following are the main characteristics of sociology as a science:

**1. Sociology:** a generalizing science: Sociology is a generalizing sciences and not a particularizing science. It aims to establish general laws of principles about interactions and associations. It seeks to find general principles about the nature, form, content and structure of human groups and societies. Like history, it does not attempt to make a description of particular events or particular societies. History is the study of human behavior from particularizing perspective. But sociology is generalizing in its perspective. Whereas history is concerned with particular wars and revolutions, sociology is concerned with war and revolution in general as social phenomena, as forms of social conflict and not with their particular and concrete manifestations.

**2. Sociology:** a generalized science: Sociology is a general science. It is not a specialized science like history, political science and economics. These social sciences have specialized subject matters and these are all parts of one general subject matter: Man's social behavior, which sociology studies. Only certain kinds of behavior engage their attention. The economist, for example, is interested in one kind of behavior: economic behavior. The political scientist likewise is concerned with political behavior. In contrast to these specialized sciences, the generalized sciences like sociology, psychology and anthropology recognize no such limitations of scope of interest. One may readily speak of noneconomic or nonpolitical behavior. But it simply makes no sense to speak of non-psychological or non-sociological or non-anthropological behavior. All behavior has psychological, sociological and anthropological dimensions and the scientists in any one of these fields must necessarily take all kinds of behavior into account. Sociology studies social factors that all social phenomena have in common, whether they are economic or political. Like economics, it does not deal with the 'economic' behavior of man as such but sees economic behavior "as simply a partial abstraction from the total social behavior of the

individual." Although the focus of sociology is also special one, the area of enquiry of sociology is general.

**3. Sociology:** a social science: Sociology is a social science, a humanistic science. It is a social science like economics, political science, psychology etc. It is not a physical science. Sociology deals with social universe and not with the physical universe. Sociology deals with social facts, social phenomena, man's social relationships and behavior. "Social sciences cannot escape value judgments, and their damaging influences can be mitigated only by subjecting the thought process to valid thinking procedures." [18]

**4. Sociology:** a special kind of abstraction: Psychology, anthropology and sociology have, in common, their interest in all aspects of human behavior. The differences between them seem to lie in their different ways of thinking about human behavior in general. These differences may be understood by noting that human behavior is a variable and that these three social sciences represent different systems of explanation of this variability. In other words, these three social sciences adopt three different kinds of explanation of single fact of human behavior, namely the variability in amount of discrimination practiced by people against other racial groups. The psychologists tend to explain variability in behavior in terms of the personalities of the behaving persons. Each kind of behavior is a specific manifestation of a kind of organizations of psychological traits or elements. For the anthropologist, variations in human behavior tend to be explained by variations in culture. Different groups of people have different ideas and moral conceptions, and persons living in groups with different cultures may be expected to display different patterns of behavior. Sociology tends to explain variability in human behavior in terms of variation in society of social structure. Different persons are seen to have occupied different positions or statuses in that structure, and these positions condition the behavior of the occupants in a number of ways. These differences among psychology, anthropology and sociology are differences of emphasis rather than absolute ones. However, Sociology is a special kind of abstraction. It has its own system of explanation.

**5. Sociology:** an objective science: Sociology is an objective, but not a normative science. This means that sociology is primarily concerned with facts and not with value judgments upon them. Durkheim shared the vision of an objective sociology and in his *Rules of Sociological Method*, he urged that the sociologist must 'eradicate all preconceptions' and deal with facts rather than with his ideas about social facts. The German sociologist Max Weber devoted major his essay to the problem of objectivity or "Value-neutrality" in sociology. Sociology studies values as social facts but does not deal with the problems of good or bad, desirable or undesirable. It is ethically neutral. According to Weber, the sociologist may well be involved in partisan political activities to stimulate his intellectual curiosity but that, as a social

scientist (e.g. a teacher of sociology) he must leave out his personal bias, remembering always that a “podium is not a pulpit”.

6. Sociology: a pure or theoretical science: Sociology is a pure science. It is not an applied science. This means that sociology aims at the acquisition of knowledge and it has no concern whether the acquired knowledge is useful or applied. Sociology aims at exact description by the analysis of the properties and relation of social phenomena and explanation by the formulation of general statements. In this way sociology adds information to our knowledge about human society. The aim of sociology is the acquisition of knowledge about human society. Such knowledge can be used to solve social problems, but it is not an applied science. The knowledge acquired by sociology is helpful for administrators, legislators, social workers etc.

7. Sociology: a rational and empirical science: Sociology is both a rational and empirical science. It is empirical in the sense that it is based on observation and experimentation. To quote H.M. Johnson, “It is empirical, that is, it is based on observation and reasoning, not on supernatural revelation and its results are not speculative. Sociology is rational as it stresses on reason. Sociological theories are built on the basis of logical inference. The theoretical sociology emerged historically as a kind of speculation as illustrated in the broad theoretical schemes of August Comte, Herbert Spencer and other pioneers. In the twentieth century, most sociologists have shifted their attention to the gathering of empirical data about social life, a stage that perhaps reached its climax in the 1930’s.

### IX. CONCLUSION

In conclusion it can be aptly said that though there are some objections against Sociology to be called a science and it has been regarded as a proto-science, pseudoscience and non-science, it possesses the characteristics, ethics and basic principles of a pure science, and all the requirements of a scientific process. Sociology fulfills all these conditions and, hence, it is entitled to be a science. Science is a method and a way of looking at things consisting of systematic steps like collecting and classifying data or information, testing of hypothesis, theory and generalization. According to Harry M. Johnson, sociology to some extent has several characteristics as a science. They are: it is empirical, theoretical, cumulative, and non-technical, and progress is steadily made in these sectors[19]. Sociology has a body of knowledge and data or information. It has procedures in organizing the information. If we accept ‘science’ in the sense in which it has been defined by Weber, it will invalidate objections to sociology being regarded a science. According to B.N. Gosh, the proper understanding and explanation of facts lead to the development of

science[20] Sociology undoubtedly does so. According to Earl Babbie, there are two pillars of science: (i) logic or rationality, and (ii) observation[21]. One simple definition of science is that it is simply organized common sense, involving objective observation followed by interpretation of the observed facts. Science is further described as mass of knowledge about a subject acquired by systematic observations, experience and study and analyzed and classified into a unified whole. Sociology does all these. It studies facts by scientific method under definite conditions. It tries to classify types and forms of social relationships. It tries to deduce general laws from systematic study of its material, and the conclusions drawn from the sociological principles are applied to the solution of social problems. Hence Sociology is a pure science.

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