

## **VARIOUS APPROACHES OF SOCIAL SCIENCES: PARTICULARLY EMPHASIZE INTERDISCIPLINARY APPROACH**

Social Science is the study of human society and of individual relationship in and to society. Social Sciences have more roles in shaping and re-shaping our society and its social order. Basically social science disciplines have reliable data gathered through systematic process. Like other disciplines have certain methods and approaches to study the various problems in society.<sup>1</sup>

Approach means theories. A theory is a set of ideas which provides an explanation for something. A sociological theory is a set of ideas which provides an explanation for human society. Like all theories sociological theory is selective. These theories or approaches present a distinctive explanation of the social world.<sup>2</sup>

There are four major approaches in social sciences.1) Functionalism 2) Marxism 3) Structuralism and 4) Symbolic Interactionism.

### **Functionalism**

The chief exponent of Functionalist approach was in the works of Auguste Comte and Herbert Spencer. It was developed by Emile Durkheim and refined by Talcott Parsons. Functionalism views society as a system, which is as a set of interconnected parts which together form a whole. In this theory which society is seen as an organic whole, each of its constituent parts working to maintain the others? The concept of function in Functionalist analysis refers to the contribution of the part to the whole. Functionalist analysis has focussed on the question of how social sciences are maintained.<sup>3</sup>

Functionalism has often been criticised for failing to provide an adequate explanation for social change. Another criticism is its deterministic view of human action. Human behaviour is portrayed as determined by the system. Another criticism is that it tends to ignore coercion and conflict.<sup>4</sup>

## Marxism

Marxist theory or conflict theory is the radical answer to Functionalist form of analysis. Marx regards man as both producer and the product of society. Man makes society and himself by his own actions. His theory is based on the idea of dialectic. Conflict provides the dynamic principle; the source of change. Conflict theory begins with the simple observation that in order to survive man must produce food and material objects. Each major stage in the development of the forces of production will correspond with a particular form of the social relationships of production. The major contradictions which propel change are found in the economic infrastructure of society.<sup>5</sup>

A major criticism faced by Marx, he rejects as implistic, one directional view of causation. He gives priority to economic factors; they form only one aspect of the dialectic of history. Marx described the economic infrastructure is the ultimately determinant element in history. The economic situation is the basis, but the various elements of superstructure also exert their influence upon the course of historical struggle.<sup>6</sup>

## Structuralism

Like Functionalism, structuralism has been influenced by Durkheim's writings. The work of the Swiss linguist Ferdinand Saussure (1857-1913) was the most important early source of structuralist ideas. According to Saussure, analysing the structures of language means looking for the rules which underline our speech. For eg. In English we usually add 'ed' to a verb when we want signal that we are referring to an event in the past. This is one of grammatical rule among thousands of others which every speaker of the language knows, and which is used to construct what we say. Saussure argues that meaning of words derives from the structures of language, not the objects to which the words refer. The structuralist

approach has been used more widely in anthropology than in sociology, particularly in the US structuralist analysis has been employed in the study of kinship, myth, religion and other areas. Structuralism originated in the study of language, and has proved more relevant to analysing certain aspects of human behaviour than others.<sup>7</sup>

It is used for exploring communication and culture, but it has less application to more practical concerns of social life, such as economic or political activity.

### Symbolic Interactionism.

It developed from the work of a group of American philosophers who included John Dewey, William I Thomas and George Herbert Mead. Symbolic Interactionism gives more weight to the active, creative individual rather than either of other theoretical approaches. Symbolic interactionism directs our attention to the detail of interpersonal interaction, and that detail is used to make sense of what others say and do. A symbol does not simply stand for an object or event: it defines them in a particular way and indicates a response to them. Thus the 'symbol' 'chair' not only represents a class of objects and defines them as similar, it also indicates a line of action, that is the action of sitting. Symbols provide the means whereby man can interact meaningfully with his natural and social environment. Without symbols there would be no human interaction and no human society.<sup>8</sup>

Symbolic interactionism severely criticised by several scholars. It is distinctly American branch of sociology and to some this partly explains its shortcomings. Symbolic interactionism has its roots deeply imbedded in the cultural environment of American life, and its interpretation of society. Thus the emphasis in liberty, freedom and individuality in interactionism can be seen in part as a reflection of America's view of itself.

### **INTERDISCIPLINARITY IN SOCIAL SCIENCE**

Another major approach in social science is interdisciplinary approach. “The need for interdisciplinarity has been reflected in epistemological writings ever since the origin so Western Science”. An attempt to understand the concept of interdisciplinarity is complicated by a considerable difference of opinion about its origin. For some, it is quite old, rooted in the ideas of Plato, Aristotle, Hegel, Kant and others. They have been described as “interdisciplinary thinkers”. For some others, it is entirely a phenomenon of the 20<sup>th</sup> century rooted in modern educational reforms, applied research and movement across disciplinary boundaries.<sup>9</sup>

The concept of interdisciplinarity has been shaped not only by ideas, but also by the way ideas were structured in the curriculum. The modern university evolved from the medieval cathedral schools, a unified whole had come to include both letters and sciences in the customary divisions. The ideas of interdisciplinarity were not that a student should study everything and forego specialization, but that specialization would occur in a community of general studies.

By the late middle Ages, the term “discipline”, was being applied pre-eminently in three areas: to theology and arts, to the law and to the medicine. Though, not yet phrased in terms of interdisciplinarity, the problem was apparent in the work of a number of writers from the sixteenth through the nineteenth centuries. They included Francis Bacon, Descartes, Immanuel Kant, Hegel, Auguste Comte and others. Each of them expressed concern about the fragmentation of knowledge, and, each in his own way articulated a vision of the unity of knowledge.<sup>10</sup>

The growing particularization of knowledge was also to have a profound impact on the structure of higher education. The modern connotation of “disciplinarity” is the product of the 19<sup>th</sup> century and is linked with several forces: the evolution of the modern natural sciences, the general scientification of knowledge, the industrial revolution, technological advancements, and agrarian

agitations. The trend towards specialization was further propelled by increasingly more expensive and sophisticated instrumentation within individual fields. Some sub-specialities were also becoming distinct branches of knowledge through certain fields remained connected with other fields. The parts of psychology, now known as personality theory, and social psychology, for example, remained linked with philosophy well into the certain decade of the 20<sup>th</sup> century.<sup>11</sup>

Beginning of the modern period is marked by three points:

1. Institutional establishment of the discipline.
2. Differentiation in scholarly and scientific institution for the sake of progress in individual disciplines.
3. Co-operation between individual disciplines.

These changes have raised the question of whether unity of knowledge is still possible. The modern concept of the interdisciplinarity field or multi disciplinary field is a field of study that causes traditional boundaries between academic disciplines or schools of thought, as new needs and professions have emerged. Originally, the terms were applied within education and training pedagogies to describe studies that cut across several established disciplines or traditional fields of study.

Interdisciplinarity factors involve researchers, students and teachers in the goals of connecting and integrating several academic schools of thought, professions or technologies along with their specific objectives, in pursuit of a common task. Interdisciplinary approaches focus on problems thought to be too complex or vast for adequate understanding with a single discipline. Global warming requires understanding of diverse disciplines. “Interdisciplinarity” may be applied where the subject is felt to have been neglected or even misrepresented in the traditional disciplinary structure of research institution, for eg. Women studies or ethnic area studies. The subject of land-use may appear differently when examined

by different disciplines, for instance, biology, chemistry, economics, geography, and politics and so on.<sup>12</sup>

In a sense, interdisciplinarity evolves attacking a subject from various angles and methods, eventually cutting across disciplines and forming a new method for understanding the subject common goal of understanding units, the various methods and knowledge's a common or shared subject or problems, even if it spreads to other disciplines. The concept of interdisciplinarity is viewed as a twentieth century term. Thompson Klein attests that "the roots of the concepts lie in the number of ideas that resonate through modern discourse. They are the ideas of a unified science, general knowledge, synthesis and integration of knowledge.

An interdisciplinary programme sometimes arises from a shared conviction that the traditional disciplines are unable or unwilling to address an important problem. For e.g., social sciences disciplines such as anthropology and the sociology paid little attention to the social analysis of technology throughout most of the 20<sup>th</sup> century.<sup>13</sup>

At another level, interdisciplinarity is seen as a remedy to the harmful effects of excessive specialization. When interdisciplinary collaboration or research results in new solutions to problems, much information is given back to the various disciplines evolved. Therefore, both disciplinarians and interdisciplinarians may be seen in complimentary relation to one another.

Multi disciplinarity is the act of joint together two or more disciplines without integration. A multi disciplinary community or project is made up of people from different disciplines and professions who are engaged in working together as equal stack holders in addressing a common challenge.

Illustration:Multidisciplinary of an expression-Theft of a car

If a car is taken without its owner's knowledge and with no intention of returning it, we are dealing with theft and not borrowing. Thus identified, the expression takes its place in thematic context. It is the illegal taking of commodity of

economic value. To determine the value of a commodity is a matter of economics; to assert whether it is a crime is a matter of jurisprudence. Then we want to know how the act came to be committed. This is explained in a historical context. Then we ask why the person committed the act becomes a matter of psychology. If finally, we want to know why revenge on his father took this particular form, the answer may be a sociological one.

### **Barriers**

Since most participants in interdisciplinary ventures were trained in traditional disciplines, they must learn to appreciate differing perspectives and methods. From the disciplinary point of view, much interdisciplinary work may be seen as “soft”, lacking in rigour, or ideologically motivated”. Such beliefs play barriers in the growth of interdisciplinary study. Due to such barriers, interdisciplinary research area is strongly motivated to become disciplines themselves. Examples of former interdisciplinary research areas that have become disciplines include neuro-science, bio-chemistry, bio-medical engineering etc.”Interdisciplinary” studies is an academic programme or process seeking to synthesise broad perceptive, knowledge, skills inter connections, and epistemology in an educational setting. The most common complaint regarding interdisciplinary programme by supporters and detractors alike, is the lack of synthesis of varied knowledge students are provided with multidisciplinary perspectives. But they are not given effective guidance in resolving the conflicts and achieving a coherent view of the subject. Critics of interdisciplinary programmes feel that the ambition is simply unrealistic, given the knowledge and intellectual maturity of all but the exceptional under graduate. Some defenders concede the difficulty, but insist that cultivated in disciplinarity as a habit of mind, even at that level, is both possible and essential to the education of informed and engaged citizens and leaders capable of analyzing, evaluating and synthesizing information from multiple sources in order to render reasoned decisions.

### Endnotes

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## **HISTORICAL FOUNDATIONS OF SCIENCES**

The word 'science' is much older than its modern use. Science teaches us to 'know' things and an art teaches us to do 'things'. The practicing science of the world-physical, natural, social or humanities are both science and art. There is difference in the way various sciences are being practiced. Each science has its historical foundation and footing. With the application of modern scientific techniques, the crude social sciences were refined and they emerged into the status of well developed independent social disciplines. The individuality of independence social sciences made it more technical and abstract.

To have an understanding of the emergence of social sciences into independent disciplines, we should be aware about the historical roots of social sciences.

### **Greek Tradition**

Going back to ancient Greece, there was no difference between mathematics and the study of history, poetry and politics. With the development of mathematical and statistical(imperial) proof there arose perceived difference between “scientific” disciplines and others. The Greek philosopher, Aristotle studied planetary motion and poetry with the same method. Plato attempted to mix geometrical proofs with his demonstration on the state of intrinsic knowledge. Thus scientific methods of investigation had been used even by Greek philosophers to establish and validate their theory.

### **Islamic Contributions**

There were Islamic scientists who made significant contribution to the social sciences. Al-Biruni(973:1048) has been called the first anthropologist. He wrote detailed comparative studies on the anthropology of peoples, religion and cultures in the Middle East, Mediterranean and South Asia. Al-Biruni’s anthropology of religion was only plausible for a scholar deeply immersed in the lore of other nations. Several scholars had praised Biruni for his knowledge in Islamic anthropology. Ibn Khaldun(1332-1406) is regarded as the father of demography(study of people), historiography(history of historical knowledge), the philosophy of history, sociology and the social sciences. Khaldun is further viewed as one of the fore-runners of modern economics.

With the fall of a Roman Empire, which did little in the way of science, theorizing was transferred to the priesthood and a group of schoolers known as scholastics. The prominent thinkers of the Dark Ages such as St. Anselm and John of Salisbury made few comments on economic analysis. Thomas Aquinas of the 13<sup>th</sup> century expressed interest in political sociology and there were references to economics in his writings.

## **Renaissance**

Prior to the advent of Renaissance, which began around the 14<sup>th</sup> century, Buridanus and Oremius wrote on money. In the 15<sup>th</sup> century, St. Antonine of Florence wrote of a comprehensive economic process. In the 16<sup>th</sup> century, Leonard de Leys, Juan de Lego, and particularly Luis Molina wrote of economic topics.

Representative figures of the 17<sup>th</sup> century include David Hartley, Hugo Grotius, Thomas Hobbes, John Locke and others. Thomas Hobbes argued that deductive reasoning (from general to particular by way of logical reasoning) is from axiom scientific frame work. His work "Leviathan" was a scientific description of a political commonwealth. In the 18<sup>th</sup> century, social science was known as moral philosophy, as contrasted from natural philosophy and mathematics. Hobbes included the study of natural theology, natural ethics, natural jurisprudence, and policy ("police"), which included economics and finance (revenue of the state). Pure philosophy, logic, literature and history were outside these to categories.

Adams Smith of England was a professor of moral philosophy, and he was thought by Francis Hutcheson. Figures of the time included Francis Quesnay, Rousseau, William Godwin and others. The Encyclopaedis of the time contained various works on the social science.

The term 'social science' first appeared in the book "An Inquiry into the principles of the Distribution of Wealth most conducive to Human happiness; applied to the Newly Proposed System of Voluntary Equality of Wealth" by William Thompson (1797-1833).

Auguste Comte (1797-1957) argued that the ideas pass through three rising stages - theological, philosophical and scientific. He defined the differences as the first being rooted in assumption, the second in critical thinking, and the third in positive observation.

With the late 19<sup>th</sup> century, attempts to apply equations to statements about human behavior became increasingly common. It was the work of Charles Darwin, that the descriptive version of social theory received another shock.

## **AN INTERDISCIPLINARY APPROACH IN SOCIAL SCIENCES**

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## **Short questions**

### **THE SCIENTIFIC METHOD**

Although the social sciences are considered scientific disciplines, they cannot employ exactly the same methodology as the natural or physical sciences. They do, however, share with all sciences the use of the scientific method. The basic technique of the scientific method is a special kind of observation called scientific observation. We obtain evidence from our senses, but for such evidence to be

reliable, it must first be confirmed by the scientific method. That is, scientific observation must proceed systematically. Scientists must select and define a problem and then make an organized plan for collecting data. Scientific observation must be accurate and precise. In collecting data, scientists must subject them to careful checking, rechecking, and crosschecking, as well as to careful measurement. Scientific observation should take place under controlled conditions, although that is frequently impossible. Researchers should be able to make particular features of the environment remain constant, so that when other features change, they can be sure which specific cause is determining which effect. This requirement is difficult to achieve in the social sciences, because research on people cannot always be performed in a laboratory. Control is difficult even in the natural sciences, because many phenomena can only be observed at a distance. Finally, scientific observation must be made by a **trained observer**. Only such a person knows which data are relevant and which are only peripherally important.

### **Concepts**

Concepts are generalized, abstract ideas that symbolize whole categories of people, objects and processes. Concepts are used to simplify the way people think and communicate. Concepts are used by social scientists to generalize about some aspects of human interaction.

### **Research**

Research may be defined as systematic scientific enquiry conducted under controlled conditions in which data are carefully observed for the purpose of determining the relationship between one factor (for example, income) and one or more other factors.

### **Variables**

The factors whose relationship social scientists try to uncover are called variables. Variables, then, are concepts that vary, and they are used in the social science to uncover how change in one phenomenon can explain change in

another one. Variables are of two kinds: *independent or dependent*. **Independent** variables are those that exert influence on **dependent** variables.

## **SOCIAL SCIENCE APPROACHES TO PROBLEM**

**Alternative Approaches:** The approach one takes when analyzing a problem reflects one's worldview—the lens through which one sees the world. Four approaches that social scientists use are the functionalist theory approach, the exchange theory approach, the conflict theory approach, and the symbolic interaction theory approach.

**The functionalist theory approach:** This approach emphasizes the interconnectedness of social life and the difficulty of affecting only one part of society with a policy. Followers of the **functionalist theory approach** are hesitant to make social judgments because all aspects of society have certain functions. Closely related to the functionalist approach is the exchange theory approach.

**The exchange theory approach:** This approach emphasizes the voluntary exchanges of individuals as reflecting individuals' choices. Thus, the structure of society reflects individuals' desires. The **exchange theory approach** lens is one of relative harmony in society, sometimes upset by dysfunctional elements.

**The conflict theory approach:** The **conflict theory approach** sees far less harmony. Followers of this approach see social behavior in terms of conflict and tension among competing groups or classes. Whereas the exchange theory approach sees individuals' voluntary choices, the conflict theory approach sees force and power directing individual actions.

**The symbolic interaction theory approach:** The **symbolic interaction theory approach** sees individuals as deriving meaning from the symbols they learn from. Followers of this approach see reality as reflecting less what people do and more what they think and feel. Their motives and perceptions, rather than actions, are emphasized.

**The mind**

Make sense to do only if the best information has been input into the mind called.

**Educate commonsense**

It is rational thought based on observation and the best information available.