

Master in sociology

Semester-3

CC-10

Unit-1

Topic-Nature and elements of Theory

Theory

A Theory is a set of interrelated concepts used to describe, explain, and predict how society and its parts are related to each other. Theories are sets of inter-related concepts and ideas that have been scientifically tested and combined to clarify, and expand our understanding of people, their behaviours, and their societies. Without theories, science would be a futile exercise. A theory is a set of propositions that provide an explanation by means of a deductive or inductive system. The three major functions of theory are description, explanation and prediction.

Nature and Characteristics of Theory

A theory is a proposed relationship between two or more concepts. In other words, a theory is explanation for why a phenomenon occurs. Without theories to explain the relationship between concepts, we would not be able to understand cause and effect relationships in social life.

The major characteristics of theory are given below.

Time boundedness: Scientific theories always seek to transcend the particular and the time bound. Scientific theories are therefore about the generic, the fundamental, the timeless, and the universal.

Objectivity: Another characteristic of scientific theories is that they are stated more formally than ordinary language. Theory is stated in neutral, objective, and unambiguous terms so that the theory means the same thing to all who examine it.

Reliability and Verifiability: A final characteristic of scientific theories is that they are designed to be systematically tested with replicable methods against the facts of particular empirical settings.

Elements of theory: Concepts, Variables, Statements and Formats

Theory is a mental activity revolving around the process of developing ideas that explain how and why events occur. Theory is constructed with the

following basic elements or building blocks: (1) concepts, (2) variables, (3) statements, and (4) formats.

Though there are different types of theory, the basic elements are common to all.

Concepts

Theories are built from concepts. Generally, concepts denote phenomena. A concept embraces the aspects of the social world that are considered essential for a particular purpose. Concepts are constructed from definitions. A *definition* is a system of terms that inform investigators as to the phenomenon denoted by a concept. A definition allows visualising the phenomenon that is denoted by the concept. It enables all investigators to see the same thing and to understand what it is that is being studied. Thus, concepts that are useful in building theory have a special characteristic: they strive to communicate a uniform meaning to all those who use them. However, since concepts are frequently expressed with the words of everyday language, it is difficult to avoid words that connote varied meanings—and hence point to different phenomena—for varying groups of scientists. It is for this reason that many concepts in science are expressed in technical or more neutral languages, such as the symbols of mathematics. In sociology, expression of concepts in such special languages is sometimes not only impossible but also undesirable. Hence the verbal symbols used to develop a concept must be defined as precisely as possible so that they point to the same phenomenon for all investigators. Although perfect consensus may never be attained with conventional language, a body of theory rests on the premise that scholars will do their best to define concepts unambiguously. The concepts of theory reveal a special characteristic: *abstractness*. Some concepts pertain to concrete phenomena at specific times and locations. Other, more abstract, concepts point to phenomena that are not related to concrete times or locations. For example, in the context of small-group research, *concrete concepts* would refer to the persistent interactions of particular individuals, whereas an *abstract* conceptualization of such phenomena would refer to those general properties of face-to-face groups that are not tied to particular individuals interacting at a specified time and location. Whereas abstract concepts are not tied to a specific context, concrete concepts are. Although it is essential that some of the concepts of theory transcend specific times and places, it is equally critical that there be procedures for making these abstract concepts relevant to observable situations and occurrences. The utility of an abstract concept can be demonstrated only when the concept is brought to analyse some specific empirical problem

encountered by investigators; otherwise, concepts remain detached from the very processes they are supposed to help investigators understand. Some argue for very formal procedures for attaching concepts to empirical events. Those of this view believe that abstract concepts should be accompanied by a series of statements known as *operational definitions*, which are sets of procedural instructions telling investigators how to go about discerning phenomena in the real world that are denoted by an abstract concept. Others argue, however, that the nature of our concepts in sociology precludes such formalistic exercises. At best, concepts can be only devices that must change with the changes in society, and so we can only intuitively and provisionally apply abstract concepts to the actual analysis.

Variables

Once the measurement system has been specified by the operational definition, different values of the concept can be observed. The concept can now be referred to as a variable, since it can respond to differences in the “real world” by taking on varying values, as specified in the operational definition. When used to build theory, two general types of concepts can be distinguished: (1) those that simply label phenomena and (2) those that refer to phenomena that differ in degree. Concepts that merely label phenomena would include such common terms like group, social class etc. Concepts that denote properties as size, weight, density, velocity etc. refer to differences in degree among phenomena. Some concepts of scientific theory should denote the variable features of the world. To understand events it is necessary to analyse how variation in one phenomenon is related to variation in another.

Statements and Formats

To be useful, the concepts of theory must be connected to one another. Such connections among concepts constitute theoretical statements. These statements specify the way in which events denoted by concepts are interrelated, and at the same time, they provide an interpretation of how and why events should be connected. When these theoretical statements are grouped together, they constitute a theoretical format. Concepts are constructed from definitions; theoretical statements link concepts together; and statements are organized into five basic types of formats. There are five basic approaches in sociological theory for generating theoretical statements and formats: (1) metatheoretical schemes, (2) analytical schemes, (3) discursive schemes, (4) propositional schemes, and (5) modeling schemes.

Meta-theoretical schemes deal with the basic issues that a theory must address. In many sociological circles, meta-theory is considered an essential prerequisite to adequate theory building. The philosophical debates like idealism versus materialism, induction versus deduction, causation versus association, subjectivism versus objectivism, and so on are re-evoked and analyzed with respect to social reality.

Analytical Scheme is a classification scheme that denotes the key properties, and interrelations among these properties, in the social universe. There are many different varieties of analytical schemes, but they share an emphasis on classifying basic properties of the social world. Explanation of an empirical event comes whenever a place in the classificatory scheme can be found for an empirical event. There are two basic types of analytical schemes: (1) *naturalistic schemes*, which try to develop a tightly woven system of categories that is presumed to capture the way in which the invariant properties of the universe are ordered and (2) *sensitizing schemes*, which are more loosely assembled congeries of concepts intended only to sensitize and orient researchers and theorists to certain critical processes.

Discursive Schemes are typically easier to understand than those that are more formal, but the weakness is that the variables and forces highlighted and the dynamic relations among them are vague and imprecise. Even with a certain vagueness in language, it is still possible to recognise the basic theoretical argument and convert it into a more formal format like an analytical model or propositions scheme.

Propositional Scheme is a theoretical statement that specifies the connection between two or more variables. It tells us how variation in one concept is accounted for by variation in another. Propositional Schemes vary perhaps the most of all theoretical approaches. They vary primarily along two dimensions: (1) the level of abstraction and (2) the way propositions are organized into formats. Some are highly abstract and contain concepts that do not denote any particular case but all cases of a type. By using these two dimensions, several different types of propositional schemes can be isolated: (a) axiomatic formats, (b) formal formats, and (c) empirical formats.

An axiomatic organization of theoretical statements involves a set of concepts some of which are concepts are highly abstract; others, more concrete. Second, there is always a set of existence statements that describe those types and classes of situations in which the concepts and the propositions that incorporate them apply. Third, propositional statements are stated in a hierarchical order. At

the top of the hierarchy are axioms, or highly abstract statements, from which all other theoretical statements are logically derived. The axioms should be consistent with one another, although they do not have to be logically interrelated. The axioms should be highly abstract; they should state relationships among abstract concepts. These relationships should be law-like in that the more concrete theorems derived from them have not been disproved by empirical investigation. Formal theories are loose versions of axiomatic schemes. The idea is to develop highly abstract propositions that are used to explain some empirical event. Some highly abstract propositions are seen as higher-order laws, and the goal of explanation is to visualize empirical events as instances of this covering law. Deductions from the laws are made, but they are much looser, rarely conforming to the strict rules of axiomatic theory. Moreover, there is recognition that extraneous variables cannot always be excluded, and so the propositions have a condition that if other forces do not impinge, then the relationship among concepts in the proposition should hold true.

Empirical Formats consist of generalizations from specific events, in particular empirical contexts. They are too tied to empirical contexts, times, and places. In fact, they are generalizations that are in need of a theory to explain them. There are other kinds of empirical generalizations also. These are often termed middle-range theories, because they are more abstract than a research finding and because their empirical content pertains to variables that are also found in other domains of social reality.

Analytical Modeling Scheme is a diagrammatic representation of social events. The diagrammatic elements of any model include: (1) concepts that denote and highlight certain features of the universe; (2) the arrangement of these concepts in visual space so as to reflect the ordering of events in the universe; and (3) symbols that mark the connections among concepts, such as lines, arrows, vectors, and so on. The elements of a model may be weighted in some way, or they may be sequentially organized to express events over time, or they may represent complex patterns of relations and other potential ways in which properties of the universe affect one another. In sociology, most diagrammatic models are constructed to emphasize the causal connections among properties of the universe. That is, they are designed to show how changes in the values of one set of variables are related to changes in the values of other variables. Sociologists generally construct two different types of models, which can be termed analytical models and causal models. Analytical models are more

abstract: they highlight more generic properties of the universe, and they portray a complex set of connections among variables. In contrast, causal models are more empirically grounded. They provide a more detailed interpretation of an empirical generalization.

Email-artirani21nov@gmail.com

Contact-6200360965