1.1C: Sociology and Science

Early sociological studies were thought to be similar to the natural sciences due to their use of empiricism and the scientific method.

Learning Objectives

• Contrast positivist sociology with “verstehen”-oriented sociological approaches

Key Points

• Early sociological approaches were primarily positivist—they treated sensory data as the sole source of authentic knowledge, and they tried to predict human behavior.
• Max Weber and Wilhelm Dilthey introduced the idea of verstehen, which is an attempt to understand and interpret meanings behind social behavior.
• The difference between positivism and verstehen has often been understood as the difference between quantitative and qualitative sociology.
• Quantitative sociology seeks to answer a question using numerical analysis of patterns, while qualitative sociology seeks to arrive at deeper a understanding based on how people talk about and interpret their actions.

Key Terms

• positivism: A doctrine that states that the only authentic knowledge is scientific knowledge, and that such knowledge can only come from positive affirmation of theories through strict scientific method, refusing every form of metaphysics.
• **Verstehen**: A systematic interpretive process of understanding the meaning of action from the actor’s point of view; in the context of German philosophy and social sciences in general, the special sense of “interpective or participatory examination” of social phenomena.

• **empirical**: Pertaining to, derived from, or testable by observations made using the physical senses or using instruments which extend the senses.

Early sociological studies considered the field of sociology to be similar to the natural sciences, like physics or biology. As a result, many researchers argued that the methodology used in the natural sciences was perfectly suited for use in the social sciences. The effect of employing the scientific method and stressing empiricism was the distinction of sociology from theology, philosophy, and metaphysics. This also resulted in sociology being recognized as an empirical science.

**Positivism and Verstehen**

This early sociological approach, supported by August Comte, led to positivism, an idea that data derived from sensory experience and that logical and mathematical treatments of such data are together the exclusive source of all authentic knowledge. The goal of positivism, like the natural sciences, is prediction. But in the case of sociology, positivism’s goal is prediction of human behavior, which is a complicated proposition.

The goal of predicting human behavior was quickly realized to be a bit lofty. Scientists like Wilhelm Dilthey and Heinrich Rickert argued that the natural world differs from the social world; human society has culture, unlike the societies of most other animals. The behavior of ants and wolves, for example, is primarily based on genetic instructions and is not passed from generation to generation through socialization. As a result, an additional goal was proposed for sociology. Max Weber and Wilhelm Dilthey introduced the concept of *verstehen*. The goal of *verstehen* is less to predict behavior than it is to understand behavior. Weber said that he was after meaningful social action, not simply statistical or mathematical knowledge about society. Arriving at a *verstehen*-like understanding of society thus involves not only quantitative approaches, but more interpretive, qualitative approaches.

The inability of sociology and other social sciences to perfectly predict the behavior of humans or to fully comprehend a different culture has led to the social sciences being labeled “soft sciences.” While some might consider this label derogatory, in a sense it can be seen as an admission of the remarkable complexity of humans as social animals. Any animal as complex as humans is bound to be difficult to fully comprehend. Humans, human society, and human culture are all constantly changing, which means the social sciences will constantly be works in progress.

**Quantitative and Qualitative Sociology**

The contrast between positivist sociology and the *verstehen* approach has been reformulated in modern sociology as a distinction between quantitative and qualitative methodological approaches, respectively. Quantitative sociology is generally a numerical approach to understanding human behavior. Surveys with large numbers of participants are aggregated into data sets and analyzed using statistics, allowing researchers to discern patterns in human behavior. Qualitative sociology generally opts for depth over breadth. The qualitative approach uses in-depth interviews, focus groups, or the analysis of content sources (books, magazines, journals, TV shows, etc.) as data sources. These sources are then analyzed systematically to discern patterns and to arrive at a better understanding of human behavior.
Drawing a hard and fast distinction between quantitative and qualitative sociology is a bit misleading, however. Both share a similar approach in that the first step in all sciences is the development of a theory and the generation of testable hypotheses. While there are some individuals who begin analyzing data without a theoretical orientation to guide their analysis, most begin with a theoretical idea or question and gather data to test that theory. The second step is the collection of data, and this is really where the two approaches differ. Quantitative sociology focuses on numerical representations of the research subjects, while qualitative sociology focuses on the ideas found within the discourse and rhetoric of the research subjects.

Max Weber: Max Weber and Wilhelm Dilthey introduced verstehen—understanding behaviors—as goal of sociology.