Chapter 3 – Theory & Research

I. Introduction
a. Social scientific inquiry is an interplay of theory and research, logic and observation, induction and deduction- and of the fundamental frames of reference known as paradigms.
   i. Why Theory?
      1. Logical explanations are what theories seek to provide. Theories function three ways in research.
         a. They prevent scientists from making incorrect assumptions about the relationship between variables. In other words, if scientists can discover why a particular phenomenon has occurred, then anticipating the event again will be easier.
         b. Theories make sense of observed patterns.
         c. Theories shape and direct research efforts, pointing toward likely discoveries through empirical observations.

II. Early Positivism
a. When the French philosopher Auguste Comte coined the term sociology in 1822, he launched an intellectual adventure that is still unfolding today. Most importantly, Comte identified society as a phenomenon that can be studied scientifically and objectively. In other words, Comte felt that society could be observed and then explained logically and rationally and that sociology could be as scientific as biology or physics. In his optimism, he coined the term positivism to describe this scientific approach, in contrast to what he regarded as negative elements during the enlightenment period.

III. Rational Objectivity Reconsidered
a. We began this discussion of paradigms with Comte's assertion that society can be studied rationally and objectively. Since his time, the growth of science and technology, together with the relative decline of superstition (often referred as secularism), have put rationality more and more in the center of social life. As fundamental as rationality is to most of us, however, some contemporary scholars have raised questions about it.
   i. A Short Debate on Positivism and Rationality
      1. For example, positivistic social scientists have sometimes erred in assuming that social reality can be explained in rational terms because humans always act rationally.
      2. A more sophisticated positivism would assert that we can rationally understand and predict even non-rational behavior.
      3. More radically, we can question whether social life abides by rational principles at all.
      4. The contemporary challenge to positivism, however, goes beyond the question of whether people behave rationally. In part, positivism challenges the idea that scientists can be as objective as the positivistic ideal assumes. Most scientists would agree that personal feelings can and do influence the problems scientists choose to study, what they choose to study, what they choose to observe, and the conclusions they draw from their observations.
         a. Subjectivity and Science
            i. There is an even more radical critique of the ideal of objectivity. As we glimpsed in the discussion of feminism and ethnomethodology, some contemporary researchers suggest that subjectivity might actually be preferable in some situations. To begin, all our experiences are inescapably subjective. There is no way out. We can see only through our own eyes, and anything peculiar to our eyes will shape what we see.
Despite the inescapable subjectivity of our experience, we humans seem to be wired to seek an agreement on what is really real, what is objectively so.

IV. Objectivity Reconsidered Again
   a. Objectivity is a conceptual attempt to get beyond our individual views. It is ultimately a matter of communication, as you and I attempt to find a common ground in our subjective experiences. Whenever we succeed in our search, we say we are dealing with objective reality. Whereas our subjectivity is individual, our search for objectivity is social. In summary, a rich variety of theoretical paradigms can be brought to bear on the study of social life. With each of these fundamental frames of reference, useful theories can be constructed. We turn now to some of the issues involved in theory construction, which are of interest and use to all social researchers, from positivists to postmodernists- and all those in between.

V. Some Social Science Paradigms
   a. There is usually more than one way to make sense of things. In daily life, for example, liberals, and conservatives often explain the same phenomenon quite differently. But underlying these different explanations, or theories, are paradigms- the fundamental models or frames of reference we use to organize our observations and reasoning. Paradigms play a fundamental role in science. As a result of their emphasis in science, several paradigms have been developed for understanding social behavior.

VI. Macrotheory, Mesotheory, & Microtheory
   a. Macrotheory
      i. Conflict Paradigm
         1. Feminist Theories
      ii. Structural Functionalism
         1. Social Darwinism
   b. Mesotheory
   c. Microtheory
      i. Interactionism
         1. Symbolic Interactionism
         2. Ethnomethodology

VII. Elements of Social Theory
   a. Paradigms
      i. Defined as general frameworks or viewpoints: literally “points from which to view.”
   b. Theories
      i. Systematic sets of interrelated statements intended to explain some aspect of social life. In other words, whereas a paradigm offers a way of looking, a theory aims at explaining what we see.
   c. Observation
   d. Fact
      i. A phenomenon that has been observed and a consensus exist on its accuracy.
   e. Laws/Principles
      i. Universal generalizations about classes of facts. In other words, a law is an observed regularity.
   f. Concepts
      i. The basic building blocks of theory.
   g. Axioms/Postulates
      i. Fundamental assertions taken to be true, on which a theory is grounded. From these, scientists often construct propositions.
   h. Propositions
      i. Specific conclusions about the relationships among concepts that are derived from the axiomatic groundwork.
   i. Variables
      i. A concept that has been operationalized and prepared for use in a hypothesis.
   j. Hypotheses
      i. A statement about the relationship between two or more variables.

VIII. Two Logical Systems Revisited
a. The Creation of Social Science Theory
   i. Theory and observation go together in science, but sometimes theory precedes observation and other times observation comes before theory.

b. The Traditional Model of Science
   i. Explained
      1. There are three main elements in the traditional model of science: theory, operationalization, and observation.
         a. Theory
            i. A theory is a system of abstract statements that explain how and why phenomena in the universe operate. In other words, theory is the vehicle in science for understanding. Theory and observation go together in science, but sometimes theory precedes observation and other times observation comes before theory.
         b. Operationalization
            i. Operationalization is simply the specification of the steps, procedures, or operations that we go through to actually identify and measure the variables we intend to observe.
         c. Observation
            i. The final step in the traditional model of science involves actual observation—examining the empirical world and making measurements of what is “seen.” Having developed theoretical expectations and having created a strategy for looking, we next look at the way things are. Sometimes this step involves conducting experiments, interviewing people, or visiting who/what/where we are interested in and watching it. Sometimes the observations are structured around the testing of specific hypotheses; sometimes the inquiry is less structured.

IX. Deductive Theory Construction
a. To see what’s involved in deductive theory construction and hypothesis testing, let’s imagine that you are going to construct a deductive theory. How would you go about it?
   i. Constructing Your Theory
      1. Specify the topic.
      2. Specify the range of phenomena your theory addresses. Will your theory apply to all of human social life, will it apply only to U.S. citizens, only to young people, or what?
      3. Identify and specify your major concepts and variables.
      4. Find out what is known (propositions) about the relationships among those variables.
      5. Reason logically from those propositions to the specific topic you are examining.

X. Inductive Theory Construction
a. As we have seen, quite often social scientists begin constructing a theory through the inductive method by first observing aspects of social life and then seeking to discover patterns that may point to relatively universal principles.

XI. The Links between Theory & Research