INTRODUCTION

Suppose you want to make sense of the hostility between people of different races. Trying to understand it, you ask a teacher, who responds:

> Most racially prejudiced people learn negative stereotypes about another racial group from their families, friends, and others in their immediate surroundings. If they lack sufficient intimate social contact with members of the group or intense information that contradicts those stereotypes, they remain prejudiced.

This makes sense to you because it is consistent with what you know about how the social world works. This is an example of a small-scale social theory, a type that researchers use when conducting a study.

What do you think of when you hear the word *theory*? Theory is one of the least well understood terms for students learning social science. My students' eyelids droop if I begin a class by saying, "Today we are going to examine the theory of . . ." The mental picture many students have of theory is something that floats high among the clouds. My students have called it "a tangled maze of jargon" and "abstractions that are irrelevant to the real world."

Contrary to these views, theory has an important role in research and is an essential ally for the researcher. Researchers use theory differently in various types of research, but some type of theory is present in most social research. It is less evident in applied or descriptive than in basic or explanatory research. In simple terms, researchers interweave a story about the operation of the social world (the theory) with what they observe when they examine it systematically (the data).

People who seek absolute, fixed answers for a specific individual or a particular one-time event may be frustrated with science and social theories. To avoid frustration, it is wise to keep in mind three things about how social scientific theories work. First, social theories explain recurring patterns, not unique or one-time events. For example, they are not good for explaining why terrorists decided to attack New York's World Trade Center on September 11, 2001, but they can explain patterns, such as the conditions that generally lead to increased levels of fear and feelings of patriotism in a people. Second, social theories are explanations for aggregates, not particular individuals. *Aggregates* are collections of many individuals, cases, or other units (e.g., businesses, schools, families, clubs, cities, nations, etc.). A social theory rarely can explain why Josephine decided to major in nursing rather than engineering, but it can explain why females more than males in general choose nursing over engineering as a major. Third, social theories state a probability, chance, or tendency for events to occur, rather than state that one event must absolutely follow another. For example, instead of stating that when someone is abused as a child, that person will always later abuse his or her own children, a theory might state that when someone experiences abuse during his or her childhood, that person will *tend to* or is *more likely to* become an abusive parent when an adult. Likewise, it might state that people who did not experience childhood abuse might become abusive parents, but they are *less likely to* than someone who has experienced abuse as a child.

WHAT IS THEORY?

In Chapter 1, *social theory* was defined as a system of interconnected abstractions or ideas that condenses and organizes knowledge about the social world. It is a compact way to think of the social world. People are constantly developing new theories about how the world works.

Some people confuse the history of social thought, or what great thinkers said, with social

theory. The classical social theorists (e.g., Durkheim, Weber, Marx, and Tonnies) played an important role in generating innovative ideas. They developed original theories that laid the foundation for subsequent generations of social thinkers. People study the classical theorists because they provided many creative and interrelated ideas at once. They radically changed the way people understood and saw the social world. We study them because geniuses who generate many original, insightful ideas and fundamentally shift how people saw the social world are rare.

At times people confuse theory with a hunch or speculative guessing. They may say, "It's only a theory" or ask, "What's your theory about it?" This lax use of the term *theory* causes confusion. Such guessing differs from a serious social theory that has been carefully built and debated over many years by dozens of researchers who found support for the theory's key parts in repeated empirical tests. A related confusion is when what people consider to be a "fact" (i.e., light a match in a gasoline-filled room and it will explode) is what scientists call a theory (i.e., a theory of how combining certain quantities of particular chemicals with oxygen and a level of heat is likely to produce the outcome of explosive force). People use simple theories without making them explicit or labeling them as such. For example, newspaper articles or television reports on social issues usually have unstated social theories embedded within them. A news report on the difficulty of implementing a school desegregation plan will contain an implicit theory about race relations. Likewise, political leaders frequently express social theories when they discuss public issues. Politicians who claim that inadequate education causes poverty or that a decline in traditional moral values causes higher crime rates are expressing theories. Compared to the theories of social scientists, such laypersons' theories are less systematic, less well formulated, and harder to test with empirical evidence.

Almost all research involves some theory, so the question is less *whether* you should use theory than *how* you should use it. Being explicit about the theory makes it easier to read someone else's research or to conduct your own. An awareness of how theory fits into the research process produces better designed, easier to understand, and better conducted studies. Most researchers disparage atheoretical or "crude empiricist" research.

Blame Analysis

Blame analysis is a type of counterfeit argument presented as if it were a theoretical explanation. It substitutes attributing blame for a causal explanation that is backed by supporting empirical evidence. Blame belongs to the realm of making moral, legal, or ideological claims. It implies an intention, negligence, or responsibility for an event or situation (usually an unfavorable one). It shifts the focus from Why did it occur? to Who is responsible? Blame analysis assumes there is a party or source to which a fixed amount of responsibility can be attached. The goal of inquiry is to identify a responsible party. Often, some sources are exempted or shielded. This may be the injured party, members of a sympathetic audience, or a sacred value or principle.

Blame analysis clouds discussion because it confuses blame with cause; it gives an account (or story) instead of a logical explanation with intervening causal mechanisms; and it fails to explore empirical evidence for and against several alternative causes. Blame analysis first presents an unfavorable event or situation. It could be a bank is robbed, a group is systematically paid less in the labor force, or traffic congestion is terrible in an urban area. It next identifies one or more responsible parties, then it provides selective evidence that shields certain parties or sources (e.g., employment conditions, the choices available to the underpaid group, transportation policy, and land cost).[1]

THE PARTS OF THEORY

Concepts

All theories contain concepts, and concepts are the building blocks of theory.[2] A *concept* is an idea expressed as a symbol or in words. Natural science concepts are often expressed in symbolic forms, such as Greek letters (e.g., δ) or formulas (e.g., $s = d/t$; s = speed, d = distance, t = time). Most social science concepts are expressed as words. The exotic symbols of natural science concepts make many people nervous, as the use of everyday words in specialized social science concepts can create confusion.

I do not want to exaggerate the distinction between concepts expressed as words and concepts expressed as symbols. Words, after all, are symbols, too; they are symbols we learn with language. Height is a concept with which you are already familiar. For example, I can say the word *height* or write it down; the spoken sounds and written words are part of the English language. The combination of letters in the sound symbolizes, or stands for, the idea of a *height*. Chinese or Arabic characters, the French word *hauteur*, the German word *höhe*, the Spanish word *altura*—all symbolize the same idea. In a sense, a language is merely an agreement to represent ideas by sounds or written characters that people learned at some point in their lives. Learning concepts and theory is like learning a language.[3]

Concepts are everywhere, and you use them all the time. Height is a simple concept from everyday experience. What does it mean? It is easy to use the concept of *height*, but describing the concept itself is difficult. It represents an abstract idea about physical relations. How would you describe it to a very young child or a creature from a distant planet who was totally unfamiliar with it? A new concept from a social theory may seem just as alien when you encounter it for the first time. Height is a characteristic of a physical object, the distance from top to bottom. All people, buildings, trees, mountains, books, and so forth have a height. We can

measure height or compare it. A height of zero is possible, and height can increase or decrease over time. As with many words, we use the word in several ways. Height is used in the expressions *the height of the battle, the height of the summer,* and *the height of fashion.*

The word *height* refers to an abstract idea. We associate its sound and its written form with that idea. There is nothing inherent in the sounds that make up the word and the idea it represents. The connection is arbitrary, but it is still useful. People can express the abstract idea to one another using the symbol alone.

Concepts have two parts: a *symbol* (word or term) and a *definition*. We learn definitions in many ways. I learned the word *height* and its definition from my parents. I learned it as I learned to speak and was socialized to the culture. My parents never gave me a dictionary definition. I learned it through a diffuse, nonverbal, informal process. My parents showed me many examples; I observed and listened to others use the word; I used the word incorrectly and was corrected; and I used it correctly and was understood. Eventually, I mastered the concept.

This example shows how people learn concepts in everyday language and how we share concepts. Suppose my parents had isolated me from television and other people, then taught me that the word for the idea *height* was *zdged*. I would have had difficulty communicating with others. People must share the terms for concepts and their definitions if they are to be of value.

Everyday life is filled with concepts, but many have vague and unclear definitions. Likewise, the values, misconceptions, and experiences of people in a culture may limit everyday concepts. Social scientists borrow concepts from everyday culture, but they refine these concepts and add new ones. Many concepts such as *sexism, life-style, peer group, urban sprawl,* and *social class* began as precise, technical concepts in social theory but have diffused into the larger culture and become less precise.

We create concepts from personal experience, creative thought, or observation. The clas-

sical theorists originated many concepts. Example concepts include *family system, gender role, socialization, self-worth, frustration,* and *displaced aggression.*

Some concepts, especially simple, concrete concepts such as *book* or *height,* can be defined through a simple nonverbal process. Most social science concepts are more complex and abstract. They are defined by formal, dictionary-type definitions that build on other concepts. It may seem odd to use concepts to define other concepts, but we do this all the time. For example, I defined *height* as a distance between top and bottom. *Top, bottom,* and *distance* are all concepts. We often combine simple, concrete concepts from ordinary experience to create more abstract concepts. *Height* is more abstract than *top* or *bottom.* Abstract concepts refer to aspects of the world we do not directly experience. They organize thinking and extend understanding of reality.

Researchers define scientific concepts more precisely than those we use in daily discourse. Social theory requires well-defined concepts. The definition helps to link theory with research. A valuable goal of exploratory research, and of most good research, is to clarify and refine concepts. Weak, contradictory, or unclear definitions of concepts restrict the advance of knowledge.

Concept Clusters. Concepts are rarely used in isolation. Rather, they form interconnected groups, or *concept clusters.* This is true for concepts in everyday language as well as for those in social theory. Theories contain collections of associated concepts that are consistent and mutually reinforcing. Together, they form a web of meaning. For example, if I want to discuss a concept such as *urban decay,* I will need a set of associated concepts (e.g., *urban expansion, economic growth, urbanization, suburbs, center city, revitalization, mass transit,* and *racial minorities*).

Some concepts take on a range of values, quantities, or amounts. Examples of this kind of concept are *amount of income, temperature, density of population, years of schooling,* and *degree of violence.* These are called *variables,* and you will read about them in a later chapter. Other concepts express types of nonvariable phenomena (e.g., *bureaucracy, family, revolution, homeless,* and *cold*). Theories use both kinds of concepts.

Classification Concepts. Some concepts are simple; they have one dimension and vary along a single continuum. Others are complex; they have multiple dimensions or many subparts. You can break complex concepts into a set of simple, or single-dimension, concepts. For example, Rueschemeyer and associates (1992:43–44) stated that democracy has three dimensions: (1) regular, free elections with universal suffrage; (2) an elected legislative body that controls government; and (3) freedom of expression and association. The authors recognized that each dimension varies by degree. They combined the dimensions to create a set of types of regimes. Regimes very low on all three dimensions are totalitarian, those high on all three are democracies, and ones with other mixes are either authoritarian or liberal oligarchies.

Classifications are partway between a single, simple concept and a theory.[4] They help to organize abstract, complex concepts. To create a new classification, a researcher logically specifies and combines the characteristics of simpler concepts. You can best grasp this idea by looking at some examples.

The *ideal type* is a well-known classification. Ideal types are pure, abstract models that define the essence of the phenomenon in question. They are mental pictures that define the central aspects of a concept. Ideal types are not explanations because they do not tell why or how something occurs. They are smaller than theories, and researchers use them to build a theory. They are broader, more abstract concepts that bring together several narrower, more concrete concepts. Qualitative researchers often use ideal types to see how well observable phenomena match up to the ideal model. For example, Max

Weber developed an ideal type of the concept *bureaucracy*. Many people use Weber's ideal type (see Box 2.1). It distinguishes a bureaucracy from other organizational forms (e.g., social movements, kingdoms, etc.). It also clarifies critical features of a kind of organization that people once found nebulous and hard to think about. No real-life organization perfectly matches the ideal type, but the model helps us think about and study bureaucracy.

Scope. Concepts vary by scope. Some are highly abstract, some are at a middle level of abstraction, and some are at a concrete level (i.e., they are easy to directly experience with the senses such as sight or touch). More abstract concepts have wider scope; that is, they can be used for a much broader range of specific time points and situations. More concrete concepts are easy to recognize but apply to fewer situations. The concepts *skin pigmentation, casting a ballot in an election,* and *age based on the date on a birth certificate* are less abstract and more concrete than the concepts *racial group, democracy,* and *maturity.* Theories that use many abstract concepts can apply to a wider range of social phenomena than those with concrete concepts. An example of a theoretical relationship is: Increased size creates centralization, which in turn creates greater formalization. *Size, centralization,* and *formalization* are very abstract concepts. They can refer to features of a group, organization, or society. We can translate this to say that as an organization or group gets bigger, authority and power relations within it become centralized and concentrated in a small elite. The elite will tend to rely more on written policies, rules, or laws to control and organize others in the group or organization. When you think explicitly about the scope of concepts, you make a theory stronger and will be able to communicate it more clearly to others.

Max Weber's Ideal Type of Bureaucracy

Box 2.1

- It is a continuous organization governed by a system of rules.
- Conduct is governed by detached, impersonal rules.
- There is division of labor, in which different offices are assigned different spheres of competence.
- Hierarchical authority relations prevail; that is, lower offices are under control of higher ones.
- Administrative actions, rules, and so on are in writing and maintained in files.
- Individuals do not own and cannot buy or sell their offices.
- Officials receive salaries rather than receiving direct payment from clients in order to ensure loyalty to the organization.
- Property of the organization is separate from personal property of officeholders.

Source: Adapted from Chafetz (1978:72).

Assumptions

Concepts contain built-in *assumptions*, statements about the nature of things that are not observable or testable. We accept them as a necessary starting point. Concepts and theories build on assumptions about the nature of human beings, social reality, or a particular phenomenon. Assumptions often remain hidden or unstated. One way for a researcher to deepen his or her understanding of a concept is to identify the assumptions on which it is based.

For example, the concept *book* assumes a system of writing, people who can read, and the existence of paper. Without such assumptions, the idea of a *book* makes little sense. A social science concept, such as *racial prejudice*, rests on several assumptions. These include people who make distinctions among individuals based on their racial heritage, attach specific motivations

and characteristics to membership in a racial group, and make judgments about the goodness of specific motivations and characteristics. If race became irrelevant, people would cease to distinguish among individuals on the basis of race, to attach specific characteristics to a racial group, and to make judgments about characteristics. If that occurred, the concept of *racial prejudice* would cease to be useful for research. All concepts contain assumptions about social relations or how people behave.

Relationships

Theories contain concepts, their definitions, and assumptions. More significantly, theories specify how concepts relate to one another. Theories tell us whether concepts are related or not. If they are related, the theory states how they relate to each other. In addition, theories give reasons for why the relationship does or does not exist. It is a relationship, such as: Economic distress among the White population caused an increase in mob violence against African Americans. When a researcher empirically tests or evaluates such a relationship, it is called a *hypothesis.* After many careful tests of a hypothesis with data confirm the hypothesis, it is treated as a *proposition.* A proposition is a relationship in a theory in which the scientific community starts to gain greater confidence and feels it is likely to be truthful.

THE ASPECTS OF THEORY

Theory can be baffling because it comes in so many forms. To simplify, we can categorize a theory by (1) the direction of its reasoning, (2) the level of social reality that it explains, (3) the forms of explanation it employs, and (4) the overall framework of assumptions and concepts in which it is embedded. Fortunately, all logically possible combinations of direction, level, explanation, and framework are not equally viable. There are only about half a dozen serious contenders.

Direction of Theorizing

Researchers approach the building and testing of theory from two directions. Some begin with abstract thinking. They logically connect the ideas in theory to concrete evidence, then test the ideas against the evidence. Others begin with specific observations of empirical evidence. On the basis of the evidence, they generalize and build toward increasingly abstract ideas. In practice, most researchers are flexible and use both approaches at various points in a study (see Figure 2.1).

Deductive. In a *deductive approach,* you begin with an abstract, logical relationship among concepts, then move toward concrete empirical evidence. You may have ideas about how the world operates and want to test these ideas against "hard data."

Weitzer and Tuch (2004, 2005) used a deductive approach in a study of perceptions of police misconduct. They began with Group Position theory (a middle-range theory discussed later) within the conflict theory framework (see Range of Theory later in this chapter). Group position theory states that dominant and subordinate racial–ethnic groups are in competition for resources and status in a multiethnic society that has a racial hierachy, and such competition affects racial beliefs and attitudes. Dominant groups believe they are entitled to privileges and a position of superiority, and they fear losing their privileges. Subordinate groups believe their position can be enhanced if they challenge the existing order. The authors deduced that group competition extends beyond attitudes to perceptions of social institutions, especially institutions of social control such as policing. They argued that subordinate group members (i.e., Blacks and Latino/Hispanics) would preceive police misconduct (measured as unjustified stops of citizens, verbal abuse by police, an excessive use of force, and police corruption) differently than members of the dominant group (Whites). The authors thought that perceptions operated via three mechanisms:

FIGURE 2.1 Deductive and Inductive Theorizing
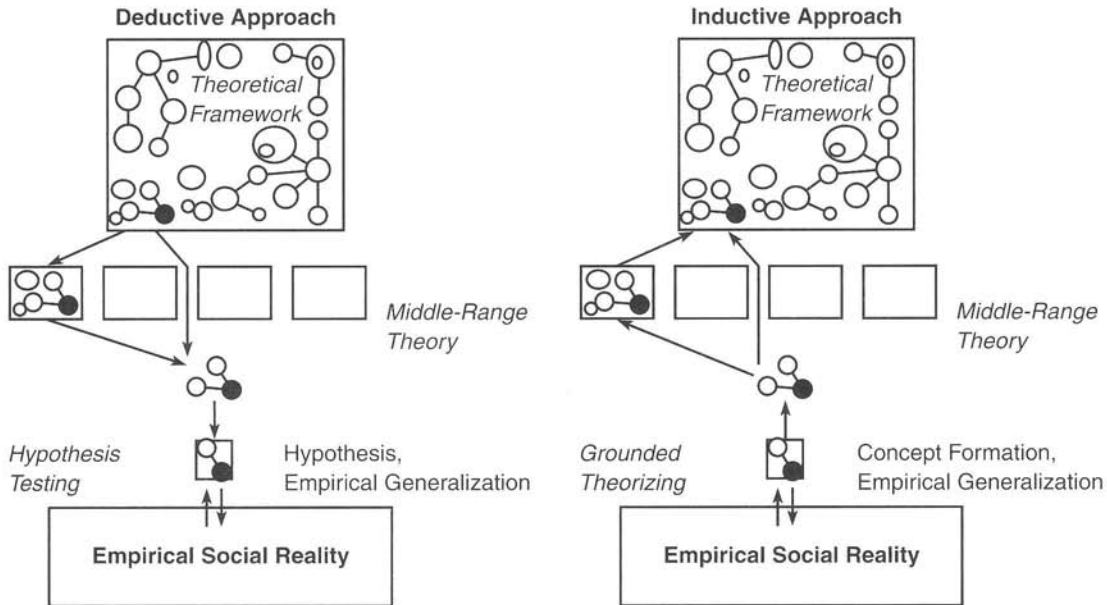
personal encounters with the police; reports of police encounters by friends, family, or neighbors; and noticing and interpreting news reports about police activity. In these three areas, they predicted that non-Whites would interpret negative events or reports as strong evidence of serious and systematic police misconduct. By constrast, Whites would tend to ignore or dismiss such events or reports or see them as isolated incidents. Data from a national survey of U.S. metropolitan areas (over 100,000 population) supported predictions of the theory.

Inductive. If you use an *inductive approach,* you begin with detailed observations of the world and move toward more abstract generalizations and ideas. When you begin, you may have only a topic and a few vague concepts. As you observe, you refine the concepts, develop empirical generalizations, and identify preliminary relationships. You build the theory from the ground up.

Duneier (1999) used an inductive approach in his study of life on the sidewalk. He noted that in much of social science, both quantitative secondary analysis research and qualitative field research, a researcher develops a theoretical understanding only after data have been collected. He stated, "I began to get ideas from the things I was seeing and hearing on the street" (p. 341). Many researchers who adopt an inductive approach use grounded theory. *Grounded theory* is part of an inductive approach in which a researcher builds ideas and theoretical generalizations based on closely examining and creatively thinking about the data (see Box 2.2). A researcher creates grounded theory out of a process of trying to explain, interpret, and render meaning from data. It arises from trying to account for, understand, or "make sense of" the evidence. Duneier (1999:342) has suggested that the process is similar to seeing many symptoms and later arriving at a diagnosis (i.e., a story that explains the source of the symptoms).

Box
2.2   **What Is Grounded Theory?**

Grounded theory is a widely used approach in qualitative research. It is not the only approach and it is not used by all qualitative researchers. *Grounded theory* is "a qualitative research method that uses a systematic set of procedures to develop an inductively derived theory about a phenomenon" (Strauss and Corbin, 1990:24). The purpose of grounded theory is to build a theory that is faithful to the evidence. It is a method for discovering new theory. In it, the researcher compares unlike phenomena with a view toward learning similarities. He or she sees micro-level events as the foundation for a more macro-level explanation. Grounded theory shares several goals with more positivist-oriented theory. It seeks theory that is comparable with the evidence that is precise and rigorous, capable of replication, and generalizable. A grounded theory approach pursues generalizations by making comparisons across social situations.

Qualitative researchers use alternatives to grounded theory. Some qualitative researchers offer an in-depth depiction that is true to an informant's worldview. They excavate a single social situation to elucidate the micro processes that sustain stable social interaction. The goal of other researchers is to provide a very exacting depiction of events or a setting. They analyze specific events or settings in order to gain insight into the larger dynamics of a society. Still other researchers apply an existing theory to analyze specific settings that they have placed in a macro-level historical context. They show connections among micro-level events and between micro-level situations and larger social forces for the purpose of reconstructing the theory and informing social action.

Range of Theory

Social theories operate with varying ranges. One source of the confusion about theories involves the range at which a theory operates. At one end are highly specific theories with concrete concepts of limited scope. At the opposite end are whole systems with many theories that are extremely abstract. As part of the task of theory building, verifying, and testing, a researcher connects theoretical statements of different ranges together, like a series of different-sized boxes that fit into one another or a set of Russian dolls.

Empirical Generalization.   An empirical generalization is the least abstract theoretical statement and has a very narrow range. It is a simple statement about a pattern or generalization among two or more concrete concepts that are very close to empirical reality. For example, "More men than women choose engineering as a college major." This summarizes a pattern between gender and choice of college major. It is

easy to test or observe. It is called a generalization because the pattern operates across many time periods and social contexts. The finding in the study on Internet pornography discussed in Chapter 1 that unhappily married men are more likely than happily married men to use Internet porn is an empirical generalization.

Middle-Range Theory.   Middle-range theories are slightly more abstract than empirical generalizations or a specific hypothesis. A middle-range theory focuses on a specific substantive topic area (e.g., domestic violence, military coups, student volunteering), includes a multiple empirical generalization, and builds a theoretical explanation (see Forms of Explanation later in this chapter). As Merton (1967:39) stated, "Middle-range theory is principally used in sociology to guide empirical inquiry." A middle-range theory used in a study discussed in Chapter 1 said that girls who suffer physical or sexual abuse experience self-blame and guilt feelings that inhibits them from developing a healthy social network or forming stable romantic

relationships, and that these factors lead to them staying single or experiencing greater marital instability when they become adults.

Theoretical Frameworks.   A theoretical framework (also called a paradigm or theoretical system) is more abstract than a middle-range theory. Figure 2.1 shows the levels and how they

are used in inductive and deductive approaches to theorizing. Few researchers make precise distinctions among the ranges of theorizing. They rarely use a theoretical framework directly in empirical research. A researcher may test parts of a theory on a topic and occasionally contrast parts of the theories from different frameworks. Box 2.3 illustrates the various degrees of abstrac-

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Box 2.3   **Kalmijn's Levels of Theory in "Shifting Boundaries" and Weitzer and Tuch's "Race and Perceptions of Police Misconduct"**

Theoretical Framework

Kalmijn.   Structural functionalism holds that the processes of industrialization and urbanization change human society from a traditional to a modern form. In this process of modernization, social institutions and practices evolve. This evolution includes those that fill the social system's basic needs, socialize people to cultural values, and regulate social behavior. Institutions that filled needs and maintained the social system in a traditional society (such as religion) are superseded by modern ones (such as formal schooling).

Weitzer and Tuch.   Conflict theory holds that established social, political, and legal institutions protect the dominant or privileged groups of a society. Major institutions operate in ways that contain or suppress the activities of nondominant groups in society, especially if they challenge or threaten the established social–economic hierarchy. Thus, conflict between the dominant and subordinate social groups is reflected in how major institutions operate, especially institutions that are charged with maintaining order and engaged in formal social control, such as law enforcement.

Middle-Range Substantive Theory

Kalmijn.   A theory of intermarriage patterns notes that young adults in modern society spend less time in small, local settings, where family, religion, and community all have a strong influence. Instead, young adults spend increasing amounts of time in school settings. In these settings, especially in col-

lege, they have opportunities to meet other unmarried people. In modern society, education has become a major socialization agent. It affects future earnings, moral beliefs and values, and leisure interests. Thus, young adults select marriage partners less on the basis of shared religious or local ties and more on the basis of common educational levels.

Weitzer and Tuch.   Group-position theory uses group competition over material rewards, power, and status to explain intergroup attitudes and behaviors. Each group perceives and experiences real or imagined threats to its social position differently. Members of a dominant group tend to view police or government actions taken to defend its interests as being fair or favorable, whereas members of subodorinate groups tend to see the same actions negatively.

Empirical Generalization

Kalmijn.   Americans once married others with similar religious beliefs and affiliation. This practice is being replaced by marriage to others with similar levels of education.

Weitzer and Tuch.   Non-Whites experience more negative interpersonal encounters with police and tend to interpret media reports about police misconduct as evidence of serious and systematic problems with the police. By contrast, Whites have different police encounters or interpret their encounters and media reports about police actions more favorably.

tion with Kalmijn's study of changing marriage partner selection (see also page 40).

Sociology and other social sciences have several major theoretical frameworks.[5] The frameworks are orientations or sweeping ways of looking at the social world. They provide collections of assumptions, concepts, and forms of explanation. Frameworks include theories for many substantive areas (e.g., theories of crime, theories of the family, etc.). Thus, there can be a structural functional theory, an exchange theory, and a conflict theory of the family. Theories within the same framework share assumptions and major concepts. Some frameworks are oriented more to the micro level; others focus more on macro-level phenomena (see Levels of Theory next). Box 2.4 shows four major frameworks

in sociology and briefly describes the key concepts and assumptions of each.

Levels of Theory

Social theories can be divided into three broad groupings by the level of social reality with which they deal. Most of us devote the majority of our time to thinking about the micro level of reality, the individuals we see and interact with on a day-by-day basis. *Micro-level theory* deals with small slices of time, space, or numbers of people. The concepts are usually not very abstract.

Brase and Richmond (2004) used a micro-level theory about doctor–patient interactions and perceptions. The theory stated that physican attire affects doctor–patient interactions. It sug-

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Box 2.4   Major Theoretical Frameworks in Sociology

Structural Functionalism

Major Concepts.   System, equilibrium, dysfunction, division of labor

Key Assumptions.   Society is a system of interdependent parts that is in equilibrium or balance. Over time, society has evolved from a simple to a complex type, which has highly specialized parts. The parts of society fulfill different needs or functions of the social system. A basic consensus on values or a value system holds society together.

Exchange Theory (also Rational Choice)

Major Concepts.   Opportunities, rewards, approval, balance, credit

Key Assumptions.   Human interactions are similar to economic transactions. People give and receive resources (symbolic, social approval, or material) and try to maximize their rewards while avoiding pain, expense, and embarrassment. Exchange relations tend to be balanced. If they are unbalanced, persons with credit can dominate others.

Symbolic Interactionism

Major Concepts.   Self, reference group, role-playing, perception

Key Assumptions.   People transmit and receive symbolic communication when they socially interact. People create perceptions of each other and social settings. People largely act on their perceptions. How people think about themselves and others is based on their interactions.

Conflict Theory

Major Concepts.   Power, exploitation, struggle, inequality, alienation

Key Assumptions.   Society is made up of groups that have opposing interests. Coercion and attempts to gain power are ever-present aspects of human relations. Those in power attempt to hold on to their power by spreading myths or by using violence if necessary.

gested that a patient makes judgments about a physician's abilities based on attire and that a patient's trust-openness toward a physican is also affected. It said that perceptions of physican authority increased with traditional professional formal attire over informal attire, but that trust-openness was influenced in the opposite direction as authority. Thirty-eight male and 40 female research participants rated their perceptions of same- and opposite-gender models who were identified as being medical doctors, but who were wearing different attire. Findings showed that a white coat and formal attire are clearly superior to casual attire in establishing physician authority, but it did not reduce trust-openness as expected.

Meso-level theory links macro and micro levels and operates at an intermediate level. Theories of organizations, social movements, and communities are often at this level.

Roscigno and Danaher (2001) used meso-level theory in a study on the 1930s labor movement among southern textile workers. The researchers used a theory of movement subculture and political opportunity to explain growing labor movement strength and increased strike activity among workers in one industry in a region of the United States across several years. They expected strike activity to grow as the result of a strong movement subculture that carried a message of injustice and a "political opportunity" or the expectation among people that collective action at a particular time would produce positive results. Their study showed that a technological innovation (i.e., the spread of new radio stations with songs and discussions of working conditions and unfair treatment) contributed to the growth of a subculture of movement solidarity among the textile workers and fostered self-identity as a worker who had common interests with the other textile workers. The technological innovation and events in the political environment (i.e., union organizers and speeches by the President of the United States) also created a political opportunity for the workers. The workers believed that collection action (i.e., strike) was necessary to achieve justice and

would produce gains because other workers and government authorities would support their actions.

Macro-level theory concerns the operation of larger aggregates such as social institutions, entire cultural systems, and whole societies. It uses more concepts that are abstract.

Marx's study (1998) on race in the United States, South Africa, and Brazil used a macro-level theory. He wanted to explain the conditions that led Black people to engage in protest to gain full citizenship rights and he examined patterns of national racial politics in three counties across two centuries. His theory said that protest resulted in an interaction between (1) race-based political mobilization and (2) national government policies of racial domination (i.e., apartheid in South Africa, Jim Crow laws in southern United States, and no legalized race-based domination in Brazil). Policies of racial domination developed from practices of slavery, exploitation, and discrimination that justified White superiority. The policies reinforced specific racial ideologies that shaped national development during the twentieth century. A critical causal factor was how national political elites used the legalized domination of Blacks to reduce divisions among Whites. In nations that had large regional or class divisions among Whites, national elites tried to increase White backing for the national government by creating legalized forms of racial domination. Over time, such legalized domination froze racial divisions, which promoted a sense of racial identity and consciousness among Blacks. The strong sense of racial identity became a key resource when Blacks mobilized politically to demand full citizenship rights. Legalized racial domination also intensified the Blacks' protest and directed it against the national government as the societal institution that reinforced their experience of racial inequality.

Forms of Explanation

Prediction and Explanation. A theory's primary purpose is to explain. Many people con-

fuse prediction with explanation. There are two meanings or uses of the term *explanation*. Researchers focus on *theoretical explanation*, a logical argument that tells why something occurs. It refers to a general rule or principle. These are a researcher's theoretical argument or connections among concepts. The second type of explanation, *ordinary explanation*, makes something clear or describes something in a way that illustrates it and makes it intelligible. For example, a good teacher "explains" in the ordinary sense. The two types of explanation can blend together. This occurs when a researcher explains (i.e., makes intelligible) his or her explanation (i.e., a logical argument involving theory).

Prediction is a statement that something will occur. It is easier to predict than to explain, and an explanation has more logical power than prediction because good explanations also predict. An explanation rarely predicts more than one outcome, but the same outcome may be predicted by opposing explanations. Although it is less powerful than explanation, many people are entranced by the dramatic visibility of a prediction.

A gambling example illustrates the difference between explanation and prediction. If I enter a casino and consistently and accurately predict the next card to appear or the next number on a roulette wheel, it will be sensational. I may win a lot of money, at least until the casino officials realize I am always winning and expel me. Yet, my method of making the predictions is more interesting than the fact that I can do so. Telling you what I do to predict the next card is more fascinating than being able to predict.

Here is another example. You know that the sun "rises" each morning. You can predict that at some time, every morning, whether or not clouds obscure it, the sun will rise. But why is this so? One explanation is that the Great Turtle carries the sun across the sky on its back. Another explanation is that a god sets his arrow ablaze, which appears to us as the sun, and shoots it across the sky. Few people today believe these ancient explanations. The explanation you probably accept involves a theory about the rotation of the earth and the position of the sun, the star of our solar system. In this explanation, the sun only appears to rise. The sun does not move; its apparent movement depends on the earth's rotation. We are on a planet that both spins on its axis and orbits around a star millions of miles away in space. All three explanations make the same prediction: The sun rises each morning. As you can see, a weak explanation can produce an accurate prediction. A good explanation depends on a well-developed theory and is confirmed in research by empirical observations.

Causal Explanation.   *Causal explanation*, the most common type of explanation, is used when the relationship is one of cause and effect. We use it all the time in everyday language, which tends to be sloppy and ambiguous. What do we mean when we say *cause*? For example, you may say that poverty causes crime or that looseness in morals causes an increase in divorce. This does not tell how or why the causal process works. Researchers try to be more precise and exact when discussing causal relations.

Philosophers have long debated the idea of cause. Some people argue that causality occurs in the empirical world, but it cannot be proved. Causality is "out there" in objective reality, and researchers can only try to find evidence for it. Others argue that causality is only an idea that exists in the human mind, a mental construction, not something "real" in the world. This second position holds that causality is only a convenient way of thinking about the world. Without entering into the lengthy philosophical debate, many researchers pursue causal relationships.

You need three things to establish causality: temporal order, association, and the elimination of plausible alternatives. An implicit fourth condition is an assumption that a causal relationship makes sense or fits with broader assumptions or a theoretical framework. Let us examine the three basic conditions.

The *temporal order* condition means that a cause must come before an effect. This commonsense assumption establishes the direction of causality: from the cause toward the effect. You may ask, How can the cause come after what it is to affect? It cannot, but temporal order is only one of the conditions needed for causality. Temporal order is necessary but not sufficient to infer causality. Sometimes people make the mistake of talking about "cause" on the basis of temporal order alone. For example, a professional baseball player pitches no-hit games when he kisses his wife just before a game. The kissing occurred before the no-hit games. Does that mean the kissing is the cause of the pitching performance? It is very unlikely. As another example, race riots occurred in four separate cities in 1968, one day after an intense wave of sunspots. The temporal ordering does not establish a causal link between sunspots and race riots. After all, all prior human history occurred before some specific event. The temporal order condition simply eliminates from consideration potential causes that occurred later in time.

It is not always easy to establish temporal order. With cross-sectional research, temporal order is tricky. For example, a researcher finds that people who have a lot of education are also less prejudiced than others. Does more education cause a reduction in prejudice? Or do highly prejudiced people avoid education or lack the motivation, self-discipline, and intelligence needed to succeed in school? Here is another example. The students who get high grades in my class say I am an excellent teacher. Does getting high grades make them happy, so they return the favor by saying that I am an excellent teacher (i.e., high grades cause a positive evaluation)? Or am I doing a great job, so students study hard and learn a lot, which the grades reflect (i.e., their learning causes them to get high grades)? It is a chicken-or-egg problem. To resolve it, a researcher needs to bring in other information or design research to test for the temporal order.

Simple causal relations are unidirectional, operating in a single direction from the cause to the effect. Most studies examine unidirectional relations. More complex theories specify reciprocal-effect causal relations—that is, a mutual causal relationship or simultaneous causality. For example, studying a lot causes a student to get good grades, but getting good grades also motivates the student to continue to study. Theories often have reciprocal or feedback relationships, but these are difficult to test. Some researchers call unidirectional relations nonrecursive and reciprocal-effect relations recursive.

A researcher also needs an *association* for causality. Two phenomena are associated if they occur together in a patterned way or appear to act together. People sometimes confuse correlation with association. *Correlation* has a specific technical meaning, whereas *association* is a more general idea. A correlation coefficient is a statistical measure that indicates the amount of association, but there are many ways to measure association. Figure 2.2 shows 38 people from a lower-income neighborhood and 35 people from an upper-income neighborhood. Can you see an association between race and income level?

More people mistake association for causality than confuse it with temporal order. For example, when I was in college, I got high grades on the exams I took on Fridays but low grades on those I took on Mondays. There was an association between the day of the week and the exam grade, but it did not mean that the day of the week caused the exam grade. Instead, the reason was that I worked 20 hours each weekend and was very tired on Mondays. As another example, the number of children born in India increased until the late 1960s, then slowed in the 1970s. The number of U.S.-made cars driven in the United States increased until the late 1960s, then slowed in the 1970s. The number of Indian children born and the number of U.S. cars driven are associated: They vary together or increase and decrease at the same time. Yet there is no causal connection. By coincidence, the Indian government instituted a birth control program that slowed the number of births at the same time that Americans were buying more imported cars.

FIGURE 2.2   Association of Income and Race

Lower Income   Upper Income
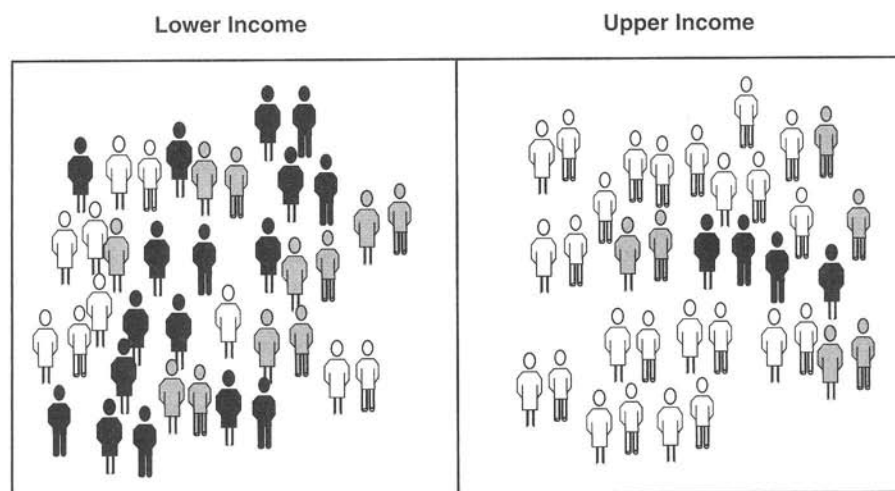
If a researcher cannot find an association, a causal relationship is unlikely. This is why researchers attempt to find correlations and other measures of association. Yet, a researcher can often find an association without causality. The association eliminates potential causes that are not associated, but it cannot definitely identify a cause. It is a necessary but not a sufficient condition. In other words, you need it for causality, but it is not enough alone.

An association does not have to be perfect (i.e., every time one variable is present, the other also is) to show causality. In the example involving exam grades and days of the week, there is an association if on 10 Fridays I got 7 As, 2 Bs, and 1 C, whereas my exam grades on 10 Mondays were 6 Ds, 2 Cs, and 2 Bs. An association exists, but the days of the week and the exam grades are not perfectly associated. The race and income-level association shown in Figure 2.2 is also an imperfect association.

Eliminating alternatives means that a researcher interested in causality needs to show that the effect is due to the causal variable and not to something else. It is also called *no spuriousness* because an apparent causal relationship that is actually due to an alternative but unrec-

ognized cause is called a spurious relationship, which is discussed in Chapter 4 (see Box 2.5).

Researchers can observe temporal order and associations. They cannot observe the elimination of alternatives. They can only demonstrate it indirectly. Eliminating alternatives is an ideal because eliminating all possible alternatives is impossible. A researcher tries to eliminate major alternative explanations in two ways: through built-in design controls and by measuring potential hidden causes. Experimental researchers build controls into the study design itself to eliminate alternative causes. They isolate an experimental situation from the influence of all variables except the main causal variable.

Researchers also try to eliminate alternatives by measuring possible alternative causes. This is common in survey research and is called *controlling for* another variable. Researchers use statistical techniques to learn whether the causal variable or something else operates on the effect variable.

Causal explanations are usually in a linear form or state cause and effect in a straight line: *A* causes *B*, *B* causes *C*, *C* causes *D*.

The study by Brase and Richmond (2004) on doctor–patient interactions discussed earlier

Box 2.5   Learning to See Causal Relations

As I was driving home from the university one day, I heard a radio news report about gender and racial bias in standardized tests. A person who claimed that bias was a major problem said that the tests should be changed. Since I work in the field of education and disdain racial or gender bias, the report caught my attention. Yet, as a social scientist, I critically evaluated the news story. The evidence for a bias charge was the consistent pattern of higher scores in mathematics for male high school seniors versus female high school seniors, and for European-background students versus African American students. Was the cause of the pattern of different test scores a bias built into the tests?

When questioned by someone who had designed the tests, the person charging bias lacked a crucial piece of evidence to support a claim of test bias: the educational experience of students. It turns out that girls and boys take different numbers and types of mathematics courses in high school. Girls tend to take fewer math courses. Among the girls who complete the same mathematics curriculum as boys, the gender difference dissolves. Likewise, a large percentage of African Americans attend racially segregated, poor-quality schools in inner cities or in impoverished rural areas. For African Americans who attend high-quality suburban schools and complete the same courses, racial differences in test scores disappear. This evidence suggests that inequality in education causes test score differences. Although the tests may have problems, identifying the real cause implies that changing the tests without first improving or equalizing education could be a mistake.

used a causal explanation; it said physician attire causes certain types of patient perceptions. The study by Weitzer and Tuch (2004, 2005) on police misconduct cited earlier used a causal explanation. The cause was a person's group position and competitive pressure with other groups. These are causally linked to police encounters, either directly or indirectly, and interpretions of news reports, which differ by group position. The police encounters and the interpretations of news reports cause very different perceptions of police misconduct. We can restate the logic in a deductive causal form: If the proposition is true, then we observe certain things in the empirical evidence. Good causal explanations identify a causal relationship and specify a causal mechanism. A simple causal explanation is: X causes Y or Y occurs because of X, where X and Y are concepts (e.g., early marriage and divorce). Some researchers state causality in a predictive form: If X occurs, then Y follows. Causality can be stated in many ways:

X leads to Y, X produces Y, X influences Y, X is related to Y, the greater X the higher Y.

Here is a simple causal theory: A rise in unemployment causes an increase in child abuse. The subject to be explained is an increase in the occurrence of child abuse. What explains it is a rise in unemployment. We "explain" the increase in child abuse by identifying its cause. A complete explanation also requires elaborating the causal mechanism. My theory says that when people lose their jobs, they feel a loss of self-worth. Once they lose self-worth, they become easily frustrated, upset, and angry. Frustrated people often express their anger by directing violence toward those with whom they have close personal contact (e.g., friends, spouse, children, etc.). This is especially true if they do not understand the source of the anger or cannot direct it toward its true cause (e.g., an employer, government policy, or "economic forces").

The unemployment and child abuse example illustrates a chain of causes and a causal

mechanism. Researchers can test different parts of the chain. They might test whether unemployment rates and child abuse occur together, or whether frustrated people become violent toward the people close to them. A typical research strategy is to divide a larger theory into parts and test various relationships against the data.

Relationships between variables can be positive or negative. Researchers imply a positive relationship if they say nothing. A *positive relationship* means that a higher value on the causal variable goes with a higher value on the effect variable. For example, the more education a person has, the longer his or her life expectancy is. A *negative relationship* means that a higher value on the causal variable goes with a lower value on the effect variable. For example, the more frequently a couple attends religious services, the lower the chances of their divorcing each other. In diagrams, a plus sign (+) signifies a positive relationship and a negative sign (−) signifies a negative relationship.

Structural Explanation. A *structural explanation* is used with three types of theories: network, sequential, and functional theories. Unlike a causal effect chain, which is similar to a string of balls lined up that hit one another causing each to bounce in turn, it is more similar to a wheel with spokes from a central idea or a spider web in which each strand forms part of the whole. A researcher making a structural explanation uses a set of interconnected assumptions, concepts, and relationships. Instead of causal statements, he or she uses metaphors or analogies so that relationships "make sense." The concepts and relations within a theory form a mutually reinforcing system. In structural explanations, a researcher specifies a sequence of phases or identifies essential parts that form an interlocked whole.

Structural explanations are used in network theory. Sanders, Nee, and Sernau (2002) explained Asian immigrant job seeking with network theory. They used interview data on immigrants from the Philippines, Korea, Taiwan, and China in Los Angeles and found that social networks matched and sorted immigrants with jobs. New immigrants with limited language and job skills sought employment either with a co-ethnic employer or through informal social ties (i.e., they consulted experienced friends, relatives, and acquaintances and asked them to be intermediaries). Network users expanded job opportunities beyond employers in their own ethnic group. Thus, ethnic network ties were "bridge ties" (i.e., they helped immigrants get jobs beyond their ethnic community by using co-ethnics who already made the transition to mainstream employment). Over time, as language and job skills improved, these immigrants moved on to mainstream jobs. Immigrants lacking social ties, in limited networks, or who worked for co-ethnics found it difficult to get a mainstream job. Thus, a person's network location, access to a large and diverse network, and use of network ties is what facilitated obtaining a mainstream job.

Structural explanations are also used in sequence theory. The panel study on volunteerism by Oesterle, Johnson, and Mortimer (2004) discussed in Chapter 1 employs sequence theory. The authors used a "life course" perspective in which the impact of an event happening at one phase of a person's life differs what it would have been if the same happened at other phases, and early events generally shape events in later phases. The authors noted that the transition to adulthood is a critical stage when a person learns new social roles and adult expectations. They found that the amounts and types of volunteer activity in the last stage they observed (age 26–27) was strongly influenced by such activities at prior stages of a person's life (age 18–19). People who volunteered at an early stage tended to volunteer at later stages. Those who did not volunteer at an early stage or who devoted full time to working or parenting at other prior stages (18–19 years old) were less likely to volunteer at a later stage (26–27 years

old). Thus, later events flowed from an interconnected process in which earlier stages set a course or direction that pointed to specific events in a later stage.

Additionally, structural explanations are used in *functional theory*.[6] Functional theorists explain an event by locating it within a larger, ongoing, balanced social system. They often use biological metaphors. These researchers explain something by identifying its function within a larger system or the need it fulfills for the system. Functional explanations are in this form: "*L* occurs because it serves needs in the system *M*." Theorists assume that a system will operate to stay in equilibrium and to continue over time. A functional theory of social change says that, over time, a social system, or society, moves through developmental stages, becoming increasingly differentiated and more complex. It evolves a specialized division of labor and develops greater individualism. These developments create greater efficiency for the system as a whole. Specialization and individualism create temporary disruptions. The traditional ways of doing things weaken, but new social relations emerge. The system generates new ways to fulfill functions or satisfy its needs.

Kalmijn (1991) used a functional explanation to explain a shift in how people in the United States select marriage partners. He relied on secularization theory, which holds that ongoing historical processes of industrialization and urbanization shape the development of society. During these modernization processes, people rely less on traditional ways of doing things. Religious beliefs and local community ties weaken, as does the family's control over young adults. People no longer live their entire lives in small, homogeneous communities. Young adults become more independent from their parents and from the religious organizations that formerly played a critical role in selecting marriage partners.

Society has a basic need to organize the way people select marriage partners and find partners with whom they share fundamental values.

In modern society, people spend time away from small local settings in school settings. In these school settings, especially in college, they meet other unmarried people. Education is a major socialization agent in modern society. Increasingly, it affects a person's future earnings, moral beliefs and values, and ways of spending leisure time. This explains why there has been a trend in the United States for people to marry less within the same religion and increasingly to marry persons with a similar level of education. In traditional societies, the family and religious organization served the function of socializing people to moral values and linking them to potential marriage partners who held similar values. In modern society, educational institutions largely fulfill this function for the social system.

Interpretive Explanation. The purpose of an *interpretive explanation* is to foster understanding. The interpretive theorist attempts to discover the meaning of an event or practice by placing it within a specific social context. He or she tries to comprehend or mentally grasp the operation of the social world, as well as get a feel for something or to see the world as another person does. Because each person's subjective worldview shapes how he or she acts, the researcher attempts to discern others' reasoning and view of things. The process is similar to decoding a text or work of literature. Meaning comes from the context of a cultural symbol system.

Duneier's (1999) study of sidewalk life in New York City discussed earlier in this chapter used an interpretive explanation. An interpretive explanation is also illustrated by Edelman, Fuller, and Mara-Drita's (2001) study of how companies adopted policies related to diversity issues in the early 1990s—that is, affirmative action and equal opportunity. The authors examined what managers said, or their rhetoric, about diversity concerns. Rhetoric included various statements about diversity made by professional managers, business school professors, and con-

sultants in professional workshops, meetings, specialized magazines, and electronic forums.

Edelman and colleagues (2001) found that managers took legal ideas, terms, and concepts and converted them into ones that fit into their organizational setting. Professional managers converted vague legal mandates and terms that were based on ideas about racial discrimination and ending injustice. They interjected their own views, values, training, and interests and produced slightly different ideas and procedures. Management rhetoric changed legal ideas from taking specific actions to end racial–ethnic or gender discrimination and changed them into a "new idea" for effective corporate management. The "new idea" was that corporations benefit from a culturally diverse workforce. Simply put, diversity is good for company profits. They consolidated various studies and discussions on how to improve corporate operations around the new idea—a socially heterogeneous workforce is more creative, productive, and profitable.

The authors created a theory of "managerialization of law" from their data. This theory states that professional managers operate in a corporate environment. They will not simply take ideas and mandates created in a government-legal environment and impose them directly onto a corporation's internal operations. In fact, on the issue of affirmative action, many corporate officials saw the legal ideas and requirements as hostile or alien. So the managers converted, or translated, the legal ideas into an acceptable form—one acceptable from a managerial point of view. They used new forms to move their corporations in a direction that would comply with the legal requirements. This is an interpretive explanation because the authors explained a social event (i.e., corporations embracing programs and rhetoric to favor cultural diversity) by examining how the managers subjectively constructed new ways of looking at, thinking about, and talking about the diversity issue (i.e., they constructed a new interpretation).

THE THREE MAJOR APPROACHES TO SOCIAL SCIENCE

We began this chapter by looking at small-scale parts of a theory (i.e., ideas or concepts). We moved toward larger aspects of social theory, and arrived at major theoretical frameworks in the last section. Now, we move to an even a broader, more abstract level of the linkage between theory and research—fundamental approaches to social science. It involves issues sometimes called *meta-methodological* (i.e., beyond or supersized methodological concerns) and blurs into areas of philosophy that studies what science means. We only briefly touch on the issues here, but we cannot ignore them because they affect how people do social research studies.

About 45 years ago, a now famous philosopher of science, Thomas Kuhn, argued that the way science develops in a specific field across time is based on researchers sharing a general approach, or paradigm. A *paradigm* is an integrated set of assumptions, beliefs, models of doing good research, and techniques for gathering and analyzing data. It organizes core ideas, theoretical frameworks, and research methods. Kuhn observed that scientific fields tend to be held together around a paradigm for a long period of time. Very few researchers question the paradigm, and most focus on operating within its general boundaries to accumulate new knowledge. On rare occasions in history, intellectual difficulties increase, unexpected issues grow, and troubling concerns over proper methods multiply. Slowly, the members of a scientific field shift in how they see things and switch to a new paradigm. Once the new paradigm becomes fully established and widely adopted, the process of accumulating knowledge begins anew.

Kuhn's explanation covered how most sciences operate most of the time, but some fields operate with multiple or competing paradigms. This is the case in several of the social sciences. This greatly bothers some social scientists, and they believe having multiple paradigms hinders

the growth of knowledge. They see multiple paradigms as a sign of the immaturity or underdevelopment of the "science" in the social sciences. Some believe all social science researchers should embrace a single paradigm and stop using alternatives to it.

Other social scientists accept the coexistence of multiple paradigms. They recognize that this can be confusing and often makes communicating difficult among those who use a different approach. Despite this, they argue that each social science paradigm provides important kinds of knowledge and insights, so to drop one would limit what we can learn about the social world. These social scientists note that no one definitely can say which approach is "best" or even whether it is necessary or highly desirable to have only one paradigm. So instead of closing off an approach that offers innovative ways to study social life and gain insight into human behavior, they argue for keeping a diversity of approaches.

In this section, we will look at three fundamental paradigms or approaches used in social science. Each approach has been around for over 150 years and is used by many highly respected professional researchers. These approaches are unequal in terms of the number of followers, quantity of new studies, and types of issues addressed. Often, people who strongly adhere to one approach disagree with researchers who use another, or see the other approaches as being less valuable or less "scientific" than their approach. Although adherents to each approach may use various research techniques, theories, and theoretical frameworks, researchers who adopt one approach tend to favor certain research techniques, theories, or theoretical frameworks over others. The three approaches are positivism, interpretive, and critical; each has internal divisions, offshoots, and extensions, but these are the core ideas of the three major approaches.

Positivist Approach

Positivism is the most widely practiced social science approach, especially in North America.

Positivism sees social science research as fundamentally the same as natural science research; it assumes that social reality is made up of objective facts that value-free researchers can precisely measure and use statistics to test causal theories. Large-scale bureaucratic agencies, companies, and many people in the general public favor a positivist approach because it emphasizes getting objective measures of "hard facts" in the form of numbers.

Positivists put a great value on the principle of replication, even if only a few studies are replicated. *Replication* occurs when researchers or others repeat the basics of a study and get identical or very similar findings. Positivists emphasize replication and the ultimate test of knowledge. This is because they believe that different observers looking at the same facts will get the same results if they carefully specify their ideas, precisely measure the facts, and follow the standards of objective research. When many studies by independent researchers yield similar findings, confidence grows that we accurately captured the workings of social reality and therefore scientific knowledge increases.

If a researcher repeats a study and does not get similar findings, one or more of five possibilities may be occurring: (1) the initial study was an unusual fluke or based on a misguided understanding of the social world; (2) important conditions were present in the initial study, but no one was aware of their significance so they were not specified; (3) the initial study, or the repeat of it, was sloppy—it did not include very careful, precise measures; (4) the initial study, or the repeat of it, was improperly conducted—researchers failed to closely follow the highest standards for procedures and techniques, or failed to be completely objective; or (5) the repeated study was an unusual fluke.

The positivist approach is *nomothetic;* it means explanations use law or law-like principles. Positivists may use inductive and deductive inquiry, but the ideal is to develop a general causal law or principle then use logical deduction to specify how it operates in concrete situa-

tions. Next, the researcher empirically tests outcomes predicted by the principle in concrete settings using very precise measures. In this way, a general law or principle covers many specific situations. For example, a general principle says that when two social groups are unequal and compete for scarce resources, in-group feelings and hostility toward the other groups intensify, and the competing groups are likely to engage in conflict. The principle applies to sports teams, countries, ethnic groups, families, and other social groupings. A researcher might deduce that in cities with high levels of interracial inequality, when jobs become more scarce and thereby increase economic competition, each group will express greater hostility about the other racial groups, and intergroup conflict (e.g., riots, demonstrations, violent attacks) will increase.

The vast majority of positivist studies are quantitative, and positivists generally see the experiment as the ideal way to do research. Positivist researchers also use other quantitative research techniques, such as surveys or existing statistics, but tend to see them as approximations of the experiment for situations where an experiment is impossible. Positivist researchers advocate value-free science, seek precise quantitative measures, test causal theories with statistics, and believe in the importance of replicating studies.

Interpretive Approach

The interpretive approach is also scientific, but its sees the idea of "scientific" differently from positivism. Unlike the positivist approach, interpretive researchers say that human social life is qualitatively different from other things studied by science. This means that social scientists cannot just borrow the principles of science from the natural sciences. Instead, they believe it is necessary to create a special type of science, one based on the uniqueness of humans and one that can really capture human social life.

Most researchers who use an interpretive approach adopt a version of the constructionist view of social reality. This view holds that human social life is based less on objective, hard, factual reality than on the ideas, beliefs, and perceptions that people hold about reality. In other words, people socially interact and respond based as much, if not more, on what they believe to be real than what is objectively real. This means that social scientists will be able to understand social life only if they study how people go about constructing social reality. As people grow up, interact, and live their daily lives, they continuously create ideas, relationships, symbols, and roles that they consider to be meaningful or important. These include things such as intimate emotional attachments, religious or moral ideals, beliefs in patriotic values, racial–ethnic or gender differences, and artistic expressions. Rarely do people relate to the objective facts of reality directly; instead, they do so through the filter of these socially constructed beliefs and perceptions. What positivists and many people view to be objective facts (e.g., a person's height), interpretive researchers say are only at the trivial surface level of social life. Or, the "facts" are images/categories that humans created (i.e., I am two meters tall) and we "forget" that people originated the images/categories but now treat them as being separate from people and objectively real.

Interpretive researchers are skeptical of the positivist attempts to produce precise quantitative measures of objective facts. This is because they view social reality as very fluid. For most humans, social reality is largely the shifting perceptions that they are constantly constructing, testing, reinforcing, or changing and that have become embedded in social traditions or institutions. For this reason, interpretive researchers tend to trust and favor qualitative data. They believe that qualitative data can more accurately capture the fluid processes of social reality. In addition, they favor interpretive over causal forms of theory (see discussion earlier in this chapter).

Interpretive researchers are not likely to adopt a nomothetic approach, but instead favor

an idiographic form of explanation and use inductive reasoning. *Idiographic* literally means specific description and refers to explaining an aspect of the social world by offering a highly detailed picture or description of a specific social setting, process, or type of relationship. For example, qualitative researchers do not see replication as the ultimate test of knowledge. Instead, they emphasize *verstehen* or empathetic understanding. *Verstehen* is the desire of a researcher to get inside the worldview of those he or she is studying and accurately represent how the people being studied see the world, feel about it, and act. In other words, the best test of good social knowledge is not replication but whether the researcher can demonstrate that he or she really captured the inner world and personal perspective of the people studied.

Critical Approach

The critical approach shares many features with an interpretive approach, but it blends an objective/materialist with a constructionist view of social reality. The key feature of the critical approach is a desire to put knowledge into action and a belief that research is not value free. Research is the creation of knowledge, and people regularly use knowledge to advance political-moral ends. This gives doing social research a strong connection to political-moral issues. The researcher can decide to ignore and help those with power and authority in society, or advance social justice and empower the powerless.

Critical approach emphasizes the multilayered nature of social reality. On the surface level, there is often illusion, myth, and distorted thinking. The critical approach notes that people are often misled, are subject to manipulated messages, or hold false ideas. Yet, beneath the surface level at a deeper, often hidden level lies "real" objective reality. Part of the task of social research is to strip away the surface layer of illusion or falsehood. Although a researcher wants to see beyond this layer, he or she does not entirely ignore it. Such an outer layer is important

because it profoundly shapes much of human action.

The critical approach has an activist orientation and favors action research. *Praxis* is the ultimate test of how good an explanation is in the critical approach. It is a blending of theory and concrete action; theory informs one about the specific real-world actions one should take to advance social change, and one uses the experiences of engaging in action for social change to reformulate the theory. All the approaches see a mutual relationship between abstract theory and concrete empirical evidence, but the critical approach goes further and tries to dissolve the gap between abstract theory and the empirical experiences of using the theory to make changes in the world.

THE DYNAMIC DUO

You have seen that theory and research are interrelated. Only the naive, new researcher mistakenly believes that theory is irrelevant to research or that a researcher just collects the data. Researchers who attempt to proceed without theory may waste time collecting useless data. They easily fall into the trap of hazy and vague thinking, faulty logic, and imprecise concepts. They find it difficult to converge onto a crisp research issue or to generate a lucid account of their study's purpose. They also find themselves adrift as they attempt to design or conduct empirical research.

The reason is simple. Theory frames how we look at and think about a topic. It gives us concepts, provides basic assumptions, directs us to the important questions, and suggests ways for us to make sense of data. Theory enables us to connect a single study to the immense base of knowledge to which other researchers contribute. To use an analogy, theory helps a researcher see the forest instead of just a single tree. Theory increases a researcher's awareness of interconnections and of the broader significance of data (see Table 2.1).

TABLE 2.1   **Major Aspects and Types of Social Theory**

Aspect	Types of Social Theory
Direction	Inductive or deductive
Level	Micro, meso, or macro
Explanation	Causal, interpretive, or structural
Abstraction	Empirical generalization, middle range, framework, or paradigm

Theory has a place in virtually all research, but its prominence varies. It is generally less central in applied-descriptive research than in basic-explanatory research. Its role in applied and descriptive research may be indirect. The concepts are often more concrete, and the goal is not to create general knowledge. Nevertheless, researchers use theory in descriptive research to refine concepts, evaluate assumptions of a theory, and indirectly test hypotheses.

Theory does not remain fixed over time; it is provisional and open to revision. Theories grow into more accurate and comprehensive explanations about the make-up and operation of the social world in two ways. They advance as theorists toil to think clearly and logically, but this effort has limits. The way a theory makes significant progress is by interacting with research findings.

The scientific community expands and alters theories based on empirical results. Researchers who adopt a more deductive approach use theory to guide the design of a study and the interpretation of results. They refute, extend, or modify the theory on the basis of results. As researchers continue to conduct empirical research in testing a theory, they develop confidence that some parts of it are true. Researchers may modify some propositions of a theory or reject them if several well-conducted studies have negative findings. A theory's core propositions and central tenets are more difficult to test and are refuted less often. In a slow process, researchers may decide to abandon or change a theory as the evidence against it mounts over time and cannot be logically reconciled.

Researchers adopting an inductive approach follow a slightly different process. Inductive theorizing begins with a few assumptions and broad orienting concepts. Theory develops from the ground up as the researchers gather and analyze the data. Theory emerges slowly, concept by concept and proposition by proposition in a specific area. The process is similar to a long pregnancy. Over time, the concepts and empirical generalizations emerge and mature. Soon, relationships become visible, and researchers weave together knowledge from different studies into more abstract theory.

CONCLUSION

In this chapter, you learned about social theory—its parts, purposes, and types. The dichotomy between theory and research is an artificial one. The value of theory and its necessity for conducting good research should be clear. Researchers who proceed without theory rarely conduct top-quality research and frequently find themselves in a quandary. Likewise, theorists who proceed without linking theory to research or anchoring it to empirical reality are in jeopardy of floating off into incomprehensible speculation and conjecture. You are now familiar with the scientific community, the dimensions of research, and social theory.

Key Terms

association
assumption
blame analysis
causal explanation
classification concept
concept cluster

deductive approach
empirical generalization
functional theory
grounded theory
ideal type
idiographic
inductive approach
macro-level theory
meso-level theory
micro-level theory
negative relationship
nomothetic
paradigm
positive relationship
praxis
prediction
proposition
replication
verstehen

Endnotes

1. See Felson (1991), Felson and Felson (1993), and Logan (1991) for a discussion of blame analysis.
2. For more detailed discussions of concepts, see Chafetz (1978:45–61), Hage (1972:9–85), Kaplan (1964:34–80), Mullins (1971:7–18), Reynolds (1971), and Stinchcombe (1968, 1973).
3. Turner (1980) discussed how sociological explanation and theorizing can be conceptualized as translation.
4. Classifications are discussed in Chafetz (1978: 63–73) and Hage (1972).
5. Introductions to alternative theoretical frameworks and social theories are provided in Craib (1984), Phillips (1985:44–59), and Skidmore (1979).
6. An introduction to functional explanation can be found in Chafetz (1978:22–25).