

Theory and Research

What Is Theory?
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One of the major functions of theory is to order experience with the help of concepts. It also selects relevant aspects and data among the enormous multitude of "facts" that confront the investigator of social phenomena.

—Lewis Coser, "The Uses of Classical Sociological Theory," p. 170

The percent of people who regularly smoke cigarettes has declined in the United States. We suspect that the decline is due to public campaigns that warned about the dangers of smoking to health. We find that more educated, higher income people tend to smoke less than less educated and low-income people. A theory of social resources suggests that this is because people who are educated and have higher incomes read more, have a long-term time horizon, and have more resources to make lifestyle adjustments compared to less educated and low-income people. However, smoking is more than a health issue. It can also be a symbolic fashion statement and lifestyle issue of cultural taste. Likewise, education and income level indicate more than knowledge and resources but also suggest membership in different class cultures (i.e., the ways people of different social classes culturally distinguish themselves). A theory of cultural taste suggests that people adopting an upper-middle-class lifestyle would not smoke because it is culturally less fashionable for their class. In contrast, people who adopt a working-class lifestyle would be more likely to smoke in part because it is a feature of their class culture. Other aspects of class culture include music taste. Highly educated, high-income people tend to prefer classical music while less educated, low-income prefer bluegrass and heavy metal music. Logically, a theory of cultural taste implies that taste in music is related to smoking because of the different class lifestyles. This is exactly what Pampel (2006) found is happening. But the results are even more interesting. Both well-educated, high-income people and less educated, low-income people tend to enjoy jazz. The jazz subculture has long included smoking. Consistent with cultural taste theory, Pampel found that jazz lovers are more likely to smoke than nonjazz lovers of the same social class.

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The connection between a person's musical taste and his or her smoking behavior outlined in the preceding box may be unexpected, but it illustrates the power of theory and its influence on research. Theory helps us to understand the complexities of social life. It not only explains why people do what they do but also offers us insights and suggests directions for inquiry. As the theory of cultural taste that led Pampel to ask new questions and reexamine smoking behavior illustrated, a theory can provide concepts with which we can explore and think about the social world in novel ways. It also shows how different theories provide competing ways to explain events.

Many beginning students fear theory. They feel it is a maze of obscure jargon and many abstractions that are irrelevant to daily life. I hope you come to see that theory is not only useful but also vital for comprehending the social world around you. Theory does many things: It clarifies thinking, extends understanding, deepens discussion, and enriches analysis. It has a critical role in advancing knowledge and in organizing the way that we conduct research. This chapter is an elementary introduction to social theory.

My students share their anxieties and confusion over social theory with me. One source of confusion is that few understand what social theory really involves. It does not help that *theory* has multiple meanings and takes several forms. Even professionals debate the meaning of theory and have given it several meanings.

1. A *theory* is a logically connected set of general propositions that establishes a connection between two or more variables.
2. A *theory* is an explanation of a specific social phenomenon that identifies a set of causally relevant factors or conditions.
3. A *theory* provides insights into the real meaning of a social phenomenon by offering an illuminating interpretation and by telling us "what it is all about."
4. A *theory* is what a famous social thinker really meant.

5. A *theory* is an entire worldview, or a way of seeing, interpreting, and understanding events in the world.
6. A *theory* is a criticism based on a political-moral viewpoint; it presents and stands for a set of beliefs-values from which it critiques the position and arguments of opponents.
7. A *theory* is a philosophical commentary on key questions or issues about core issues of how we develop knowledge about the social world (e.g., how we really construct a sense of social reality).

Source: Gabriel Abend, The Meaning of 'Theory,' *Sociological Theory*, Volume 26 Issue 2, May 28, 2008, pages 173–199.

A source of confusion regarding theory is that most of us encounter and use similar-looking but nontheory explanations in daily life. Theories are explanations but not the only source of explanations. Explanations offer ideas for making sense of things and tell us what is important, why people do what they do, and how events in the world fit together. We can hear explanations in conversations with friends, on television shows, from politicians and business leaders, in newspaper reports, and even via films. They are explanations but fall short of ones offered by social theory.

Many people become anxious when encountering unfamiliar abstract ideas. We all recognize that the world has both concrete events and physical objects that we can touch and see (e.g., holding this book) as well as abstract ideas that reside in our minds (e.g., the meaning of freedom and justice). When we encounter many unfamiliar abstract ideas and the ideas are poorly defined, whether intentionally or not, we quickly experience anxiety and frustration. Social theory consists of interconnected abstract ideas. Some of the ideas are linked only loosely to the observable world or familiar ideas. Until we learn a theory's ideas and see their connections, it is no surprise that discussing abstract ideas can make us feel uncomfortable.

A last source of confusion relates directly to doing research. A few of us as researchers fail to make theory explicit and easy to see. Although it takes a little more time and effort, when a study's

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theory is clear and visible, we can all more easily evaluate the study's strengths and weaknesses.

WHAT IS THEORY?

Social theory is a system of interconnected ideas. It condenses and organizes knowledge about the social world. We can also think of it as a type of systematic "story telling" that explains how some aspect of the social world works and why.

Many courses in social theory emphasize the history of social thought or teach us what great thinkers said. Classical social theorists (e.g., Durkheim, Marx, Mills, Tonnies, and Weber) generated many innovative ideas. They radically changed how we see and understand the social world around us by developing highly original, broad theories that laid the foundation for subsequent generations. We continue to study their writings because they offered many creative and interrelated ideas. Such true geniuses who can generate many insightful ideas and fundamentally shift how we see the social world are very rare. Despite the value of their contributions, theory is more than what the classical social theorists wrote. It is also more than we learn from recent leading theorists (e.g., Jeffrey Alexander, Pierre Bourdieu, James Coleman, Michel Foucault, Anthony Giddens, and Erving Goffman). Although theorists generate many new ideas and theories, we all can use theory.

Theories are not static. We are constantly modifying older theories and developing new ones. Theories come in many shapes and sizes. Some are broad systems of thought while others are narrow and specific explanations of one particular issue. At their core, we use social theories to organize and systematize our thinking and to deepen and extend understanding. Because they organize knowledge, theories also become a way to communicate effectively with one another.

Most likely, we all encounter social theories in daily life, although few are explicit or labeled as such. For example, newspaper articles or television reports on social issues usually rely on implicit social theories or partial theories. Such theories may be shallow and incomplete, but they contain

assumptions, interconnected concepts, and explanations. For example, a news report might discuss public support or opposition over an issue such as legalizing same-sex marriage. The report might provide a type of social theory to explain why legalizing it is controversial; it might say that opposition originates with religious organizations and people who are afraid of disrupting traditional social values. This theory has several assumptions: Religious organizations can influence new laws, some people fight to preserve past or current social norms, and some religious organizations and some people have strong views about laws regarding marriage. This theory includes concepts such as traditional values, forms of marriage, laws, or religious organizations. It offers an explanation: Vocal political opposition by some organizations or by people with strong beliefs can prevent elected government officials from passing a law. The media are not the only sources of theories in daily life. Political leaders frequently express social theories as they discuss public issues. A politician who says that inadequate schooling causes poverty is expressing a type of theory. Compared to the theories we use in social science research, these implicit, partial theories are less systematic, not as sharply formulated, and more difficult to evaluate with empirical evidence.

Social science theory is often more complex and abstract than a typical layperson's theory; however, a principle of good theory, **parsimony**, is helpful. It means that simpler is better, that better theories have minimal complexity. Good theories lack redundant or excess elements. If we have to two equally convincing theories, the simpler one is better.

Most research studies have theory somewhere. The question is less *whether* we use theory in a study than *how* we use it, or which *type* of theory we use. The place of theory is less prominent in applied or descriptive research than in basic or explanatory research. The studies we conduct will be better designed and stronger once we are aware of how

Parsimony The idea that simple is better; everything else being equal, a social theory that explains more with less complexity is better.

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theory and research fit together. Theory also helps to sharpen our thinking about what we are doing in a study. If we are clear and explicit about our study's theory, others will find it easier to read and understand our research. One indicator of a weak research study is that its theory remains unclear, incomplete, or poorly formulated.

SOCIAL THEORY VERSUS IDEOLOGY

Many people confuse social scientific theory with either a sociopolitical ideology or a moral-religious doctrine. This is understandable. In daily life, we encounter many doctrines and ideologies that share features with social theory. The debate over evolution and "creationism" in the United States illustrates the misunderstanding of scientific theory by many laypeople. Opinion polls show that more than half of the U.S. public want schools to teach both evolution and creationism because people say both are "theories" (Pew Forum, 2005). However, evolution qualifies as a scientific theory because of its logical coherence, openness, integration with other scientific knowledge, and empirical tests. Creationism (or its reinvention into something called "intelligent design") does not qualify; instead, it is part of an ideology grounded in a moral-religious doctrine.

Moral-religious doctrines are faith-based belief systems. They rely on sacred teachings or writings that believers accept as being absolute truth and largely do not question. These doctrines are a type of ideology, or a nonscientific belief system. Debates over many public issues involve ideology, either a moral-religious one, a social-political one, or both. The doctrines frequently appear in the mass media from advocates of various political-moral viewpoints, in corporate or interest group media campaigns, or in justifications by politicians for public policies or new laws.

Ideology A nonscientific quasi-theory, often based on political values or faith with assumptions, concepts, relationships among concepts, and explanations. It is a closed system that resists change, cannot be directly falsified with empirical data, and makes normative claims.

Their many shared features make mistaking an ideology for a social scientific theory easy. Both tell us why things are the way they are: why crime occurs, why some people are poor but not others, why divorce rates are high in some places, and so on. Both contain assumptions about the fundamental nature of human beings and of the social world. Both tell us what is or is not important. Both offer systems of ideas or concepts, and both interconnect the ideas.

The scientific community recognizes theory as essential to the scientific enterprise. Good theory is essential to clarify thinking, to extend and deepen our understanding, and to build knowledge over time. The scientific community views ideology differently, as a nonscientific worldview. Ideology may be appropriate to address nonscientific questions but is an illegitimate way to evaluate truth claims or build knowledge on many issues or questions of social science. To many in the scientific community, ideology is a source of obfuscation that is antithetical to the fundamental principles of science. Defenders of ideologies at times become antagonistic toward social science when the social science refutes aspects of their ideological belief system.

As an "almost" theory, **ideology** lacks critical features required of a true scientific theory. We can distinguish ideologies from theories in seven ways (also see Summary Review Box 1):

1. *Certainty of answers.* Many people find comfort in ideologies because they offer absolute truth and certain answers. They provide people with feelings of assurance and sense of security. In contrast, social scientific theories offer only tentative answers and admit to uncertainty. Many people are uneasy with the persistent uncertainty, hesitation, and tentativeness of scientific theories. Social science theories require us to have a high tolerance for ambiguity, to ask questions continuously, and to live with persistent doubt.

2. *Type of knowledge system differs.* Ideologies offer a closed system of knowledge that changes little. Ideologies claim to have all of the answers and do not require improvement. In contrast, science is an open-ended knowledge system that is always growing and changing. Its answers are incomplete

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and subject to revision as we acquire new evidence and knowledge. We are constantly modifying and reconsidering theories. Theories continuously evolve, grow, or develop toward higher levels—sometimes slowly, sometimes quickly; sometimes directly, sometimes only after a temporary reversal or diversion.

3. *Type of assumptions differ.* Both ideologies and social scientific theories contain assumptions. The assumptions in ideologies tend to be fixed, inflexible, and unquestioned. Most ideological assumptions originate in one of three sources: religious belief or faith (e.g., a specific form of Christianity or Islam), a value-based position (e.g., libertarian, socialist, or fascist), or the point of view of particular social position (e.g., a wealthy powerful elite, persons who are homeless and destitute). When they originate in a particular social location, ideologies protect and advance that one sector of society (e.g., wealthy investors, people who are destitute). In contrast, the assumptions of social scientific theory originate in open debates and discussions within the scientific community, and they evolve over time. We will examine issues of value neutrality and objectivity later. For now, we can recognize that social science theory differs from ideology by an attempt to be neutral with regard to assumptions or, if not entirely neutral, very explicit and open about its assumptions.

As noted here, ideologies often reflect the worldview of one sector of society. Might the social position of researcher-scientists affect social theory? Some say that researchers must remain detached and separate from all specific societal interests in their theory; others allow social-political views in some areas of the research process so long as they are explicit; still others say researchers occupy a unique “relational” position in society (Mannheim, 1936). A *relational position* means that social researchers come from diverse areas of society, are highly conscious of the full range of all social areas, and self-consciously reflect on their unique social position.

4. *Use of normative statements differ.* Ideologies contain many normative assumptions, statements, and ideas. They advance a normative stance or position. A *normative statement* is one that contains “what ought to be.” It tells us what is desirable, proper, moral, and right versus undesirable,

improper, immoral, or wrong. An ideology, like a social theory, tells us what is and why but goes beyond that to have a “what should be.” (See Expansion Box 1, Explaining Divorce.) Ideologies blur the distinction between a descriptive, fact-based assertion—*this is what happened or how people live*—an explanation—*this is why it happened or why people live this way*—and a normative position—*this should have occurred or is how people should live*.

In contrast, few social science theories advance a specific normative claim. They offer descriptive statements (“this is how the world operates”) and explanations. In social theory, there are separate normative positions. We can connect a theory’s descriptions (e.g., some people are starving) or explanations (e.g., some people withhold food supplies to get higher prices and this causes others to starve) to one or more normative positions (e.g., no one should go hungry, starvation of the weak makes humankind stronger). Although description, explanation, and normative positions do not have to occur in a theory, if one occurs, it is not rigid or fixed.

In sum, in social theory, normative-moral positions are detached or separated from the descriptive statements and explanations, while in ideologies, the normative positions are integral to and embedded within the descriptive statements and explanations. This makes it impossible to remove the normative positions from ideologies.

5. *Use of empirical evidence differs.* A critical distinction between scientific theory and ideology involves empirical evidence. Supporters of an ideology will selectively present and interpret the evidence in ways to protect an ideological belief. Often they emphasize personal experience, conformity to a core value conviction, or religious faith as an ultimate type of evidence that overrides careful empirical observation. As a closed belief system that already has “the answers,” ideologies resist or deny contradictory evidence. When an ideology confronts overwhelmingly negative or contradictory evidence, the ideologies do not bend or change. From an ideological worldview, believers will selectively reinterpret, treat as an exception, or declare negative evidence as irrelevant to the ideology’s claims. Believers in an ideology can always find

EXPANSION BOX 1

Explaining Divorce

How an Ideology Might Explain Divorce

American society has experienced a moral-social breakdown over the past 30 years. Families were strong, mothers did not work away from home but spent much more time taking care of their children and husband. Because of religious and moral teachings, families were strong, and divorce was rare. In the recent decades, however, moral decay has spread. There is less respect for religious and moral authority. Negative behaviors, government policy, and mass media have weakened the family and caused divorce to increase.

An Evaluation This explanation uses the concepts of *moral-social breakdown*, *strength of family*, *divorce*, *time that mothers spend with their children and husband*, *moral decay*, *loss of respect*, and *media messages*. These concepts lack precise meanings and measurement, and their exact timing is not certain. The concepts are vague and highly evaluative (e.g., *decay*, *breakdown*, *bad*). Testing the explanation would not be easy, and a long time frame suggests that alternative factors occurred in the same period that also might have an impact.

Example of Social Theory

Whether or not a family remains intact (i.e., married adults do not divorce) and is strong (i.e., expresses

affection toward one another and spends time together, devotes more time nurturing children, exhibits positive social interaction patterns) depends on the level of resources and social-emotional stress. Resources include factors that are material (income, education, housing), social (friends and extended family, involvement in community organizations), cognitive (e.g., schooling, knowledge, following current events), and psychological (positive self-images, maturity, and respect for others). Stress includes uncertainty about the future and instability of life conditions (e.g., irregularly employed family members, poor or declining health, victims of crime, or emotional instability). Families with both sufficient resources and low levels of stress tend to be stronger than those with a combination of low resources and high stress, and strong families are more likely to remain intact than weak families.

An Evaluation This explanation uses four concepts: *resources* (three types), *stress*, *family strength*, and *remaining intact*. It suggests definitions or how we measure each concept. The relationship among concepts is straightforward and can be empirically tested.

ways to reject contrary evidence. It is a “Don’t confuse me with facts; I know I’m right” position. In fact, when presented with negatives, believers in an ideology react with fear and hostility toward people who disagree.

Social theories are open systems of belief and explanation; they welcome all evidence. Because social science theories are open to continuous debate, modification, or change, they are constantly evolving. Evidence from studies may support, extend, reject, or modify a theory. We regularly confront theory with empirical evidence—all of the relevant evidence—both supporting and contrary. We use evidence to evaluate a theory, not to defend it. We

never know in advance whether the evidence will support the theory. Any study could uncover evidence suggesting that a theory has weaknesses and needs modification.

In social science, we assume that over time, social research produces cumulative knowledge and evidence; it builds over time. Because research and theory are cumulative, we do not automatically toss out a theory if we encounter any negative evidence. We evaluate all evidence together. If after years of research and dozens of studies, we have accumulated widespread empirical support for a theory, we may only slowly adjust it to new negative evidence. Nonetheless, any negative evidence raises some

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questions about a theory. If the new evidence repeatedly fails to support a theory, we are compelled to modify or replace it.

6. *Demand for logical consistency differs.* Ideologies often contain logical contradictions, and many ideologies rely on circular reasoning. There are many forms of circular reasoning; some are logical fallacies or errors in true logical reasoning. They simply repeat a statement in slightly different or stronger terms as “evidence” or reasoning for it. The typical response to finding a logical contradiction or fallacy in an ideology is to deny it or cover it up. In contrast, we as social scientists insist that theories be logically consistent. We are constantly trying to root out and remove all logical fallacies. If we discover a fallacy or contradiction, we revise the theory or replace it with a different one that does not contain a fallacy or contradiction.

7. *Transparency differs.* The distinction between ideology and theory has implications for the way we conduct research studies. In social scientific research, we are aware of a theory’s assumptions, concepts, and relationships and make them explicit. Theory and its place in research are very public; we as scientists hide nothing. Combined with visibility

is a welcome to challenges and open debate. In contrast, ideologies often contain features that are obscure or difficult to pinpoint. Ideologies frequently contain areas clouded in mystery or secrecy; they seek obedience and deference, not serious challenge or debate.

THE PARTS OF SOCIAL THEORY

Assumptions

All theories contain built-in **assumptions**, which are statements about the nature of things that we cannot observe or do not empirically evaluate. They are necessary starting points. In social science we make assumptions about the nature of human beings (e.g., people are essentially competitive or kind and cooperative), social reality (e.g., it is easy to see or contains hidden elements), or a particular phenomenon or issue.

Assumption An untested starting point or belief in a theory that is necessary in order to build a theoretical explanation.

SUMMARY REVIEW BOX 1

Social Theory versus Ideology

BASIS OF DIFFERENCE	IDEOLOGY	THEORY
Certainty of answers	Absolute, certain answers with few questions	Tentative, conditional answers that are incomplete and open ended
Type of knowledge	Closed, fixed belief system	Open, expanding belief system
Type of assumptions	Implicit assumptions based on faith, moral belief, or social position	Explicit, changing assumptions based on open, informed debate and rational discussion
Use of normative statements	Merger of descriptive claims, explanations, and normative statements	Separation of descriptive claims, explanations, and normative statements
Empirical evidence	Selective use of evidence, avoidance of direct tests of claims, resistance, denial, or ignorance of contrary evidence	Consideration of all evidence, seeking repeated tests of claims, changing, based on new evidence
Logical consistency	Contradictions and logical fallacies	Highest levels of consistency and congruity, avoiding logical fallacies
Transparency	Avoidance of transparency	Encouragement of transparency

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One type of assumption is the *background assumption*: It must exist for us to continue inquiry. Theories about complex social issues, such as racial prejudice, rely on several implicit background assumptions. Some of them related to racial prejudice are as follows: The people of a society recognize racial categories or racial distinctions; they see distinctions among individuals based on the person's membership in a racial group; they attach traits, motivations, and characteristics to being a member of a racial group; and they evaluate the goodness of members' traits, motivations, and characteristics. These are background assumptions because if people did not distinguish among "races" (i.e., certain physical appearance features related to ancestry), never attached characteristics to members of a racial group, and so forth, then the concept of *racial prejudice* would cease to be useful. Thus, the concept and a theory to explain it build on background assumptions.

In addition to background assumptions, we may have "*tractable*" assumptions (i.e., they have traction and allow us to take an argument further [see Abbott 2004: 152]). A tractable assumption may or may not hold. If we wanted to study racial prejudice, we might assume that people have it in varying degrees, and some people may not have it at all. We might assume that a person's racial prejudice applies to people in other racial groups but not to their own racial group. We might assume that racial prejudice persists over time in a person and does not instantly appear or disappear.

Concepts

Concepts are the building blocks of theory.¹ A **theoretical concept** is an idea we can express as a symbol or in words. We often express theoretical concepts in natural science and mathematics in symbolic forms, such as Greek letters (e.g., π or Σ) or as formulas (e.g., $s = d/t$; s = speed, d = distance, t = time). In contrast, most social scientists express their concepts in words. While the exotic symbols of mathematics and natural science make

many people nervous, using everyday words in specialized ways for social science concepts can create confusion. The distinction between concepts expressed as words and concepts expressed as symbols should not be exaggerated. Words, after all, are symbols, too; they are symbols we learn with language.

Let us look at a simple example concept with which you are already familiar, *height*. You can say the word *height* or write it as a symbol, *h*. The combination of letters in the word or its sound symbolizes, or stands for, an idea in your head. The Chinese characters 高度, the French word *hauteur*, the German word *höhe*, the Spanish word *altura* all symbolize the same idea. In a sense, a language is 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.²

Concepts exist outside of social science theory. They are everywhere, and we use them all the time. *Height* is a simple concept from everyday life, but what does it mean? We may find it easy to use the concept *height* but difficult to define or describe the concept itself. This is often the case: We may use concepts but find it difficult to think through their full meaning and give them good definitions. The concept *height* is an abstract idea about a physical relationship. As a characteristic of a physical object, it indicates the distance from top to bottom. We typically define concepts both by using other concepts and with examples. We can define *height* by using the concepts of top, bottom, and distance and can illustrate it with numerous examples in the physical world.

Height is a very familiar concept. All people, buildings, trees, mountains, books, and so forth have a height. We can measure the height of any object or living thing or compare their heights. A height of zero is rare but possible, and height can increase or decrease over time. As with many words, we use *height* and its concept in several ways. We use the word *height* in many 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 a sound and written form of the word with

Theoretical concept An idea that is thought through, carefully defined, and made explicit in a theory.

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that idea. Nothing inherent in the sounds of the word connects it to the idea. The connection is arbitrary, but it is still very useful. Symbols allow us to express an abstract idea to one another by using the symbol alone. This is an important point: We communicate the abstract, invisible concepts in our heads to each other by using visible symbols.

Concepts have two parts: a *symbol* (a word, term, or written character) and a *definition*. We learn definitions in many ways. We probably learned the word *height* and the idea it represents, or its definition, from our parents. We learn many concepts as we learn to speak and learn to be socialized to a culture. Our parents probably did not give us a dictionary definition. Instead they taught us through a diffuse, nonverbal, informal process. They showed us many examples; we observed and listened to others use the word. We used the word incorrectly and got confused looks or someone corrected us. We used it correctly, and others understood us. Eventually, we mastered the concept. This is how we learn most concepts in everyday language. Had our parents isolated us from television and other people and then taught us that the word for the idea of distance from top to bottom was *zodige*, we would have had difficulty communicating with others. To be of value, people must share the symbols/terms for concepts and their definitions with others.

Most of the concepts we use in everyday life have vague, unclear definitions. Likewise, the values and experiences of people in a specific culture can influence or limit everyday concepts. Preindustrial people in a remote area without electricity who never used a telephone have trouble understanding the concept of a computer or the Internet. Also, some everyday concepts (e.g., evil spirits, demons) have roots in misconceptions, ancient myth, or folklore.

Everyday concepts and those used in social science differ, but the difference is not rigid or sharp. Some social science concepts first developed in research studies with precise technical definitions have diffused into the larger culture and language. Over time, they have become less precise or developed an altered meaning. Concepts such as sexism, lifestyle, peer group, urban sprawl, and social class started as technical concepts in a social theory.

Where do social science concepts originate? Many started as ideas from everyday life, personal experiences, creative thought, or daily observations. Someone elaborated on the idea, offered a definition, and others discussed the idea, trying to make it clearer and more precise. Some social science concepts originated in classical theory. People developed some new concepts out of deep contemplation and reflective thought, sometime after examining the findings in research studies or by synthesizing findings and ideas from many diverse situations. Taken together, the numerous social science concepts form a specialized language. We use it for discussing, analyzing, and examining the social world around us. Many people call this language *jargon*, which has a bad reputation.

Specialists in many fields use jargon. It is a shorthand way to communicate with one another. Physicians, lawyers, artists, accountants, plumbers, anime fans, orchid growers, and auto mechanics all have specialized languages, or jargon. They use it to refer to the ideas and objects with which they deal on a regular basis, some of which are not widely known or shared. For example, publishers and printers have a jargon: terms such as *idiot tape*, *fonts*, *cropping*, *halftone*, *galley proof*, *kiss impression*, *hickies*, *widows*, and *kerning*. For people on the inside, jargon is a fast, effective, and efficient way to communicate. However, when people misuse a specialized language to confuse, exclude, or denigrate others, the specialized language acquires a negative reputation, and we call it *jargon*. Use of jargon with people who do not know the specialized language fails to communicate and often generates resentment.

Once we learn social science concepts and begin to use them among others who know their meaning, we will find them to be an efficient, concise, and precise way to discuss ideas and issues. To the novice or an outsider who has not yet learned the concepts, a discussion filled with the terms for social science concepts will sound like incomprehensible jargon.

Level of Abstraction. Concepts vary according to their **level of abstraction**. Some concepts are very concrete and refer to objects we can see and touch: pizza, trees, cats, cell phones, or a college test. Others are abstract mental creations removed from direct,

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Level of abstraction A characteristic of a concept that ranges from empirical and concrete, often easily observable in daily experience, to very abstract, unseen mental creations.

daily empirical life. Abstract concepts refer to aspects of the world we do not easily experience or cannot easily express. Nonetheless, they have great value because they organize our thoughts and expand our understanding. We cannot directly see concepts such as patriotism, social capital, self-esteem, emotional pain, panic, fear, cognitive dissonance, political power, or organizational authority, but we might “feel” them or recognize them operating in daily life.

To define simple, concrete concepts, we use many examples and point to visible physical features. In contrast, complex, abstract concepts often require formal, dictionary-like definitions. Their definitions combine several other, less abstract or low-level concepts. The concept of *height* is not very abstract, but we still use the slightly less abstract concepts of *top*, *bottom*, and *distance* to define it. Similarly, the concept of *aggression* is more abstract than ones we might use to define it, such as *hit*, *slap*, *scream*, *push*, *yell*, *punch*, *physically injure*, or *threaten serious bodily harm*. We might define *racial prejudice* using other abstract concepts such as *attitude* or *stereotype*.

As social scientists, we tend to define concepts more precisely than the ones in daily life. We link concepts in a theory with research studies and empirical data. This happens because knowledge advances only if we have clear, logically consistent definitions of our ideas.

Having clear, explicit, and precisely defined concepts is essential for advancing knowledge and conducting research. A few studies or theoretical essays develop entirely new concepts, but usually we rely on existing concepts. However, many concepts have multiple definitions, so we must decide which one to use. Even after we choose one, we may wish to modify or clarify the existing definition.

Wimmer (2008:973) explored and refined the concept of *ethnic boundary* (i.e., the boundaries that divide ethnic groups). He defined the concept of ethnicity “as a subjectively felt sense of belonging based on the belief in shared culture and common ancestry.”

This is one among many definitions, and other people have used it. Social researchers have debated how to define the concepts of *ethnicity* and *race*. Wimmer says that ethnicity is a very broad idea. He defines *race* and *nationhood* as subtypes of ethnicity. Race is ethnicity based on phenotype features; nation is ethnicity based on a community’s nationalist aspirations. Other subtypes include ethnicity based on a belief in a shared religious, regional, or linguistic heritage.

Wimmer (2008) explicitly rejects the idea of using common everyday understandings of ethnicity or race. Americans’ understanding of these concepts is overlapping, vague, and contradictory (for recent evidence, see Hitlin, Brown, and Elder, 2007; Morning, 2009). Wimmer wanted to avoid defining the concepts as they are used in a single culture because doing so would limit cross-cultural comparisons and theory building. He noted that there are

societies with phenotypical variation among the population but without racialized groups, societies without phenotypical variation but racially defined groups in stark opposition to one another, and nonracialized systems of ethnic differentiation that are as exclusionary as race is in the United States. (p. 975)

This example illustrates how we define concepts. It also highlights a tension between the public’s use of concepts in daily life and concepts in social theory and research. The public defines many concepts in overlapping, vague, or contradictory ways. To deepen understanding of the social world and create clear theories, we want precise, nonoverlapping, and noncontradictory theoretical definitions, yet we study how the public sees and thinks about the world. If we borrow the public’s definitions, our definitions may be close to how the public uses the concepts in daily life but may be vague, overlapping, and contradictory. If we use academic definitions, they may not closely match the public’s understanding of the concept, but our definitions can be precise, nonoverlapping, and noncontradictory, permitting clearer thinking and real advances in knowledge. An additional source of confusion is that words that the public uses (e.g., race) are the same as the ones we use in social theories. In the end, such issues mean we want to be very clear in our own minds about concepts and carefully define them.

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In sum, an important research task is to think through ideas or concepts carefully and precisely and to assign them explicit, clear definitions. Such theorizing provides a crucial foundation for carrying out research studies and advances our understanding of the world around us.

Single versus Concept Clusters. We rarely use concepts in isolation from one another. Concepts form interconnected groups, or **concept clusters**. This is true for concepts in daily life as well as for those in social theory. Theories have collections of associated concepts that are consistent and mutually reinforcing. Together, the collections can form a broader web of meaning. For example, in a discussion of the *urban decay*, we may read about associated concepts such as urban expansion, economic growth, urbanization, suburbs, center city, revitalization, ghetto, mass transit, crime rate, unemployment, White flight, and racial minorities. Used together, these concepts form a mutually reinforcing collection of ideas that we use in theorizing and research studies.

We can simplify the concepts in daily life and social theory into two types. One type has a range of values, quantities, or amounts. Examples include *amount of income, temperature, density of population, years of schooling, and degree of violence*. These are *variables*, or *variable concepts*. The other type expresses categories or nonvariable phenomena (e.g., *bureaucracy, family, college degree, homelessness, and cold*).

Simple versus Complex Concepts. In addition to ranging from concrete to abstract and being a variable or nonvariable type, concepts can be categorized as simple or complex. *Simple concepts* have only one dimension and vary along a single continuum. *Complex concepts* have multiple dimensions or many subparts. We can break complex concepts down into several simple, or single-dimension, concepts. In general, the more complex concepts tend to be more abstract and simple ones more concrete, although this is not always true.

Here is an example of a complex concept. 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. They recognized that each dimension varies by degree (very regular and wide-open or free elections in which everyone votes versus irregular restricted elections with only a minority allowed to vote). By combining the three simpler concepts or dimensions, Rueschemeyer et al. created the idea of different types of political regimes. Regimes considered to be 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. The regime types refer to more complex concepts than the three concepts for the dimensions.

Another type of complex concept is the **ideal type**. It is a broader, more abstract concept that organizes a set of more concrete concepts. Ideal types are pure, abstract models that try to define the core of the phenomenon in question. They are mental pictures that outline the central aspects of what is of interest. They are smaller than a theory but help to build a full one. Ideal types are not explanations because they do not tell why or how something occurs. Qualitative researchers often use ideal types to see how well observable phenomena match the ideal model. A very famous ideal type is that of Max Weber, who developed an ideal type of the concept *bureaucracy* (see Example Box 1, Max Weber's Ideal Type of Bureaucracy). It distinguishes a bureaucracy from other organizations. No real-life organization perfectly matches the ideal type, but this model helps us to think about and study bureaucracy.

A **concept classification** is partway between a simple concept and a full-blown theory.³ It helps to

Concept cluster A collection of interrelated concepts that share common assumptions, refer to one another, and operate together in a social theory.

Ideal type A type of concept classification that presents a pure, abstract model of an event, process, or idea. It is used in building social theory and in the analysis of data.

Concept classification A complex, multidimensional concept that has subtypes that are between a single concept and a complete theoretical explanation.

EXAMPLE BOX 1**Max Weber's Ideal Type of Bureaucracy**

- Bureaucracy 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. *A primer on the construction and testing of theories in sociology* (1978: 72). F. E. Peacock Publishers.

organize abstract, complex concepts. By logically combining the simpler concepts, we can create a type of complex concept that is a classification. You can best grasp this idea by considering some examples. A major type of classification is the **typology**, or taxonomy,⁴ in which a researcher logically combines two or more unidimensional, simple concepts so that a new concept is formed where the two simple concepts intersect. The new concept expresses the interrelation or overlap of the simple concepts.

Merton's (1938) anomie theory of deviance is a widely used typology that is simple and elegant. It allows us to understand both nondeviance and deviance by using two simpler concepts: (a) the goals that a society defines as worth pursuing and (b) the means that people use to achieve goals. The typology rests on two relationships: (1) whether people

Typology A theoretical classification or quasi-theory that is created by cross-classifying or combining two or more simple concepts to form a set of interrelated subtypes.

TABLE 1 Robert Merton's Modes of Individual Adaptation

MODE OF ADAPTION	SOCIETAL GOALS	INSTITUTIONAL MEANS
I Conformity	Accept	Accept
II Innovation	Accept	Reject
III Ritualism	Reject	Accept
IV Retreatism	Reject	Reject
V Revolution	Substitute new	Substitute new

accept or reject society's goals and (2) whether people use socially approved means (i.e., legitimate) to reach the goals. Merton's typology identifies conformity and several types of deviance based on these concepts (see Table 1). Conformity, or nondeviance, occurs when people accept societal goals (e.g., obtaining a high income) and use a socially legitimate means to reach them (e.g., getting a good job and working hard). Various forms of deviance occur when this is not the case. Merton's classification of how individuals adapt to goals and means to reach them summarizes his complex concept and labels each subpart. For example, *retreatism* describes a person who rejects both societal goals and the socially legitimate means to achieve them—such as a chronic alcohol user or a religious hermit. This type of deviant rejects the societal goal of appearing respectable and acquiring material possessions (e.g., house, car) and the legitimate means of reaching the goal (e.g., being honest, working at a job).

A different concept classification builds on classical social theory. Wright (1978) updated Marx's theory of social classes in capitalism and later tested his theoretical updating with empirical data from contemporary U.S. society. Wright noted that, for Marx, inequality and exploitation are based on control over three types of resources: (1) investments (i.e., profit-making property or capital), (2) the organization of production, and (3) labor power (i.e., the work of other people). Wright said that the organization of a class society creates positions or places that confer power (i.e. directing the work of other people). He also said that the organization of a class society creates positions

TABLE 2 Erik Wright’s System of Social Classes

SOCIAL CLASS	CONTROL OVER SOCIETAL RESOURCE		
	<i>Investments</i>	<i>Production</i>	<i>Labor</i>
Capitalists	+	+	+
Managers	–	+	+
Supervisors	–	–	+
Workers	–	–	–
Petite bourgeoisie	+	+	–

+ means has control, – means has little or no control

that confer control over the three types of resources (see Table 2). People in positions that control all three resources constitute the most powerful people or become the society’s dominant social class. In market economies, this is the capitalist class. Its members include the major investors, owners, and presidents of banks or corporations. Capitalists make investment decisions (e.g., whether and where to build a new factory), determine how to organize production (e.g., use robots or low-wage workers), and give orders to others. The class near the bottom consists of workers. They occupy positions in which they have no say over investments or how to organize production. They lack authority over others and must follow orders from other people to keep their jobs. Managers and supervisors, who assist the capitalists, are between the two major classes. They are a quasi-class that had not yet fully appeared in the mid-1800s when Marx developed his theory. This class controls some but not all of society’s major resources. The classification also points out another class about which Marx wrote, the petite (small) bourgeoisie. It consists of small-scale self-employed proprietors or farmers. Members of this class own and operate their own businesses but employ no one except family members. Marx thought this class would decrease and disappear, but it is still with us today. Like Merton, Wright combined simple concepts (i.e., types of resources owned or not owned) to generate a theoretically powerful,

complex classification (i.e., the structure of social classes in capitalist society).

A final example of a concept classification comes from Walder (2003), who wanted to understand transition from a communist regime with a command economy to postcommunist regime with a market economy. He used two factors—(1) limits on seizing private assets and (2) the amount of political change that took place—to create a classification of four types of postcommunist regimes. He cross-classified the two factors to create a conceptual typology. He used this typology with other ideas to explain the smoothness of the transition from communism and to identify which social-political groups gained power in the various postcommunist societies (see Table 3). Note that concept classifications are not, in themselves, full theoretical explanations. We need to add other theoretical ideas to them for them to tell us why outcomes occurred.

Scope. Concepts vary as to scope. Some are very narrow and apply only to specific social settings or activities or are restricted in time or place. We cannot easily use them beyond a particular setting. Other concepts are very broad. They apply to many diverse settings or activities across large expanses of time and space. Broad concepts tend to be more abstract than narrow ones.

An example concept with a narrow scope is “football hooliganism.” It refers to acts of violence by British and, to a degree, other European soccer fans that have accelerated since the late 1960s. The concept is restricted in time and location. Fans of other mass spectator events have engaged in rioting or acts of violence and property destruction, but this

TABLE 3 Four Transition Paths from a Communist to a Postcommunist Economy

		HOW EXTENSIVE WAS POLITICAL CHANGE?	
		<i>High</i>	<i>Low</i>
Limits on taking assets	<i>High</i>	1	2
	<i>Low</i>	3	4

concept is rather specific to rioting British soccer fans. Another example is the Japanese phenomena of *karoshi*, or death by overwork. People have died from excessive labor throughout history and across cultures, but this concept narrowly refers to males working in white-collar jobs who are under intense social pressure to work many hours (e.g. 16–18 hours per day) for their company without rest for a period of one or more years. The concept is associated with Japanese company work culture in the 1970s–1990s. In contrast, similar concepts of broader scope, such as physical labor or clerical work, widely apply across historical time and in diverse cultural settings.

Concepts with a narrow scope are closest to concrete everyday life. This makes them easily recognized. We can incorporate specific contextual features and the texture of a social setting into them. At the same time, doing so makes it difficult to generalize them and use them easily to build a general theoretical understanding of social life. Concepts with a broad scope (e.g., social participation, emotional warmth) have the opposite advantages and disadvantages. These concepts bridge diverse settings and times, and they facilitate our general understanding. However, they disregard significant contextual details in particular social settings and historical conditions.

Relationships

Social theories are more than collections of assumptions and concepts; they also specify relationships among the concepts. They tell us whether the concepts are connected to one another, and, if so, how. By outlining an entire complex of assumptions, concepts, and relationships, a theory provides a complete picture of why specific relationships do or do not exist.

Proposition A theoretical statement about the relationship between two or more concepts.

Hypothesis An empirically testable version of a theoretical proposition that has not yet been tested or verified with empirical evidence. It is most used in deductive theorizing and can be restated as a prediction.

Kinds of Relationships. Beyond telling us whether concepts are or are not related, theories specify the relationships. For example, a theory may tell us whether a relationship is strong or weak, direct or indirect, positive or negative. It might tell us that one concept accelerates or decelerates/diminishes the other or that its impact is immediate or delayed. Good theories indicate whether one concept is a necessary (i.e., essential and required) precondition for another concept or only sufficient (i.e., it is involved but does not have to be present). Sometimes a theory states that one concept relates to another but only under certain conditions (these are called *contingent relationships* and are discussed later in this book). A theory also specifies the form of explanation (e.g., causal, structural, and so forth) in which a relationship operates (see later in this chapter).

Propositions and Hypotheses. Social theories contain propositions about the relationships among concepts. A **proposition** is a theoretical statement that two or more factors or concepts are related and the type of relationship it is. It is a belief that may or may not have been tested. A major purpose of doing research is to find out whether a theory's proposition conforms to empirical evidence or data. Some theoretical propositions are in the form of assumptions; others can be tested with empirical data. A **hypothesis** is an empirically testable version of a proposition. It is a tentative statement about a relationship because when we start a study, we are uncertain as to whether the hypothesis actually holds in the empirical world. After repeated empirical evaluations of a hypothesis in many situations, our certainty in its truthfulness grows. By empirically evaluating a hypothesis, we learn whether a theoretical proposition is supported, or we may decide to revise it or remove it from the theory entirely. While many research studies are designed to test hypotheses, some types of research proceed without a hypothesis.

Units of Analysis

The social world comprises many units, such as individual people, groups, organizations, movements,

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institutions, countries, and so forth. Researchers tailor theoretical concepts to apply to one or more of these **units of analysis**. For example, the concept *aggression* can be applied to several units: an individual, group, organization, or country. This is illustrated by these statements: Jamie is an *aggressive* child; the basketball team was very *aggressive* last night; the XYZ Corporation has *aggressively* moved into a new market; and the United Nations condemned country X for acts of *aggression* toward its neighbor. Aggression by a child (slapping another four-year-old and kicking the teacher) seems different than aggression by a sports team (physical contact and blocking), a company (lowering prices and launching a massive advertising campaign that targets a competing product), or a nation (moving troops and tanks across an international border).

When we conduct a study, we must fit a concept to the specific type of unit we wish to analyze, like a glove fitting over a hand. This means fitting concepts with units as we design a study and measure concepts. If we consider an abstract concept, such as aggression, that is applicable across various units of analysis, we must decide the unit to focus on and tailor the way we define the concept to that unit before proceeding.

Aspects of Theory

Now that you know the parts of social theory, you can consider its other forms. Social theory can be baffling because it has many aspects. To simplify matters, we can divide them into five major ones:

1. *Direction of theorizing*. Either deductive or inductive
2. *Level of analysis*. Either micro, macro, or meso
3. *Theoretical focus*. Either substantive or formal theory
4. *Form of explanation*. Either causal, structural, or interpretative
5. *Range of a theory*. Either an empirical generalization, a middle-range theory, or a framework

The aspects may seem intimidating at first. Fortunately, only a few major combinations of them are frequently used. As you become familiar with the

aspects, you will find that they help to clarify and simplify how you apply theory when conducting a research study.

Direction of Theorizing

In an ideal sense, you can approach the building and testing of theory from two directions: (1) begin with abstract thinking and then logically connect the ideas in theory to concrete evidence or (2) begin with specific observations of empirical evidence and then generalize from the evidence to build toward increasingly abstract ideas. In practice, most researchers are flexible and tend use both directions, perhaps at different points in a study (see Figure 1).

Deductive. To theorize in a **deductive direction**, we start with abstract concepts or a theoretical proposition that outlines the logical connection among concepts. We move next to evaluate the concepts and propositions against concrete evidence. We go from ideas, theory, or a mental picture toward observable empirical evidence. The studies of the contact hypothesis used deductive theorizing. The researchers began with a theoretical proposition: The absence of interpersonal contact between people and others in a social “out-group” causes negative views of an out-group to arise because of ignorance and negative stereotypes. The researchers turned the proposition into a testable empirical hypothesis: that increased social contact with, knowledge of, and familiarity among individuals in an out-group will lessen the negative beliefs, attitudes, and statements of people in the “in-group.” The theorizing proceeded from the abstract level to a concrete, empirical level that included specific

Units of analysis The units, cases, or parts of social life that are under consideration. They are key to developing concepts, empirically measuring or observing concepts, and using data analysis.

Deductive direction An approach to developing or confirming a theory that begins with abstract concepts and theoretical relationships and works toward more concrete empirical evidence.

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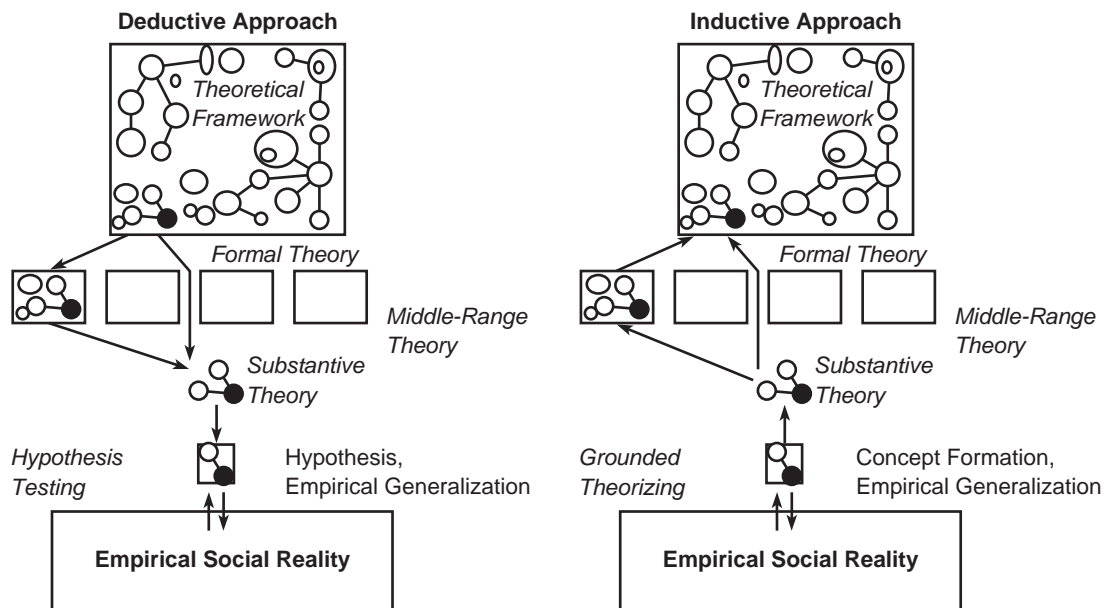


FIGURE 1 Deductive and Inductive Theorizing

out-groups, forms of social contact, and beliefs or attitudes.

Inductive. To theorize in an **inductive direction**, we begin with observing the empirical world and then reflecting on what is taking place and thinking in increasingly more abstract ways. We move toward theoretical concepts and propositions. We can begin with a general topic and a few vague ideas that we later refine and elaborate into more precise concepts when operating inductively. We build from empirical observations toward more abstract

thinking. In his study of street vendors in New York City, Duneier (1999) used inductive theorizing. He developed a theoretical understanding only during and after he had collected empirical data. He stated, “I began to get ideas from the things I was seeing and hearing on the street” (p. 341). Duneier (p. 342) described the process as being like the method used by a medical professional who sees patients with many diverse symptoms. Only after analyzing the symptoms does the professional make a diagnosis or coherent story that explains the underlying reason for the many symptoms visible on the surface.

Many researchers use a specific type of inductive theorizing called grounded theory. It involves formulating new theoretical ideas from the ground up instead of testing existing theoretical ideas.

Inductive direction An approach to developing or confirming a theory that begins with concrete empirical evidence and works toward more abstract concepts and theoretical relationships.

Grounded theory A type of inductive social theory often used in qualitative research that builds toward abstract theory, often by making comparisons of empirical observations.

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.

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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. With it, the researcher compares unlike phenomena in order to learn their 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 a 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 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 (for a summary of several alternatives, see Burawoy, 1991:271–287; Charmaz, 2003; and Hammersley, 1992.)

Level of Analysis

Social reality exists on many levels, ranging from the micro to macro levels. The micro level of social life includes short-term face-to-face interactions of a few individuals, usually in a small-scale setting (e.g., a female customer at a fast-food restaurant chats briefly with an employee and a male customer behind her in line). At the micro-level of social reality, people engage in direct personal contact, usually in a close physical setting. Social

scientists develop **micro-level theory** and concepts tailored to analyze this level of social reality. For example, McFarland (2004) developed a micro-level theory of disruptive behaviors in high school classrooms. Based on detailed observations of interactions inside classrooms among students and teachers, he noted the way protagonists and antagonists acted in patterned ways and had different outcomes. (Also see Example Box 2, Inductive, Micro-Level Theory.)

The macro level, which is at the opposite extreme of the micro level, includes large-scale societal events (e.g., the patterns of encounters between western European imperialist powers and Chinese civilization during the eighteenth century) and entire social institutions (e.g., the entire criminal justice system of a nation). **Macro-level** theorizing explains events, processes, patterns, and structures that operate among large-scale social units, usually over decades or longer and often covering large expanses of geographic space. The study of Spanish America for over a century of time by Mahoney (2003) illustrates macro-level theorizing.

Between the micro level and macro levels is the meso level, an intermediate level. **Meso-level theory** focuses on the level of organizations, social movements, or communities. As we examine different levels of the social world, we develop theories and concepts that operate at a corresponding level of analysis.

Micro-level theory Social theory focusing on the micro level of social life that occurs over short durations (e.g., face-to-face interactions and encounters among individuals or small groups).

Macro-level theory Social theory focusing on the macro level of social life (e.g., social institutions, major sectors of society, entire societies, or world regions) and processes that occur over long durations (many years, multiple decades, or a century or longer).

Meso-level theory Social theory focusing on the relations, processes, and structures at a midlevel of social life (e.g., organizations, movements, and communities) and events operating over moderate durations (many months, several years, or a decade).

EXAMPLE BOX 2**Inductive, Micro-Level Theory**

In her study of two very different toy stores, Williams (2006) developed a micro-level theory inductively from her observations made while working for six weeks at each store. Her goal was “to describe and analyze the rules that govern giant toy stores” (pp. 19–20) from observing day-to-day interactions. Williams observed and documented hundreds of ways males, Whites, and high-income people were treated better in daily workplace routines, informal store rules, and customer–staff interactions. These actions reinforced the prevailing societal hierarchy: Males dominated and had privileges when compared with females, Whites compared with non-Whites, and high-income individuals compared with low-income people. In both stores, all directors were White males; everyone employed in a “masculine” job (e.g., security guards, loading dock laborers, backroom assem-

blers) were male (half being non-White), and everyone in a “feminine” job (e.g., cash register clerk, customer service worker) was female. An exception was the electronics section of one store. It was a separate area, and every employee in that section was an Asian man. One store was “high end” and had expensive toys. The other was like a warehouse with working-class customers. In both, the clerks and managers engaged in identical “customer profiling”: They treated White female customers as potential “big spenders” and Black male customers as potential thieves. Williams’ micro-level theory showed how informal daily rules in very different settings perpetuated inequalities of class, race, and gender. Mundane shopping/selling interactions continuously reproduced, and almost never reversed, any relations of the social hierarchies.

Theoretical Focus

We construct, elaborate, and test or verify two types of theory, substantive and formal. **Substantive theory** focuses on a particular content or topic area in social reality, such as family relations, delinquent behavior, or racial-ethnic relations. We might have a theory that focuses on economic development as with Mahoney’s (2003) study of Spanish America or a theory that focuses on how social inequalities are reproduced in everyday face-to-face interactions as with Williams’ (2006) study of toy stores (see Example Box 2).

Formal theory focuses on general processes or structures that operate across multiple topic areas, such as forming a social identity, engaging in conflict, or exercising power. It is more general and abstract. A formal theory about access to resources and holding onto power and authority might apply

to several areas. It might explain how wealthy business owners use their access to valued resources in advanced capitalist societies to maintain economic and social power (see Table 2), how government elites used resource control to try to hold onto power during the transition from communism to a post-community world (see Table 3), and how colonial elites in a rigid system of resource control held onto local power in the nineteenth century in a way that stalled later national development. In all three situations, a similar social-economic dynamic operated: Powerful elite groups used their ownership and control over valued resources to maintain a position of power and resist challenges to their authority.

The two types of theory intersect. Substantive theory on a topic often draws on and combines formal theories, and a formal theory may have applications in several substantive areas. As Layder (1993:44) remarked, “The cumulative process of theory is enhanced by the encouragement of multiple substantive and formal theories.”

Each theoretical focus has strengths and limitations. Substantive theory offers powerful explanations for a specific topic area. It incorporates

Substantive theory A type of theory that is specifically tailored to a particular topic area.

Formal theory A type of theory that is general and applies across many specific topic areas.

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details from specific settings, processes, or events. Nonetheless, it may be difficult to generalize across topic areas. Compared to formal theory, concepts in a substantive theory tend to be at lower levels of abstraction and narrower in scope. Compared to formal theory, we can see the relevance of a substantive theory for ongoing events more easily. Formal theory's strength is its ability to bridge across multiple topic areas and advance general knowledge. Its weakness is that by being less rooted in specific issues and social settings, we have to adjust the theory to see how it relates to a particular issue or topic. Formal theories help us to recognize and explain similar features across multiple topics. They are more abstract, making them more complex and easier to express in a purely logical, analytic form.

Forms of Explanation

Prediction and Explanation. The primary purpose of theory is to explain. However, explanation has two meanings: theoretical and ordinary. Researchers focus on **theoretical explanation**, a logical argument that tells why something takes a specific form or why it occurs. Usually when we do this, we refer to a general rule or principle, and we connect it to a theoretical argument with many connections among concepts. An *ordinary explanation* makes something clear or describes something in a way that illustrates it and makes it intelligible for other people. For example, a good teacher "explains" in the ordinary sense. The two kinds of explanation can blend together, as when we explain (i.e., make intelligible) an explanation (i.e., a logical argument involving theory). Before we examine forms of theoretical explanation, we will take a short detour because many people confuse prediction with explanation.

Prediction is a statement that something will occur. An *explanation* logically connects what occurs in a specific situation to a more abstract or basic principle about "how things work" to answer the why question. The particular situation is shown to be an instance or specific case of the more general principle. It is easier to predict than to explain, and an explanation has more logical power than prediction because good explanations also predict. A specific explanation rarely predicts more than one

Theoretical explanation A logical argument or "story" that tells why something takes a specific form or occurs and does so by referring to more general ideas and abstract principles.

outcome, but competing explanations can predict the same outcome. Although it is less powerful than an 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, this will be sensational. I may win a lot of money, at least until the casino officials realize that 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, a star in our solar system. In this explanation, the sun only appears to rise, but it 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 by empirical observations.

Nobel Prize-winning physicist Steven Weinberg (2001:47) has given a "hard science" view of explanation:

Scientists who do pure rather than applied research commonly tell the public and funding agencies that

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*their mission is the explanation of something or other. . . . Within the limited context of physics, I think one can . . . [distinguish] explanation from mere description, which captures what physicists mean when they say that they have explained some regularity. . . . We **explain** a physical principle when we show that it can be deduced from a more fundamental physical principle. [emphasis added]*

Theoretical explanations take three forms: causal, structural, and interpretative. Each explains, or answers, the question of why events occur. Each connects a specific case to some type of general principle.

Causal Explanation A causal explanation indicates a cause-effect relationship among concepts/variables. We use this type of explanation in everyday language, although everyday language tends to be rather sloppy and ambiguous. Here is a causal explanation: You say that poverty *causes* crime or that weakening societal morals *causes* divorce to increase. These are elementary causal explanations. Social scientists try to be more precise and exact when they discuss causal relations. They also try to determine how or why the causal process works (e.g., how and why poverty causes crime).

At least since the time of eighteenth century Scottish philosopher David Hume (1711–1776), philosophers have debated the idea of cause. Some people argue that causality occurs in the empirical world. Although we cannot see it easily, it is “out there” in objective reality, and we can find indirect evidence of it. Others argue that causality does not exist in objective reality. It is a mental construction “in our heads.” We have subjectively created the idea of causality to help us think about events in objective reality. Without entering into the philosophical debate, many social scientists theorize and conduct studies on causal relationships.

Requirements for Causality. We need three things to establish causality: temporal order, empirical

association, and the elimination of plausible alternatives (see Example Box 3, Three Elements of Causality). An implicit fourth condition is that the causal relationship makes sense or fits with broader assumptions or a theoretical framework. Let us examine the three basic conditions. In addition to these three, a full explanation also requires specifying the causal mechanism and outlining a causal chain.

1. *Temporal order* means that the cause must come earlier in time than an effect. This common-sense assumption establishes the direction of causality: from the cause toward the effect. You may ask how the cause can 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, race riots occurred in a dozen U.S. cities in 1968 one day after an intense wave of sunspots happened. The temporal ordering does not establish a causal link between sunspots and race riots. Eventually, all of prior human history occurred before some specific event. The temporal order condition simply eliminates from consideration potential causes that occurred later in time.

Establishing temporal order can be tricky in cross-sectional research. For example, a researcher finds that people who have considerable formal schooling express less prejudiced attitudes than others. Does more schooling cause a reduction in prejudice, or do people who are highly prejudiced avoid school? Here is another example. The students who get high grades in my class say I am an excellent teacher. Am I doing a great job, students learn a lot, and this causes high grades, or 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)? It is a chicken-and-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. More complex theories specify reciprocal-effect

Causal explanation A type of theoretical explanation about why events occur and how things work expressed in terms of causes and effects or as one factor producing certain results.

EXAMPLE BOX 3**Three Elements of Causality**

I read that several politicians visited a Catholic school in Chicago that had a record of being much more successful than public schools in educating children. The next day, the politicians called a news conference and advocated new laws and the redirection of tax money to Catholic schools. As a person who wants children to get a good education, I was interested in the story, but as a social scientist, I critically evaluated it. The politicians' theory said Catholic schools cause more learning than public schools. They had two elements of causality: temporal order (first the children attended a Catholic school, then learning improved) and association (those attending Catholic schools performed better than those attending public school). Social researchers know this is not enough information. They first try to eliminate alternative explanations and then try to understand the causal mechanism (i.e., what happens in Catholic schools that helps students learn more). For example, the politicians failed to

eliminate the alternative explanation that children in the two types of schools had different family circumstances that affect learning and that this caused learning differences. If the family circumstances (e.g., parents' education and income, family religious belief and intensity of belief, two-parent versus single-parent households, degree of parental interest in child's education) are the same for children who attend both types of schools, then the politicians are on the right track. The focus, then, is on what Catholic schools are doing that improves learning. If the family circumstances are very different, then the politicians are making a big mistake. Unfortunately, politicians are rarely trained in social research and most make quick, high-publicity decisions without the careful reasoning or the patience for precise empirical investigation. Fortunately, sociologist James S. Coleman and others have studied this issue (see Coleman and Hoffer, 1987).

causal relations—that is, a mutual causal relationship or simultaneous causality. For example, studying a lot can cause 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*.⁵

2. An *association* means that two phenomena occur together in a patterned way or appear to act together. People often confuse the word *correlation* with association. Correlation has a specific technical meaning and there are certain statistical requirements for it. Association is the more general idea. The correlation coefficient is a statistical measure that indicates the strength of association, but there are other ways to measure an association. Sometimes researchers call association *concomitant variation* because two variables vary together. Figure 2 depicts 38 people from a lower-income neighborhood and 35 people from an upper-income neighborhood. Can you see an association between race

(represented by lighter and darker shaded figures) and income level? Some people mistake association for true causality. 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. Thus, an association existed between the day of the week and the exam grade. This association did not mean that the day of the week caused the exam grade. Instead, the reason for the association was that I worked 20 hours each weekend and was very tired on Mondays. If you cannot find an association, a causal relationship is very unlikely. This is why you want to find correlations and other measures of association. Yet just because you find an association does not mean you have causality. It is a necessary but not a sufficient condition. In other words, you need it for causality, but it is not enough alone.

Association The co-occurrence of two events, characteristics, or factors so that when one happens or is present, the other one is likely to happen or be present as well.

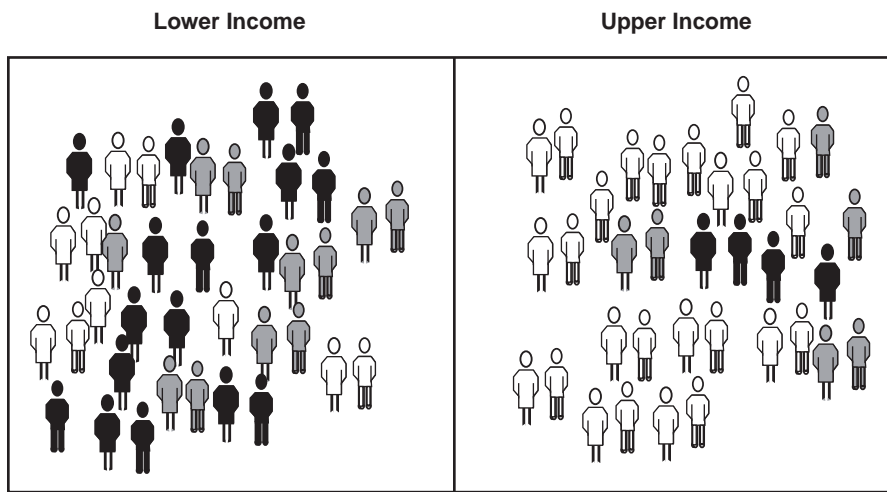


FIGURE 2 Association of Income and Race

To show causality, an association does not have to be perfect (i.e., every time one variable is present, the other is also). In the example involving exam grades and days of the week, there is an association if on ten Fridays I got seven As, two Bs, and one C, whereas my exam grades on ten Mondays were six Ds, two Cs, and two 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 is also an imperfect association.

3. *Eliminating alternatives* means that we must show that the effect is due to the causal variable, not to something else. It is also called *no spuriousness* because an apparent causal relationship that is actually due to an alternative but unrecognized cause is called a spurious relationship. While we can observe temporal order and associations, we cannot empirically eliminate all logical alternatives. Eliminating possible alternatives is an ideal. This means we can demonstrate this only indirectly or rule out the more obvious alternative explanations. In an experiment,

Causal mechanism The part of a causal explanation that specifies the process by which the primary independent variable(s) influence the primary dependent variable(s).

we build controls into the study design itself to eliminate alternative causes and isolate the experimental situation from the influence of all variables except the main causal variable. Nonexperimental research eliminates alternatives by identifying possible alternative causes and measuring them. This is common in survey research. Once we measure potential alternatives, we use statistical techniques to learn whether the causal variable or something else operates on the effect variable.

4. *Specifying the mechanism in a causal relationship* means that when we create a causal explanation, we must have more than two variables that are correlated, which is “a satisfactory explanation requires that we also specify the social ‘cogs and wheels’” (Hedstrom and Swedberg, 1998:7). We go beyond saying that an independent and dependent variable are linked, as if the connection were through a “black box” of unknown processes. A full causal explanation identifies a causal relationship and specifies a **causal mechanism**.

Let us say we find a strong association between a person’s social class and her health. We may state our “theory” as high-class people live longer and get sick less often than low-class people. However, it is not enough to say that a person’s social class causes health outcomes. We must also explain why

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and how social class does this. In short, we should describe exactly what it is about social class that makes the health outcomes happen. We may *believe* that higher class provides people with more social resources (knowledge, social connections, leisure time, flexible schedule) that enables them to eat healthy food, experience less stress, engage in physical exercise, and so forth, which produce better health. Social resources are the mechanism that connects class and outcomes (resources include “being in the know,” “knowing the right people,” and having access to opportunities).

Seeing the mechanism of a full causal explanation may be difficult, especially in the natural sciences. We may posit unseen mechanisms among subatomic particles or off in distant galaxies to explain what we can observe. As research advances, we observe the outline of a mechanism whose existence we first only predicted in theory. Even if we cannot directly observe the mechanism now, we can still describe how we think it operates.

We can use models of a process that we believe connects inputs with outcomes to clarify mechanisms. In economics, the market is a common mechanism; it is a process of making exchanges between independent buyers and sellers, each with desires and resources. The market explains how the supply–demand relationship operates. In sociology, a commonly used mechanism is Merton’s self-fulfilling prophecy. A self-fulfilling prophecy occurs when a definition of a situation stimulates behavior that makes a false definition come true. A “negative feedback” mechanism in a prophecy connects people’s beliefs and behaviors at one point in time to later outcomes. A classic example of a self-fulfilling prophecy is a run on a bank. A bank may be very financially stable, but a false rumor starts that it will fail. This new definition of the situation, although inaccurate, causes many people to withdraw their money quickly. As people withdraw large amounts of money, the bank weakens. The weakened bank stimulates even more rumors of bank failure. The new rumors in turn stimulate more withdrawals. Eventually, accelerating fear (false definition of the situation) and withdrawals (behavior based on the definition) cause the bank to fail (the false definition becomes true).

Sometimes we state theories as a lawlike generalization: When *X* occurs, *Y* will occur. However, such “theories” are not a full explanation (Elster 1998). They need the causal mechanism. The mechanism is often more specific than a general law, but it is more general than a specific instance. In a full explanation, the mechanism may be an arrangement of opportunities or individual desires, which are more general than a particular opportunity or one desire but less general than a lawlike statement. Mechanisms add complexity. Instead of a simple law (if *B* then *R*), we find in specific situations that if *B* sometimes *R* but at other times *P* or *D*. The mechanism explains why *B* does not always cause *R* but can create other outcomes. Perhaps we believe that when economic conditions are bad (*B*), people rebel (*R*). However, as we study many specific situations, we find this is not always true. Sometimes people rebel, but at other times they become passive and accept their fate (*P*) and at still other times they fight one another and become self-destructive (*D*). For a complete explanation, we must include the mechanism that tells us when bad conditions produce each of the outcomes.

5. *Outlining the causal chain* is a process in evaluating each part of the chain. Here is an association in a causal theory: A rise in unemployment causes child abuse to increase. We want to explain these increases. We explain them as being caused by a rise in unemployment. To “explain” increased child abuse, we must identify its primary cause, but a full explanation also requires specifying how this happens (i.e., identify a causal mechanism and put it in a causal chain). The mechanism in this theory is the situation of people losing their jobs. Once they lose their jobs, they feel a loss of self-worth and increased stress. As they lose self-worth and experience high stress, they are more easily frustrated and become angry more quickly. Inner social control weakens, and the pattern of living is disrupted. Highly frustrated people with lower inner social control may express their anger by directing violent acts toward those with whom they have close personal contact (e.g., friends, spouse, children). This is especially true if they cannot direct their anger in actions against its source (e.g., an employer, government policy, or “economic forces”). The mechanism is

part of a larger process or causal chain, and it occurs after the initial cause (unemployment) and before the effect (child abuse).

We can test each part of a causal chain. In addition to determining whether unemployment rates and child abuse occur together, we can consider whether unemployment increases frustration, and frustrated people become violent toward family members. A typical research strategy is to divide the causal chain into its parts and then to evaluate each part of the chain against the data.

Diagrams of Causal Relations. We can express causal relationships and theories using words, pictures, or both. We often present diagrams of the causal relations to provide a simple picture of a relationship. This makes it easier for others to see the causal relation quickly at a glance. Such symbolic representations supplement verbal descriptions and are shorthand for conveying complex information.

The simplest diagram is a two-variable model as the one in Figure 3(a). We represent variables using letters, circles, or boxes. The convention is to represent a cause by an X and the effect by a Y . The arrow shows the direction of causality (e.g., from cause to effect). Sometimes we use subscripts when there is more than one cause (e.g., X_1 , X_2). We symbolize relationships by lines with directional arrows. Causal relations are represented by straight lines. The convention is to use curved lines with arrows on both ends to show an association that does not imply that a causal relationship goes in one direction.

Positive relationship An association between two concepts or measures so that as one increases, the other also increases, or when one is present, the other is also present.

Negative relationship An association between two concepts or measures so that as one increases, the other decreases, or when one is present, the other is absent.

Structural explanation A type of theoretical explanation about why events occur and how things work expressed by outlining an overall structure and emphasizing locations, interdependences, distances, or relations among positions in that structure.

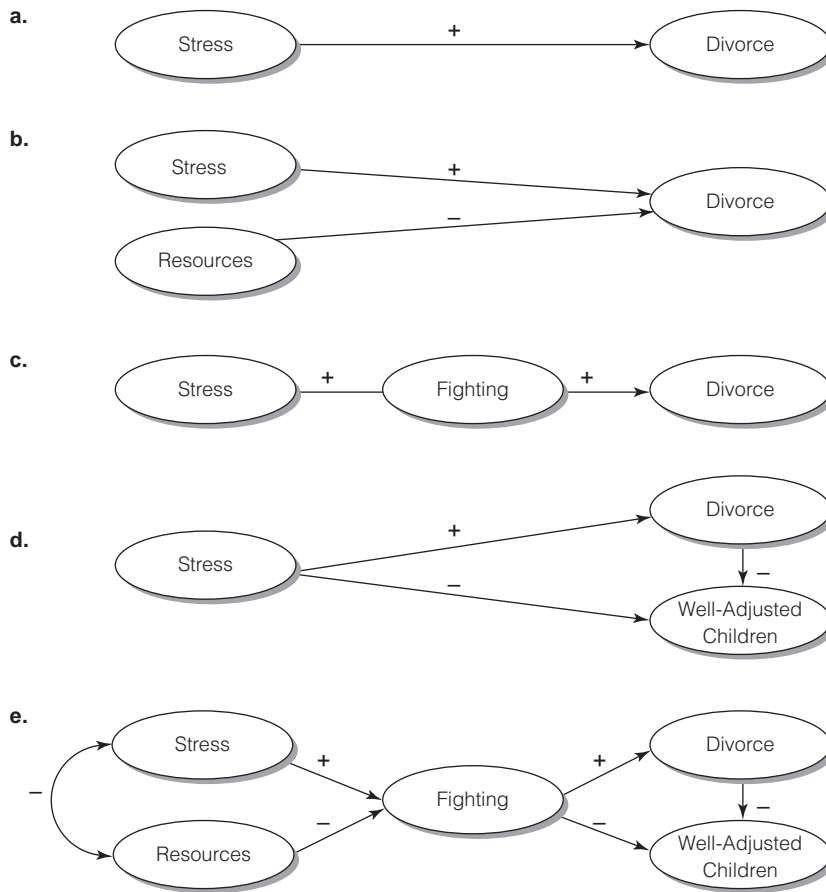
Positive and Negative Causal Relationships.

Causal relationships can be positive or negative. Many people imply a positive relationship between the cause and effect variables if they say nothing. A **positive relationship** means that a higher value on the cause goes with a higher value on the effect or outcome. For example, as the number of years of a person's schooling increases, the longer the person's life expectancy is. A **negative relationship** means that a higher value on the cause goes with a lower value on the effect or outcome. For example, as the number of years of a person's schooling increases, his or her bigotry and prejudice decreases. In diagrams, a plus sign (+) signifies a positive relationship and a negative sign (−) signifies a negative relationship. Figure 3 presents some samples of relationships that can be diagrammed. Researchers would not use a diagram for a very simple relationship like the one in Figure 3(a) but find it helpful as they increase the number and complexity of causal relationships.

At times, the impact of a cause on an outcome is mediated or conditioned. This means that the cause operates under some conditions but not others. For example, early marriage causes divorce in modern societies that permit individual freedoms and allow for legal divorce but not in highly traditional societies. A third factor that mediates the basic cause-effect relationship is diagrammed as a third line with an arrow that intersects the line with an arrow between the cause and effect (see Example Box 4, Explaining Racial Conflict).

Structural Explanation. In a causal explanation, one or more factors may cause a response in other factors. This is like one ball that rolls and hits others, causing them to begin rolling. In contrast, the logic of a **structural explanation** locates a social process, event, or factor within a larger structure. The structure is like a spiderweb, a wheel with spokes, or a machine with interconnected parts. A structural explanation explains social life by noting how one part fits within the larger structure. A causal expla-

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Explanation of relationship in each diagram

- a.** Level of stress (financial, social, emotional, etc.) is positively associated with the likelihood that a couple will divorce.
- b.** Level of stress is positively associated with the likelihood that a couple will divorce, but the amount of resources (financial, social, emotional, etc.) they possess is negatively associated with it.
- c.** Level of stress is positively associated with the frequency of fighting by a couple, which is associated with the likelihood that the couple will divorce.
- d.** Level of stress is positively associated with the likelihood that a couple will divorce and negatively associated with the likelihood that the couple will have emotionally well-adjusted children. In addition, the divorce process itself has a negative effect on the emotional adjustment of children.
- e.** Level of stress and amount of resources are negatively associated with each other (i.e., people who tend to have many resources are less likely to experience or better able to deal with stress). Level of stress is positively associated with the frequency of fighting by a couple, but the amount of resources is negatively associated with it. Amount of fighting is positively associated with the likelihood that a couple will divorce. Both fighting and the divorce itself are negatively associated with the likelihood that the couple will have emotionally well-adjusted children.

FIGURE 3 Causal Diagrams

Sequential theory A type of theory that uses a structural explanation, outlines a sequential pattern, and specifies the ordered sequence, stages, steps, or phases by which events occur.

nation says, B happens because A causes B. A structural explanation may say that B happens because B is positioned inside a larger structure that either blocks off or provides B openings to other areas in the structure.

EXAMPLE BOX 4

Explaining Racial Conflict

Behrens, Uggen, and Manza (2003) provided a causal explanation of felon disenfranchisement in the United States. They noted that the United States has the most restrictive voting laws for people convicted of committing a crime among advanced democracies. State-level voting laws vary widely: Some states have no restrictions, others bar incarcerated felons from voting, and others bar felons who have served their sentences from voting for life. The authors extended an existing theory, the “racial threat hypothesis,” to explain why some states have highly restrictive voting laws while others do not. Others have developed the theory to explain interracial economic competition. These authors measured a high racial threat as a potentially angry, powerful Black presence (e.g., large Black populations and many Blacks in prisons) in a state where a White majority prevented Blacks from voting in the pre–Civil Rights era but can no longer do so after the passage of civil rights laws. The authors looked at the year in which a restrictive voting law was passed, the types of restrictions it included, and the percentage of Blacks in the state population and in its prisons. The role of imprisonment is pertinent because Blacks are far more likely than Whites to be felons. The theory suggests the states with the highest “racial threat” would have the most restrictive voting laws because restrictive voting laws replaced more direct forms of denying voting rights to Blacks. The authors documented temporal order and found an association between racial composition and restrictive laws that fit the hypothesis. In this macro-level study, the main cause was a large Black

Three major types of theories that use a structural explanation are sequential theories, network theories, and functional theories (see Figure 4).

1. Sequential theory emphasizes the order or sequence by which events occur; it identifies the necessary earlier steps and possible subsequent steps in an unfolding pattern of development across time. A sequential theory maps out an ordered set of stages. Almost all people, organizations, or events follow the sequence. There may be a single path or

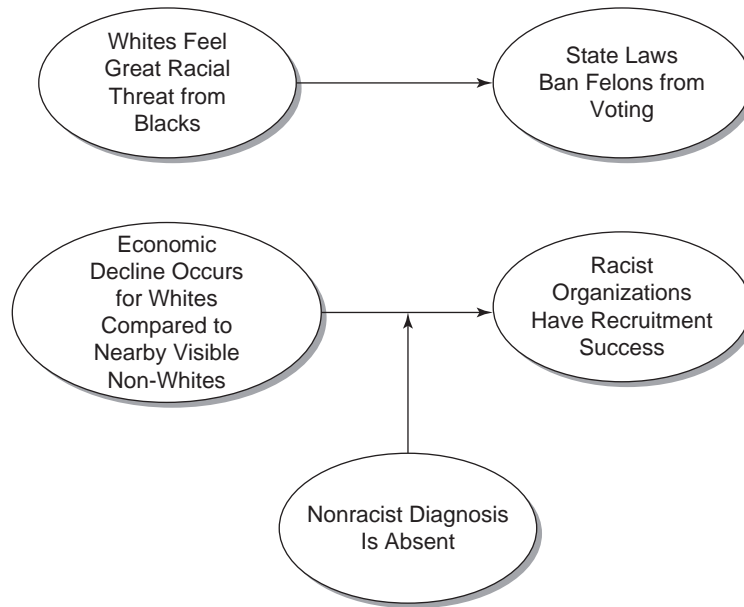
population in prisons, the main effect was restrictive voting laws, and the unit of analysis was the state (see Example Box 4 Figure).

McVeigh (2004) also used a causal explanation to study why White racist organizations succeed in some areas of the United States more than in other areas. Racist organizations appealed to Whites who experience downward social mobility and offered messages that blamed non-Whites for the difficulties. McVeigh hypothesized that racist organizations would be most successful where local conditions matched the racist claims. He predicted that the White racist messages would succeed in areas of more racial diversity, unstable economic conditions, and rising income inequality. In addition, he expected racist messages that lacked an alternative, nonracist diagnosis of the conditions to be most successful. He argued that alternatives would be in the highest numbers where White education levels were mixed, the more educated Whites would spread to other Whites information of alternative reasons for their economic decline (e.g., global competition, changing technology, lack of relevant skills). He hypothesized that a combination of two causes—Whites economically falling behind visible, nearby non-Whites and the absence of a nonracist diagnosis—explained the success of racial organizations in some areas. In the study, McVeigh measured economic conditions, racial organizational success, and mixed White education level by county, which was the study’s unit of analysis (see Example Box Figure 4 Figure).

(continued)

EXAMPLE BOX 4

continued



a narrow range of paths for a specific process, such as the moral development of a child, the maturing of an intimate relationship, family formation, urban expansion, organizational growth or death, conflict intensification or resolution, or societal development. In addition to identifying the steps or stages of a process, sequential theories explain the speed of movement along the steps, stagnations at a stage,

and key turning points of a process that trigger a different direction or steps. A sequential theory may identify essential versus optional steps, or how a specific prior step restricts possible next steps. It is not a causal theory; being in an earlier step does not *cause* movement along the sequence; instead, the structure of a staged sequence constrains what can occur. Thus, a sequential theory may state that

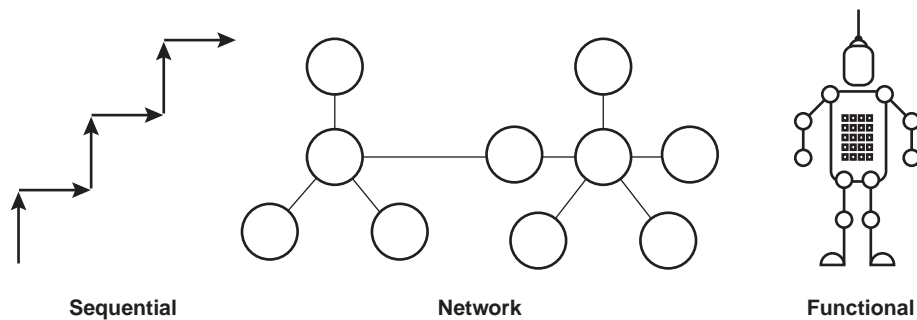


FIGURE 4 Forms of Structural Explanation

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unless step A was completed, movement to step B is impossible, and the only way to get from step A to step C is to pass through step B.

The study of Spanish American countries by Mahoney (2003) used a sequential theory. He found that events at an early stage in a Spanish American country's development, during colonialism, shaped the direction of its path in later stages. Oesterle, Johnson, and Mortimer (2004) offer a sequential theory in their panel study on voluntarism among young people. The authors adopted a "life course" perspective in which "the meaning of roles and activities differs across life stage" (p. 1124). Thus, the impact of an event at a specific phase of a person's life differs from the same event happening in other phases, and the same impact will 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 examined panel data of ninth-grade students (15–16 years old) begun in 1988 that continued across 9 years when the research subjects were 18–19 and 26–27. The authors found that prior stage activities strongly influenced what happened at the last stage. People who worked or who were parenting full-time at an earlier stage (18–19 years old) were less likely to volunteer at a later stage (26–27 years old) than people whose major activity was to attend school full-time. Also, having volunteered at an earlier stage predicted whether a person volunteered at a later stage.

2. Network theory explains social relations in terms of placement in a network. It explains by referring to relational positions within a network or its size and shape, type and existence of connections among positions, overlap or density of connections, centrality in a network, or flows among positions or nodes in a network.⁶ The positions might be points or nodes in a network of relationships among people, organizations, cities, or nations. The positions and

structure of a network help to explain ease of communication, power relationships, hierarchical relations, and speed of flows in the network.

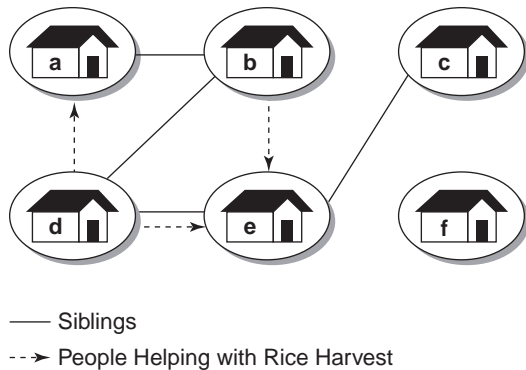
A network theorist explains by referring to a pattern, a set of syntax rules, or structures. The explanation shows events fitting into a larger pattern or within a much larger system of linkages. Network theory is a form of reasoning similar to that used to explain why people use language in specific way. For example, a language has syntax rules that state that *X* goes with *Y* or that sentences need a noun and a verb. To explain is to identify the syntax rule that covers a situation.

Many studies examine social networks and map network structures as a way to explain social life. Entwisle, Faust, Rindfuss, and Kaneda (2007) studied networks in villages in a region of Thailand. The authors found that the networks connecting people, through kinship or other social ties, varied by village: "Networks are sparse in some, dense in others; porous in some, less so in others. Moreover, this variability matters" (p. 1524). The networks had many consequences for relations with nearby villages, for the economic activities in a village, for whether people migrated out of a village, and so forth. Network structure shaped the flow of activities and degree of intravillage cooperation. To illustrate these findings, the authors provide a diagram with six households. Solid lines indicate people related as brother or sister, and dotted lines indicate those helping with the rice harvest. They show that households a, b, d and e work together. There is no direct family connection between a and d, or between b and e, but they cooperate due to their indirect connections in the network through d. A key network impact was on social cohesion. As the authors noted, "Networks in which actors have more ties, on average, are more cohesive than those in which actors have fewer ties. . . . The more cohesive a network, the more likely that information can travel through social ties to all members and that activities can be coordinated among network members" (p. 1508). In other words, networks influenced how activities in a village occur. More important, dense overall networks with many interconnections were more socially cohesive than loose networks.

Network theory A type of theory that uses a structural explanation in which the emphasis is on locations and connections within an interconnected web or network and on the shape or overall pattern of the network.

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Cohesion meant that people shared information, cooperated, and accomplished tasks faster and with fewer difficulties compared to people in villages that have sparse networks (*American Journal of Sociology*, 2007:1515).



From *The Construction of a Global Profession: The Transnationalization of Economics*, by Marion Fourcade. *American Journal of Sociology*, Volume 112 Number 1 (July 2006): 145–94 (page 151).

3. Functional theory uses the idea of a system with a set of mutually interdependent relations.⁷ Various parts of a system depend on other parts, and in combination, all parts function together as a whole. Success or failure of one part has ramifications for other parts and for the entire system. The system might refer to a family, a social group, a formal organization, or an entire society. Functional theories suggest that long-term system survival requires a balance or equilibrium to continue smooth operation. If a critical part fails, the system is unable to fulfill a vital function unless a replacement for the vital function is found. Parts of a system tend to be specialized or more efficient/effective in fulfilling different system needs or functions and therefore fit a patterned division of labor. The theory explains parts by the way they fit into the structure of all functions. Like the part of a human body or part of a robot, each part (e.g., head, hand, foot) performs specialized functions.

A functional theory of social change says that society moves through developmental stages, from traditional to modern. Over time, society becomes increasingly differentiated and complex and evolves

Functional theory A type of theory that uses a structural explanation in which the emphasis is on how interdependent parts fit into and operate to sustain an overall system with specific parts serving complementary and specialized supporting roles for the whole.

a more specialized division of labor with individualism. These developments create more efficiency for the system as a whole. Specialization and individualism may create disruptions and require system adjustments. They might weaken traditional ways of performing system functions. However, new types of social relations will emerge to replace traditional ways, and they will perform the same function to satisfy the needs of the system for continuity.

Kalmijn (1991) explained a shift in the way that Americans select marriage partners using a functional explanation. He relied on modernization theory, which holds that the historical processes of modernization (industrialization, urbanization, and secularization) shape societal development. As part of modernization, people rely less on traditional ways of doing things. Traditional religious beliefs and local community ties weaken as does the family's control over young adults. People cease to live their entire lives in small, homogeneous communities. Young adults gain independence from their parents and from local religious organizations. In order to function, every society has a way to organize how people select marriage partners and locate partners with whom they share fundamental values. In the past, parents and religion had a major role in selecting marriage partners. In modern society, people spend time away from small local settings and more time in school settings. In school settings, especially in college, they meet other unmarried people who are potential marriage partners. Education is a major socialization agent in modern society. It affects a person's future earnings, moral beliefs and values, and leisure time interests. Over time, the trend in the United States has been that people are less likely to marry within the same religion and increasingly likely to marry persons with a similar level of education. The functions of socializing people to moral values and linking people to marriage partners that the family and religious

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organization had performed in traditional society has been replaced by higher education in modern society.

Interpretive Explanation. The purpose of **interpretive explanation** is to foster understanding. It does so by placing what we wish to explain (e.g., a social relationship, event, cultural practice) within a specific social context and setting that have a meaning system. The explanatory goal is for others to mentally grasp how some area of the social world operates and to place what we want to explain within that would. This goal is reached by helping others comprehend what we want to explain within an entire worldview and system of meaning. Each person's subjective worldview shapes how he or she acts, so the goal is to discern others' reasoning and view of things. The process is similar to decoding a text or work of literature in which meaning comes from the context of a cultural symbol system.

Futrell and Simi (2004) used an interpretative explanation to study the U.S. White power movement. The authors focused on movement, collective identity, or a shared sense of "we." They examined members of racist movements that are fragmented into many organizations (e.g., Ku Klux Klan, Christian identity groups, Aryan Nation, neo-Nazi groups) and whose members are marginalized from larger society. The authors investigated how members communicate their beliefs and engage in activism when their radical beliefs can result in losing their jobs and destroying most personal relations. After

interviewing and collecting data on fifty-six activists from 1996 and 2003, the authors discovered that the members participated in small domestic gatherings (e.g., study groups, ritual parties) at which they reaffirmed their commitments to the group and discouraged conformity to the mainstream of outsiders. The gatherings were small, inclusive, and rooted in ongoing personal relations. In them members felt that they could safely and openly express racial ideologies. Family members and close friends supported these "cultural havens." Thus, members created and sought out "free spaces" in which they could affirm their radical beliefs among like-minded people. By embedding opportunities for political expressions in what looked on the surface to be "normal" activities (homeschooling, study groups, camping trips, parties), they reduced the distance between themselves and the outside world. They built a protective social environment so they could maintain and celebrate a radical ideology and identity that was camouflaged to appear mainstream.

Range of Theorizing

Theoretical statements also vary by range. At one extreme is the empirical generalization, a narrow statement that relies on concrete concepts and fits into a substantive theory; it is a low-level descriptive statement about a relationship believed to operate empirically. It generalizes beyond a specific case or set of observations but not by very much. For example, people who marry when they are very young (under age 21) are more likely to divorce than those who marry when they are older (over age 31). We might wish to qualify the generalization by specifying historical, cultural, or other conditions that make a divorce more or less likely. If empirical generalization includes an explanation, it is simple and concrete, not a full social theory. For example, people who marry when they are younger are more likely to divorce because they are less mature.

Middle-range theorizing has a broader theoretical range and uses more abstract concepts in a substantive or formal theory. A **middle-range theory** about divorce would include a number of empirical generalizations interlocked with more abstract concepts. Divorce might become part of the

Interpretive explanation A type of theoretical explanation about why events occur and how things work expressed in terms of the socially constructed meanings and subjective worldviews.

Empirical generalization A narrow, quasi-theoretical statement that expresses empirical patterns or describes empirical regularities using concepts that are not very abstract.

Middle-range theory Social theory that falls between general frameworks and empirical generalization, that has limited abstraction/range, and that is in the form of empirically verifiable statements capable of being connected to observable phenomena.

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large idea of marital instability, and age of marriage might be linked to the person's stage in the life cycle and the social roles she or he learns. Maintaining a marital relationship may be placed in a context of other social forces (e.g., gender ideologies, societal disapproval or acceptance, laws affecting divorce, friendship or kinship groups, religious pressures). A study may elaborate and test specific parts of the middle-range theory, and accumulating empirical support for many parts of the theory over time helps the theory to advance as an explanation.

Theoretical frameworks (also called *theoretical systems* or *paradigms*) are at the widest range and the opposite extreme from empirical generalizations. A theoretical framework is more than a formal or substantive theory and includes many specific formal and substantive theories that may share basic assumptions and general concepts in common. Sociology has several major frameworks.⁸ They are orientations or sweeping ways to see and think about the social world. They provide assumptions, concepts, and forms of explanation.

Theoretical framework A very general theoretical system with assumptions, concepts, and specific social theories.

For example, each framework may have its own theory of the family, of crime, or of social change. Some frameworks (e.g., symbolic interactionism) are more oriented toward the micro level of analysis whereas others (e.g., conflict) are stronger at the macro level. Specific studies rarely test or contrast entire frameworks. More often, studies seek evidence for one part of a theory within one framework (e.g., one proposition from a conflict theory of crime). Example Box 5, Kalmijn's Levels of Theory, illustrates the ranges of theory with Kalmijn's study of changing marriage partner selection. Each framework is associated with an overall approach to doing research. Expansion Box 2, Major Theoretical Frameworks, briefly describes the key concepts of assumption of the four major theoretical frameworks of sociology.

EXAMPLE BOX 5

Kalmijn's Levels of Theory in "Shifting Boundaries"

Theoretical framework. 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 are superseded by modern ones.

Formal theory. Secularization theory says that during modernization, people shift away from a reliance on traditional religious beliefs and local community ties. In traditional society, institutions that conferred ascribed social status (family, church, and community) also controlled socialization and regulated social life. In modern society, they are superseded by secular institutions (e.g., education, government, and media) that confer achievement-oriented status.

Middle-range substantive theory. 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 college, young adults 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.

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

EXPANSION BOX 2**Major Theoretical Frameworks****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 onto their power by spreading myths or by using violence if necessary.

The Dynamic Duo

You have seen the many aspects of theory (see Summary Review Box 2). Only those of us who are naive, new researchers mistakenly believe that theory is irrelevant to conducting research or that we just collect the data. If we try to proceed without using theory, we may find that we are adrift as we attempt to design a study. We may waste time collecting useless data, lack precise ideas, and fall into the trap of hazy and vague thinking. We may find organizing arguments, converging on research issues, or generating a lucid account of our study for other people to be difficult.

The reason for all of these difficulties is simple. Theory frames how we investigate 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 helps us make connections and see the broader significance of findings. To use an analogy, theory is what helps us see the forest instead of just a single tree.

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. The role of theory in applied and descriptive research may be indirect. The concepts are often more concrete, and the goal is not to create general knowledge. Nevertheless, we use theory in descriptive research to refine concepts, evaluate assumptions of a theory, and indirectly test hypotheses.

Theory does not remain fixed; it is provisional and open to revision. Theories grow into more accurate and comprehensive explanations about the

SUMMARY REVIEW BOX 2**The Parts and Aspects of Social Theory****Four Parts of Social Theory**

1. *Assumptions*
2. *Concepts.* Vary by level of abstraction (concrete versus abstract), single versus concept clusters, simple versus complex (e.g., classifications, typologies), and scope (narrow versus broad)
3. *Relationships.* Forms of relationships, propositions, and hypotheses
4. *Units of analysis*

Five Aspects of Social Theory

1. *Direction of theorizing.* Deductive (abstract to concrete) or inductive (concrete to abstract)
2. *Level of analysis.* Micro level, meso level, macro level
3. *Focus of theory.* Substantive theory or formal theory
4. *Forms of explanation.* Causal, structural (sequential, network, functional), or interpretative
5. *Range of theorizing.* Empirical generalization, middle-range theory, or theoretical framework

makeup and operation of the social world in two ways. Theories advance as we 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. If we adopt a deductive approach, theory guides study design and the interpretation of results. We refute, extend, or modify the theory based on results. Only by continuing to conduct empirical research that tests a theory can we develop confidence that some parts of it are true. A theory's core propositions and central tenets are more difficult to test and are refuted less often. In a slow process, we may decide to abandon or change a theory as the evidence against it mounts over time and cannot be logically reconciled.

If we adopt an inductive approach, we follow a slightly different process. Inductive theorizing begins with a few assumptions and broad orienting concepts. Theory develops from the ground up as we gather and analyze the data. Theory in a specific area emerges slowly, concept by concept, proposition by

proposition. The process is similar to a long pregnancy. Over time, the concepts and empirical generalizations emerge and mature. Soon, relationships become visible, and we weave together knowledge from different studies into more abstract theory.

Theories are relevant because they provide explanations. Different theories provide different explanations, and the types of explanations tell us that the world works in different ways. Some studies evaluate one theory. Other studies expand on a theory or find a theory incomplete and add to it. You saw this in this chapter's opening box: Education and income alone do not explain smoking behaviors. Still other studies set forth two or more competing theoretical explanations and attempt to create a head-to-head competition to see which one better explains events.

Sometimes a study contrasts the competing predictions offered by two or more theoretical explanations. For example, Kraeger (2008) contrasted two explanations about the relationship between a high school boy engaging in antisocial behavior (fighting and delinquency) and in participating in high school sports teams: social control theory and social learning theory. Social control theory suggests that participation in school sports will reduce antisocial behavior. This is so because school sports are an institutionally approved behavior governed by adults. Sports create social bonds among adolescent males and tie them to conventional behavior. Engaging in deviance can cause a loss of athletic status and lower peer social standing. The time required by sports participation also reduces idle time available for performing antisocial behavior. In addition, organized school sports promote prosocial values, such as teamwork and fair play. Social control theory suggests that reports of violent behavior by male high school athletes can be attributed to a few mavericks who lack sufficient control and social integration.

By contrast, social learning theory says we learn either prosocial or antisocial behavior from our peers and family. High school athletics promote both prosocial and antisocial values: play through the pain, do not accept limits, and glorify nonacademic achievements. Certain games or sports, such as the game of chicken, more than others can encourage

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aggressive physical behavior, use of intimidation, loyalty to insiders, and “character contests.” A subpart of learning theory, masculinity theory, notes that certain sports are “hypermasculine” (such as football, rugby, and ice hockey versus swimming, track, baseball, and tennis). Hypermasculine sports emphasize engaging in individual violence, such as the use of the body as a weapon, brutal body contact, and raw physical domination. These sports link success and prestige among peers to a particular form of “maleness.” This form of maleness is insulated from alternative forms of masculinity, which it labels as “weak” or “effeminate.” Together social learning and masculinity theory predict that boys who participate or have friends in hypermasculine sports will engage in antisocial behavior, such as fighting, more than those who participate in other sports or who are not engaged in high school sports.

The two theories offer competing predications: (1) participating in school sports or having peers in them reduces antisocial behavior, (2) participating in certain sports or having peers in those sports increases antisocial behavior. Kraeger (2008) examined data from a national sample of 6,397 male high school students. He investigated males who participated in twelve high school sports or had friends in those sports to identify any connections

with the students’ engaging in antisocial behavior (i.e., fighting or other acts of delinquency). The findings suggest that high school males with many friends in hypermasculine sports (such as football), especially those also active in such sports themselves, had a high likelihood of fighting. By contrast, the high school males in other school-based sports, such as tennis, had a low tendency to fight. His findings showed more support for social learning than for social control 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 now should be familiar with the scientific community, the dimensions of research, and social theory.

KEY TERMS

association	ideal type	positive relationship
assumption	ideology	proposition
causal explanation	inductive direction	sequential theory
causal mechanism	interpretative explanation	structural explanation
concept classification	level of abstraction	substantive theory
concept cluster	macro-level theory	theoretical concept
deductive direction	meso-level theory	theoretical explanation
empirical generalization	micro-level theory	theoretical framework
formal theory	middle-range theory	typology
functional theory	negative relationship	unit of analysis
grounded theory	network theory	
hypothesis	parsimony	

REVIEW QUESTIONS

1. How do concrete and abstract concepts differ? Give examples.
2. How do researchers use ideal types and classifications to elaborate concepts?
3. How do concepts contain built-in assumptions? Give examples.
4. What is the difference between inductive and deductive approaches to theorizing?
5. Describe how the micro, meso, and macro levels of social reality differ.
6. Discuss the differences between prediction and theoretical explanation.
7. What are the three conditions for causality? Which one is never completely demonstrated? Why?
8. Why do researchers use diagrams to show causal relationships?
9. How do structural and interpretive explanations differ?
10. What is the role of the major theoretical frameworks in research?

NOTES

1. 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 (1973).
2. Turner (1980) has provided an interesting discussion of how sociological explanation and theorizing can be conceptualized as translation.
3. Classifications are discussed in Chafetz (1978: 63–73) and Hage (1972).
4. For more on typologies and taxonomies, see Blalock (1969:30–35), Chafetz (1978:63–73), Reynolds (1971: 4–5), and Stinchcombe (1968:41–47).
5. *Recursive* refers to a procedure that can repeat itself indefinitely or an iterative process that reoccurs with a feedback loop. Applied to a causal relationship, recursive suggests that a cause (*X*) operates on an effect (*Y*) to

produce an effect (*Y*), but this process repeats with the effect (*Y*), at a later time, itself acting as a cause influencing the original cause (*X*).

6. Network theory is discussed in Collins (1988: 412–428), Fuhse (2009), Galaskiewicz and Wasserman (1993), and Schweizer (1997).

7. A basic introduction to functional explanation can be found in Chafetz (1978:22–25).

8. See Craib (1984), Phillips (1985:44–59), and Skidmore (1979). Chapter 1 of Bart and Frankel (1986) also offers an elementary introduction. Jasso (2004) offers a tripartite model of social science knowledge that consists of empirical analysis, theoretical analysis, and framework analysis, arguing that the advance of knowledge takes place on all three levels and their interrelationship.