

Thinking About Theory and Research

Rolanda Nash

Rolanda Nash had to hurry to class from work. She always seemed to be running late these days. She had a lot on her mind since she had decided to divorce Anton and move from Sheridan, Wyoming, to Chicago. She was pretty sure Anton was going to leave her alone now and just cooperate with the divorce. After her relationship with him, she felt she would never trust another man again. Meanwhile, she had to complete six credits to graduate and keep the new job she had secured in Chicago. In addition to doing her schoolwork, Rolanda was working thirty hours a week for one of her professors, Dr. Stevens. Dr. Stevens was testing a theory about communication behaviors, and so far it had been a fun job for Rolanda. The theory Dr. Stevens was interested in was called Communication Accommodation Theory. Dr. Stevens had told Rolanda that communication accommodation focused on how and when people made their own communication sound like their conversational partner's (a process of accommodation). According to the theory, when someone wants to get another's approval, there is a higher chance for them to mirror this person's talk. Dr. Stevens wanted to observe communication accommodation in an organizational setting. The professor had sent Rolanda into two different organizations with a tape recorder. Rolanda's task was to tape naturally occurring

conversations between subordinates and managers. Stevens called it water cooler conversations, but so far Rolanda had not seen a single water cooler!

Rolanda thought it was very challenging to capture natural conversations. Although Stevens had obtained permission for her to record conversations in the organizations, some people recognized Rolanda and were self-conscious about talking around her. In addition, neither of the two organizations employed many African Americans. Rolanda felt she stuck out as she walked through the hallways. But she was used to that. In most of her university classes she was the only African American woman. At first it really bothered her, but she was used to it by now. She was hoping Chicago would be a better experience.

Now, if she could only get enough conversations to satisfy Dr. Stevens, she could go home to tackle her English assignment. Stevens hadn't really told her how many conversations she needed. Rolanda was hoping ten would be enough. That's all she had gotten in five days of taping. Dr. Stevens had mentioned last week that when Rolanda was finished taping, she would probably be sending her back to the organizations to do some follow-up interviews with the people she had taped. Rolanda wondered how that would work out. She hoped she could get what Dr. Stevens wanted.

Rolanda is involved in theorizing and researching about complex communication interactions both in her work and in her personal life. Although not everyone does research for a living, often people wonder to themselves, or ask one another, Why do we act the way we do? Why do we argue about some things and not others? Why are we successful in communicating sometimes and not at other times? How can we be better communicators? Scholars believe that we can provide answers to these kinds of questions with theory, because as Robert Craig and Heidi Muller (2007) observe, “theorizing is a formalized extension of everyday sense-making and problem solving” (p. ix). Furthermore, when we make observations and compare them to theory, we’re doing research to help us in our efforts to make sense of situations and solve problems. Theory and research are inextricably linked. Paul Reynolds (2007) points out that some researchers begin with theory (theory-then-research) whereas others begin with research (research-then-theory), but all researchers need to think about both.

In this book we are discussing theory and research as professionals use them in their work; yet all of us in daily life think like researchers, using implicit theories to help us understand those questions we mentioned previously. Fritz Heider (1958) referred to everyday interactors engaging in theoretical thinking as “naïve psychologists.” Whenever we pose an answer to one of our questions (for example, if we suggest that maybe we are really fighting over power and control and not what color to paint the living room), we are engaging in theoretical thinking.

In many ways, this text points out the similarities and differences between thinking as a “naïve” theorist and thinking as a professional theorist. First, as we have just mentioned, they are similar because both puzzle over questions encountered through observations and both seek answers for these questions. Both also set up certain criteria that define what an acceptable answer might be. For instance, when Ely, a student, wonders why his roommate talks so much more than what is comfortable for him, he might decide on the following criteria for an answer: The answer has to apply to all communication contexts (phone, face-to-face, and so forth); and the answer has to make sense (Ely wouldn’t accept for an answer that his roommate comes from another planet where talk is more highly valued than here on Earth). When Ely and social scientists find answers that satisfy their criteria, they generalize from them and may apply them to other situations that are similar. If Ely concludes that his roommate is insecure and talks to cover up his insecurity, he may determine that others he meets who talk more than he does are also insecure.

In all those processes, everyday communicators follow the basic outline advanced by social science. However, there are very clear differences apparent in this description as well. First, social scientists systematically test theories whereas nonscientists test selectively. For instance, Ely will accept evidence that agrees with his theory about the relationship of insecurity and talking and tend to ignore evidence that contradicts it. Researchers are more rigorous in their testing and more willing to amend theories, incorporating information arising from inconsistencies in the original formulation of the theory. In the text, many of the theories we present have undergone extensive revisions as



T*I*P



Theory Into Practice

Martina

When we first started talking about the “naïve theorist” idea, I thought it was kind of weird. I was pretty sure I wasn’t a theorist, naïve or not! Then I started keeping track of how I was thinking like a theorist in my everyday life. It was amazing how many times I did make a theory and then tried to test it. It seemed like it happened a lot at work. When I was being considered for a promotion, I watched carefully to see what the “higher ups” in my office did and how they reacted to my work. I developed a “theory” that the men in positions of power needed to think of me as their daughter but the women wanted me to perform as an equal. So, when I presented my work to the men, I was more deferential and asked them for advice. I never did that with the women. I decided my theory was correct when I got the promotion!

testing has posed challenges to the original theoretical principles or a need for expansion of them.

Now that you know that theory and research operate in some ways like the way we think already, we’re ready to move on to an in-depth examination of our basic terms. In this chapter, we prepare you for reading about the twenty-five theories to follow by providing the following: (1) a definition of theory that maps the term onto intellectual traditions and explains how scholars’ assumptions affect the process of theorizing, and (2) a brief description of the research process.

Defining Theory: What’s in a Name?

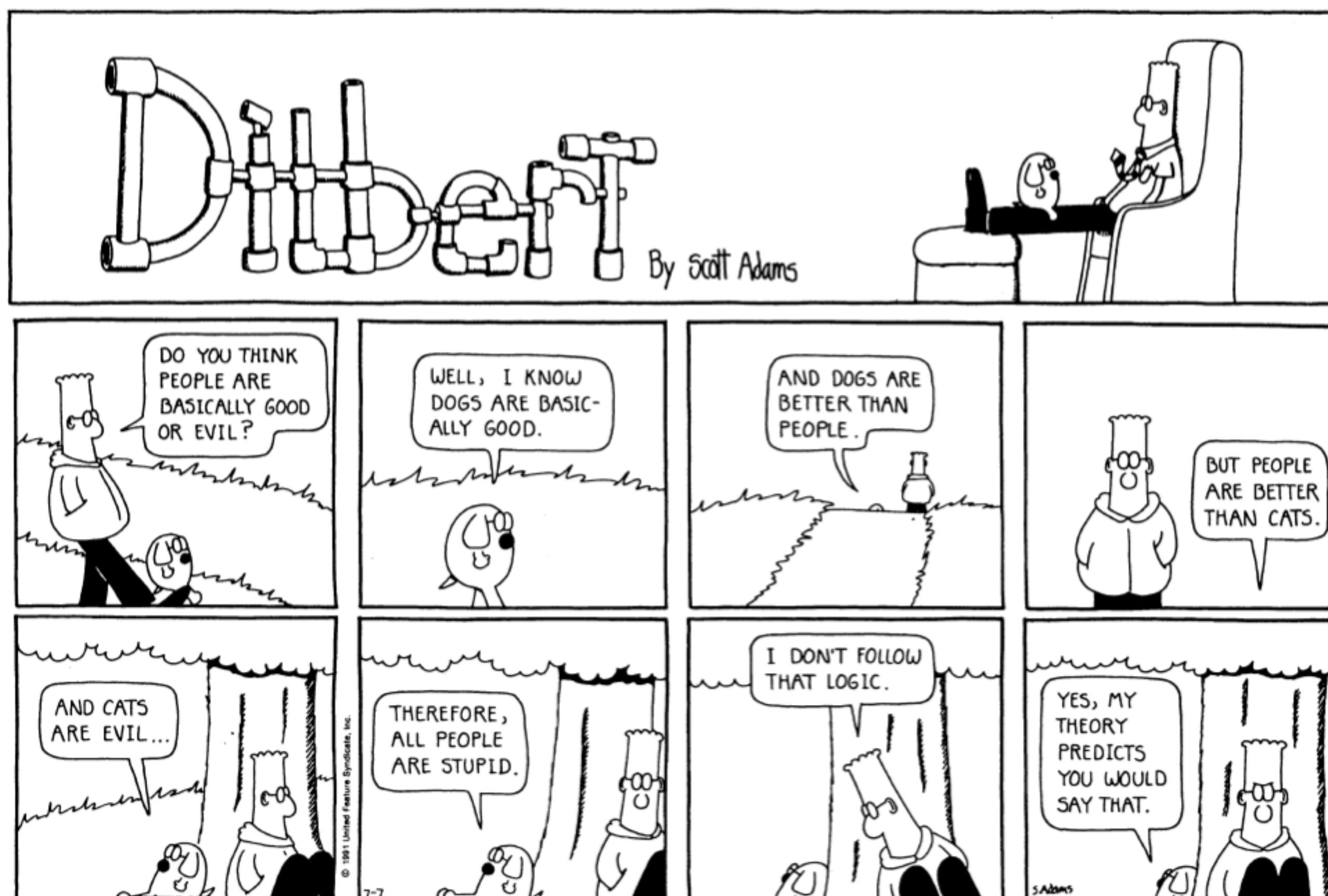
Generally speaking, a **theory** is an abstract system of concepts with indications of the relationships among these concepts that help us to understand a phenomenon. Stephen Littlejohn and Karen Foss (2008) suggest this abstract system is derived through systematic observation. Jonathan H. Turner (1986) defined *theory* as “a process of developing ideas that can allow us to explain how and why events occur” (p. 5). This definition focuses on the nature of theoretical thinking without specifying exactly what the outcome of this thinking might be. William Doherty and his colleagues (1993) have elaborated on Turner’s definition by stating that theories are both process and product: “Theorizing is the process of systematically formulating and organizing ideas to understand a particular phenomenon. A theory is the set of interconnected ideas that emerge from this process” (p. 20). In this definition, the authors attempt to be inclusive. They do not use Turner’s word *explain* because the goals of theory can be more numerous than simply explanation, a point we explore later in this chapter.

In this brief discussion, you have probably noticed that different theorists approach the definition of *theory* somewhat differently. The search for a

theory

an abstract system of concepts and their relationships that help us to understand a phenomenon





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universally accepted definition of *theory* is a difficult, if not impossible, task. When defining the term *theory*, as D. C. Phillips (1992) observes, “there is no divinely ordained *correct* usage, but we can strive to use the word consistently and to mark distinctions that we feel are important” (p. 121).

In part, the difficulty in defining *theory* is due to the many ways in which a theory can be classified or categorized. Here we refine our definition by examining the following features and attributes of theories: level of generality, components, and goals.

Level of Generality

One way to understand differences among theories pertains to their level of generality. Level of generality refers to how widely the theory can be applied. Theories can be grand (universal), mid-range (moderately general), or narrow (very specific). **Grand theories** purport to explain all of communication behavior in a manner that is universally true. Outside the discipline of communication, Marxism, an approach we mentioned in Chapter 2, is an example of a grand theory. A grand theory would have the ability to unify all the knowledge we have about communication into one integrated theoretical framework. This may or may not be a worthy goal (Craig, 1999), but most would agree that no grand theory of communication exists. There are too many instances where communication differs from group to group or when communication behavior is modified by changes in context or time to create a grand theory.

A **mid-range theory** explains the behavior of a specific group of people rather than all people, as a grand theory would do. A mid-range theory might try to explain the behavior of all people within a specified time or context.

grand theories
theories that attempt to explain all of a phenomenon such as communication

mid-range theory
a theory that attempts to explain a specified aspect of a phenomenon such as communication

narrow theory

a theory that attempts to explain a very limited aspect of a phenomenon such as communication

concepts

labels for the most important elements in a theory

Many theories of communication fall into the mid-range category. Mid-range theories explain a focused aspect of communication behavior, such as how people behave in initial encounters with strangers (see, for example, Chapter 9 describing Uncertainty Reduction Theory), how people agree on decisions in groups (see, for example, Chapter 14 describing Groupthink), or how people from different cultures engage in conflict (see, for example, Chapter 26 describing Face-Negotiation Theory). These theories are bounded by considerations such as time (the initial encounter between strangers explained by Uncertainty Reduction Theory), context (communication in small groups explained by Groupthink), or type of communication behavior (conflict behavior explained by Face-Negotiation Theory). In the case of Face-Negotiation Theory, the boundaries also include the context of cultural communication.

Finally, a **narrow theory** “concerns only certain people in certain situations—for example, the communication rules pertinent to standing in an elevator” (Stacks, Hill, & Hickson, 1991, p. 284). Often theories are criticized for claiming to be grander than they really are. For instance, some critics of Standpoint Theory (Chapter 29) argue that it makes claims about all women, but these assertions have to be modified by other identifiers such as class and race.

Theories differ in their level of generality due to their difference in focus or what they try to explain. Some theories focus on the entire communication process (e.g., Symbolic Interaction Theory), whereas others focus more specifically on a given aspect of the process, such as the message or the sender (e.g., Rhetorical Theory). Still others attend to communication as a means for relationship development (e.g., Social Penetration Theory). Knowing a variety of ways to classify theories helps us see how very dissimilar works (such as Uncertainty Reduction, Uses and Gratifications, and Muted Group) can all be defined as theory.

Components

To understand *theory*, we also need to understand the components of theories. Theories are composed of several key parts, the two most important of which are called concepts and relationships. **Concepts** are words or terms that label the most important elements in a theory. Concepts in some of the theories we will discuss include *cohesiveness* (Groupthink), *dissonance* (Cognitive Dissonance Theory), *self* (Symbolic Interaction Theory), and *scene* (Dramatism). As you can see, sometimes theories are named using one of their key concepts, although this is not always the case.

A concept often has a specific definition that is unique to its use in a theory, which differs from how we would define the word in everyday conversation. For example, the concept “cultivation” used in Cultivation Analysis (see Chapter 22) refers specifically to the way media, especially television, create a picture of social reality in the minds of media consumers. This use of the term differs somewhat from using it to mean hoeing your garden or developing an interest, skill, or friendship. In the theory, cultivation has a unique and relatively narrow definition. It is always the task of the theorist to provide a clear definition of the concepts used in the theory.

Concepts may be nominal or real. **Nominal concepts** are those that are not observable, such as democracy or love. **Real concepts** are observable, such as personal rituals or spatial distance. As we'll discuss later in the chapter, when researchers use theory in their studies, they must turn both nominal and real constructs into something concrete so that they can be observed. It is much easier to do this for real concepts than for nominal ones.

Relationships specify the ways in which the concepts in the theory are combined. For example, in Chapter 1 we presented three different models of the process of communication. In each model, the concepts are very similar. What is different is the relationship specified among them. In the first model, the relationship is a linear one where one concept relates to the second, which then relates to the next, and so forth. In the second model, the posited relationship is interactive, or two-way. The third model illustrates mutual influence (transaction), where all the concepts are seen as affecting one another simultaneously.

Goals

We can also clarify the definition of theory by understanding its purposes. In a broad, inclusive sense, the goals of theory can include explanation, understanding, prediction, and social change; we are able to *explain* something (why Anton behaved so badly in his relationship with Rolanda, for example) because of the concepts and their relationships specified in a theory. We are able to *understand* something (Rolanda's distrust of men) because of theoretical thinking. In addition, we are able to *predict* something (how Rolanda will respond to other men she meets) based on the patterns suggested by a theory. Finally, we are able to effect *social change* or empowerment (altering the institution of marriage so that it more completely empowers both partners, for example) through theoretical inquiry.

Although some theories try to reach all these goals, most feature one goal over the others. Rhetorical theories, some media theories, and many interpersonal theories seek primarily to provide explanation or understanding. Others—for example, traditional persuasion and organizational theories—focus on prediction. Still others—for instance, some feminist and other critical theories—have as their central goal to change the structures of society. As you learned in Chapter 2, for critical theorists, this means effecting social change, not simply improving individual lives. For instance, a theory about conflict management may help people understand how to engage in conflict more productively, thus enriching their lives. Yet it may do nothing to change the underlying structures that promoted the conflict in the first place.

Now we have a working definition for theory: an abstract system of concepts with indications of the relationships among these concepts that helps us to explain, understand, predict, or change a phenomenon (i.e., some aspect of communication). In addition, we can see that theories can be broadly generalized or more narrowly applied. Most theories have the ability to generalize moderately, called mid-range. From this discussion of the definition of theory, it should be clear that experience and theory are related, although experience is concrete and theory is abstract. We'll now address this relationship.

nominal concepts
concepts that are not directly observable

real concepts
concepts that are directly observable

relationships
the ways in which the concepts of a theory relate to one another



Relationship Between Theory and Experience

In 1952, Carl Hempel compared a scientific theory to a complex spatial network, saying that a theory's "terms are represented by the knots, while the threads connecting the latter correspond, in part, to the definitions and, in part, to the fundamental and derivative hypotheses included in the theory" (p. 36). Hempel then noted that this theory/network

floats, as it were, above the plane of observation and is anchored to it by rules of interpretation. These might be viewed as strings which are not part of the network but link certain points of the latter with specific places in the plane of observation. . . . From certain observational data, we may ascend, via an interpretive string, to some point in the theoretical network, then proceed, via definitions and hypotheses, to other points, from which another interpretive string permits a descent to the plane of observation. (p. 36)

Hempel suggests that although a theory is abstract, it enables us to understand concrete experiences and observations, and that a theory itself is capable of being modified by observations. In addition, his statement asserts that our concrete experiences and observations are interpreted by us through the lens offered by the theory we are using.

Janet Yerby (1995), commenting on the notion that theories act as a lens, allowing us to see some things while ignoring others, refers to theories as "the stories we have developed to explain our view of reality" (p. 362). The strings of interpretation that Hempel mentions can be seen as the elements in the story we have chosen as satisfactory explanations for communication behaviors. In taking this approach, we have to be aware, as Yerby suggests, that theories, like stories, change and evolve over time as new information modifies and refines them.

This line of thinking prompts us to ask what motivates a scholar to choose one theory (or lens) over another in their work. The answer to this question comes in an examination of the varying approaches to knowing that scholars bring to their work before they even begin to do any research.

Approaches to Knowing: How Do You See (and talk about) the World?

Many scholars (Baxter & Babbie, 2004; Baxter & Braithwaite, 2008; White & Klein, 2008) have discussed how researchers think and talk about the world and their work. Most of these scholars have identified three general approaches: positivistic or empirical, interpretive, and critical. We will discuss each of these in turn, but remember that we're presenting each approach in its extreme form, and many researchers would not identify themselves as subscribing to the extremes. Most people find some way to adapt one of these approaches to fit the particular way they see the world.

The Positivist, or Empirical, Approach

The **positivistic, or empirical, approach** assumes that objective truths can be uncovered and that the process of inquiry that discovers these truths can be, at least in part, value-neutral. This tradition advocates the methods of the natural sciences, with the goal of constructing general laws governing human interactions. An empirical researcher strives to be objective and works for **control**, or direction over the important concepts in the theory. In other words, when the researcher moves to the plane of observation, he or she carefully structures the situation so that only one element varies. This enables the researcher to make relatively definitive statements about that element.

As Leslie Baxter and Dawn Braithwaite (2008) observe, the researcher's task in the empirical approach is "to deduce testable hypotheses from a theory" (p. 7). In other words, the positivistic approach moves along the theory-then-research model to which Reynolds (2007) referred.

The Interpretive Approach

The **interpretive approach** views truth as subjective and co-created by the participants, with the researcher clearly one of the participants. There is less emphasis on objectivity in this approach than in the empirical approach because complete objectivity is seen as impossible. However, this does not mean that research in this approach has to rely totally on what participants say with no outside judgment by the researcher. Martyn Hammersley (1992), for example, advocates a "subtle realism" that suggests that researchers "monitor [their] assumptions and the inferences [they] make on the basis of them" (p. 53). In this subtle realism, Hammersley suggests that research can find a way to be reasonably objective. The interpretive researcher believes that values are relevant in the study of communication and that researchers need to be aware of their own values and to state them clearly for readers, because values will naturally permeate the research. These researchers are not concerned with control and the ability to generalize across many people as much as they are interested in rich descriptions about the people they study. For interpretive researchers, theory is best induced from the observations and experiences the researcher shares with the respondents. This means that the interpretive approach is likely to follow Reynolds' (2007) research-then-theory model.

The Critical Approach

In the **critical approach**, an understanding of knowledge relates to power. As Art Bochner (1985) notes, this approach "assumes that science cannot exist without ideology" (p. 46). Critical researchers believe that those in power shape knowledge in ways that work to perpetuate the status quo. Thus, powerful people work at keeping themselves in power, which requires silencing minority voices questioning the distribution of power and the power holders' version of truth. Patricia Hill Collins (1991) speaks from this approach when she says that "the tension between the suppression of Black women's ideas and our intellectual activism in the face of that suppression, comprises the politics of Black feminist

**positivistic/
empirical approach**
an approach assuming
the existence of
objective reality and
value-neutral research

control
direction over the
important concepts
in a theory

**interpretive
approach**
an approach viewing
truth as subjective
and stressing the
participation of the
researcher in the
research process

critical approach
an approach stressing
the researcher's
responsibility to
change the inequities
in the status quo

Table 3.1 Three Approaches to Knowing

	EMPIRICAL	INTERPRETIVE	CRITICAL
Goal	Explanation of world	Probe the relativism of world	Change the world
Engagement of researcher	Separate	Involved	Involved
Application of theory	To generalize about many like cases	To illuminate the individual case	To critique a specific set of cases

thought” (pp. 5–6). Black feminists are not the only researchers who are comfortably rooted in the critical approach Marxists and feminists of all types, among others, also work from this intellectual tradition. For critical researchers, it is generally important to change the status quo to resolve power imbalances and to give voice to those who have been silenced by the power structure.

Some critical theorists, notably Stuart Hall (1981), whose work we feature in Chapter 21, have commented that power imbalances may not always be the result of intentional strategies on the part of the powerful. Rather, ideology, or “those images, concepts, and premises which provide the frameworks through which we represent, interpret, understand and ‘make sense’ of some aspect of social existence” (Hall, 1981, p. 31), is often “produced and reproduced” accidentally. For example, this may come about when certain images of masculinity work to sell a product. When advertisers observe this success, they continue creating ads with these images. In this fashion, the images of masculinity become entrenched in society. Thus, although the powerful are interested and invested in staying in power, they may not be fully aware of what they do to silence minority voices (Table 3.1).

Approaches to Knowing: What Questions Do You Ask About the World?

Implicit in the three approaches to knowing are answers to questions about the nature of reality (researchers call this **ontology**), questions about how we know things (researchers call these questions **epistemology**), and questions about what is worth knowing (or what researchers call **axiology**). It’s important to recognize that each of the three approaches to knowing (empirical, interpretive, and critical) answers questions about ontology, epistemology, and axiology differently. We’ll briefly address each of these terms and suggest how the three approaches to knowing treat them differently.

Ontology is the study of being and nonbeing, or in other words, the study of reality. The word *ontology* comes from the Greek language and means the science of being or the general principles of being. The What Is Ontology? website (www.formalontology.it/section_4.htm) provides the following definition for ontology: “a science or study of being: specifically, a branch of metaphysics

ontology

a branch of knowledge focused on the nature of reality

epistemology

a branch of knowledge focused on how we know things

axiology

a branch of knowledge focused on what is worth knowing

relating to the nature and relations of being; a particular system according to which problems of the nature of being are investigated; first philosophy.” This definition focuses on the idea that ontology gives us a certain vision of the world and on what constitutes its important features. It is called the first philosophy because it is not possible to philosophize until the nature of reality is determined. Often questions of ontology cluster around how much free will people have. Researchers who subscribe to an empirical approach believe that general laws govern human interactions. Thus they also believe that people don’t have a lot of free choice in what they do—people are predictable because they follow the laws of human behavior which, to a large extent, determine their actions. A researcher’s job is to *uncover* what is already out there in reality. This differs from researchers with an interpretive bent, who would allow that people do have free choice, and see a researcher’s job as to co-create reality with research participants. Finally, critical researchers see choice and constraint in the power structures they wish to change.

The questions surrounding epistemology focus on how we go about knowing; what counts as knowledge is intimately related to ontology. How researchers see the world, truth, and human nature necessarily influences how they believe they should try to learn about these things. The approach (positivistic, interpretive, or critical) Dr. Stevens took in our opening example would affect her way of collecting information, an epistemologic choice. For instance, if Dr. Stevens researched as a positivist, she would institute many more controls than we described in our opening case study. Furthermore, the number of observations would not be left to chance or to Rolanda’s schedule. Dr. Stevens would have calculated the number of conversations she needed to support statistics testing relationships among status and communication accommodation. If Dr. Stevens operated in the interpretive tradition, she would not be content with her own analysis of the conversations. She might invite the participants to read the transcripts of their conversations so that they could tell her whether they were trying to accommodate to their partners. Stevens would probably be interested in the participants’ explanations for why they changed (or did not change) their speech patterns as they conversed with superiors or subordinates in the workplace. Using a critical approach, Dr. Stevens might bring some of the following questions to her research: How is the relationship between workers of differing statuses communicatively constructed? Does convergence happen unequally based on status? Are there status differences other than occupation that impact communication accommodation? How can we change the prevailing power structures to improve the inequities we observe in the workplace?

The final set of questions focuses on the place of values in theory and research. The empirical position on axiology is that science must be value-free. However, most researchers do not take this extreme position and accept that some subjectivity, in the form of values, informs the research process (Bostrom, 2003). The question that is still debated concerns not *whether* values should permeate theory and research but *how* they should.

Here we briefly present three positions on this debate that correspond to the three ways of knowing: avoiding values as much as possible in research



(empirical), recognizing how values influence the entire research process (interpretative), and advocating that values should be closely intertwined with scholarly work (critical). The first stance argues that the research process consists of many stages and that values should inform some of these stages but not others. For example, the part of the research enterprise that focuses on theory choice must be informed by the values of the researcher. Scholars choose to view a research problem through the lens that they believe most accurately describes the world. Thus, some researchers choose theoretical frameworks that are consistent with an ontology of free choice, whereas others choose frameworks that are more “lawlike” and deterministic. Yet, when they test these theories (the verification stage), they must eliminate “extra-scientific values from scientific activity” (Popper, 1976, p. 97). As you can see, this stance proposes a very limited role for values.

The second position argues that it is not possible to eliminate values from any part of theorizing and research. In fact, some values are so embedded in researchers’ culture that researchers are unconscious that they even hold them. Sandra Bem (1993), for instance, observes that much of the research on differences between women and men was influenced by biases existing at the time. Many feminist scholars argue that social science itself suffers from a male bias (Harding, 1987). Some African American scholars make the same observations about the European American biases that exist in much social scientific research (Allen, 2007; Houston, 1992). Thomas Nakayama and Robert Krizek (1995) point out that communication researchers often take White for granted as the default race. Thus, the values and assumptions held by those with a European American perspective are never highlighted, questioned, or acknowledged; they simply inform a scholar’s process. Yoshitaka Miike (2007) takes this one step further to advocate theories that would be Asiacentric (meaning rooted in Asian thinking).

The final position argues that not only are values unavoidable, but they are a desirable aspect of the research process. Earlier in this chapter we referred to the goals of theory as including social change. Those who embrace this goal are called critical theorists. Critical theorists advocate seeing theory and research as political acts that call on scholars to change the status quo. Thus, scholars must contribute to changing conditions rather than simply reporting conditions (Table 3.2).

Table 3.2 Answers Supplied by the Three Approaches to Knowing

	EMPIRICAL	INTERPRETIVE	CRITICAL
Ontology	No free choice	Free choice	Choice restrained by power
Epistemology	Theory first. Control study	Research first. Co-create study	Critique power. Seek change
Axiology	Reduce role of values	Acknowledge values	Celebrate values

Approaches to Knowing: How Do You Go About Theory Building?

When researchers seek to create theory, they are guided by all of the issues we've just discussed: their general approach to knowing things (empirical, interpretive, or critical) and the answers to questions about truth or reality, gathering information, and values (ontology, epistemology, and axiology). In addition, they have some guidelines about how to create theory (Craig, 1999). We will review three traditional guidelines: covering law, rules, and systems. The covering law approach and the rules approach represent two extremes, whereas the systems approach provides an intermediate position between the extremes. We must caution that few scholars take the extreme positions sketched out here. Rather, these positions form benchmarks from which researchers anchor their own stances on questions of communication.

The **covering law approach** seeks to explain an event in the real world by referring to a general law. Researchers applying a covering law approach believe that communication behavior is governed by forces that are predictable and generalizable. The **rules approach**, at the other end of the ontological continuum, holds that communication behavior is rule governed, not lawlike. The rules approach differs from the covering law approach in that researchers holding the rules approach admit the possibility that people are free to change their minds, to behave irrationally, to have idiosyncratic meanings for behaviors, and to change the rules. Ultimately, their differences focus on the concept of choice. The covering law model explains human choices by seeking a prior condition (usually a **cause**) that determines the choice that is made (usually an **effect**). From the rules model, rule following results from a choice made by the follower but does not necessarily involve antecedent conditions or any aspect of the cause–effect logic of the covering law approach.

A third view, the **systems approach**, subscribes somewhat to the beliefs of the rules approach while also suggesting that people's free will may be constrained by the system in which they operate. Further, this approach acknowledges the impossibility of achieving what the covering law approach requires: laws about human communication that are invariant and general. The systems approach proposes assumptions that are more easily met than those of the covering law approach (Monge, 1973). We now examine each of the three approaches in more detail and provide an overview in Table 3.3.

Covering Law Approach

This term was first introduced by William Dray (1957), a historian who defined *covering law* as that “explanation is achieved, and only achieved, by *subsuming what is to be explained under a general law*” (p. 1 [emphasis in original]). Some covering law explanations refer to universal laws that state all x is y . These laws are not restricted by time or space. However, as new information comes to light, even laws have to be modified. Covering law explanations do not always have to be cause–effect. They may also specify relationships of coexistence. We have a causal relationship when we say that self-disclosures by

covering law approach

a guideline for creating theory suggesting that theories conform to a general law that is universal and invariant

rules approach

a guideline for creating theory that builds human choice into explanations

cause

an antecedent condition that determines an effect

effect

a condition that inevitably follows a causative condition

systems approach

a guideline for creating theory that acknowledges human choice and the constraints of the systems involved

Table 3.3 Guidelines to Communication Theory Construction

APPROACH	DESCRIPTION/EXAMPLE
Covering law	Covering law theorists hold that there are fixed relationships between two or more events or objects. Example: Whenever Linda speaks, Bob interrupts her; this is a lawlike statement that expresses a relationship between Linda and Bob. These statements are commonly referred to as if-then statements.
Rules	Rules theorists contend that much of human behavior is a result of free choice. People pick the social rules that govern their interactions. Example: In an interaction between co-workers, much of their conversation will be guided by rules of politeness, turn taking, and so on.
Systems	Systems theorists hold that human behavior is part of a system. Example: Think of a family as a system of family relationships rather than individual members. This illuminates the complexity of communication patterns within the family.

one person cause self-disclosures from a relational partner. A claim of coexistence merely asserts that two things go together—that is, when one person self-discloses, the other does, too—but it does not claim that the first self-disclosure causes the second. It's possible that social norms of reciprocity cause the second self-disclosure or that both disclosures are caused by the environment (an intimate, dimly lit bar or consuming more alcohol than usual).

Critical attributes of covering law explanations are that they provide an explicit statement of a boundary condition and that they allow **hypotheses**, testable predictions of relationships, of varying levels of specificity, to be generated within this boundary condition. Furthermore, because the system is deductive, complete confirmation of theories is never possible. There will always be unexamined instances of the hypothesis.

The type of covering law that we have just described is considered outdated by most social scientists (Bostrom, 2004). Most researchers today recognize that this type of universal law is unrealistic. Instead, researchers might strive for “probabilistic laws,” or statements we can predict with a certain degree of probability. For example, as Berger (1977) asserts, “We can predict with a certain probability that if males and females with certain eye colors have large numbers of children, a certain proportion of those children will have a certain eye color. However, we are *not* in a position to predict what the eye color of a *particular* child will be” (p. 10).

Overall, a covering law approach instructs researchers to search for lawlike generalizations and regularities in human communication. These lawlike generalizations may be culturally bound or may have some other complex relationship with culture. Covering law offers a theory-generating option that aims for complete explanation of a phenomenon. The law, in effect, governs the relationships among phenomena.

hypotheses

testable predictions of relationships between concepts that follow the general predictions made by a theory

Table 3.4 Rules Governing Initial Peer Encounters

<i>In the first fifteen minutes of an encounter:</i>	<i>In the second fifteen minutes:</i>
Politeness should be observed.	Politeness should be observed.
Demographics should be exchanged.	Likes and dislikes can be discussed.
Partners should speak in rough equivalence to each other.	One partner can speak more than another, but avoid dominance.
Interruptions and talk-overs should be minimal.	More interruptions can be tolerated, but avoid dominance.

Rules Approach

This approach assumes that people are typically engaged in intentional, goal-directed behavior and are capable of acting rather than simply being acted upon. We can be restricted by previous choices we have made, by the choices of others, and by cultural and social conditions, but we are conscious and active choice makers. Further, human behavior can be classified into two categories: activities that are stimulus–response behaviors (termed **movements**) and activities that are intentional choice responses (termed **actions**) (Cushman & Pearce, 1977). Rules theorists contend that studying actions is most relevant to theorists.

Rules theorists look inside communities or cultures to get a sense of how people regulate their interaction with others (Shimanoff, 1980). Rules do not require people to act in a certain way; rather, rules refer to the standards or criteria that people use when acting in a particular setting (Cushman & Cahn, 1985). For example, when two people meet, they normally do not begin at an intimate level of exchange. Rather, there is an agreed-upon starting point, and they will delve further into intimacy if the two see the relationship as having a future. The process of meeting another is guided by rules, although these rules are rarely verbally identified by either person. Don Cushman and Barnett Pearce (1977) believed that if the relationship evolves, the rules guiding interactions change. Rules, then, are important benchmarks for the direction of an interaction. Table 3.4 illustrates how rules guide initial encounters of many peers in the United States.

Several researchers (Lull, 1982; Wolf, Meyer, & White, 1982) have used a rules-based theoretical framework to study family television viewing behaviors. James Lull (1982) identified three types of rules that govern family television watching. First are **habitual rules**, which are nonnegotiable and are usually instituted by the authority figures in the family. When Roger and Marie tell their children that there can be no television until all homework is checked over by one of them and declared finished for the night, they are establishing a habitual rule.

Parametric rules are also established by family authority figures, but they are more negotiable than habitual rules. For example, the Marsh family may have a rule that members can engage in extended talk only during commercial breaks when they are viewing television. Yet, if something exciting has happened to one member, they may negotiate to talk about it during the program itself.

Finally, Lull identified **tactical rules**, or rules that are understood as a means for achieving a personal or interpersonal goal, but are unstated. For example,

movements

activities based on stimulus-response

actions

activities based on intentional choice responses

habitual rules

nonnegotiable rules that are usually created by an authority figure

parametric rules

rules that are set by an authority figure but are subject to some negotiation

tactical rules

unstated rules used to achieve a personal or interpersonal goal

if Rob and Jeremy are watching television together and Rob likes Jeremy, he may tune in to Jeremy's favorite show even though he himself would not have chosen that program. He follows the tactical rule of maintaining relational harmony with his partner.

Overall, a rules approach instructs researchers to discover the rules that govern particular communication contexts and construct theoretical statements around these rules. The rules perspective offers a theory-generating option that aims for a satisfying explanation of a specific communication situation. The theorist would normally begin with a typology of the rules that govern the situation and move from those to statements connecting the rules and specifying the conditions affecting the rules.

Systems Approach

Systems thinking in communication is derived from General Systems Theory (GST), which is both a theory of systems in general—"from thermostats to missile guidance computers, from amoebas to families" (Whitchurch & Constantine, 1993, p. 325)—and a program of theory construction. Systems thinking captured the attention of communication researchers because it changed the focus from the individual to an entire family, a small group, or an organization. This shift reconceptualized communication for scholars and helped them to think innovatively about experience and interaction in groups. Further, systems thinking replaced the stringent assumptions of covering law with more realistic ones. Systems theorists (Monge, 1973) agreed with the rules assertion that "human communication is not characterized by universal patterns" (p. 9). Systems thinking requires systemic, nonuniversal generalizations, does not depend on inductive reasoning, separates the logical from the empirical, allows alternative explanations for the same phenomenon, and permits partial explanations (Monge, 1973).

Systems thinking rests on several properties, including wholeness, interdependence, hierarchy, boundaries, calibration/feedback, and equifinality. We will explain each of these properties briefly.

wholeness

a fundamental property of systems theory stating that systems are more than the sum of their individual parts

Wholeness The most fundamental concept of the systems approach is **wholeness**. It refers to the idea that a system cannot be fully comprehended by a study of its individual parts in isolation from one another. In order to understand the system, it must be seen as a whole. Wholeness suggests that we learn more about a couple, for example, by analyzing their interactions together than we do by simply analyzing one partner's motivations or statements alone.

interdependence

a property of systems theory stating that the elements of a system affect one another

Interdependence Because the elements of a system are interrelated, they exhibit **interdependence**. This means that the behaviors of system members co-construct the system, and all members are affected by shifts and changes in the system. Virginia Satir (1988) compares the family to a mobile to illustrate how this principle applies to families. We might expect that when elderly parents decide to sell the family home and move to a small condo, their decisions will affect all of their children.



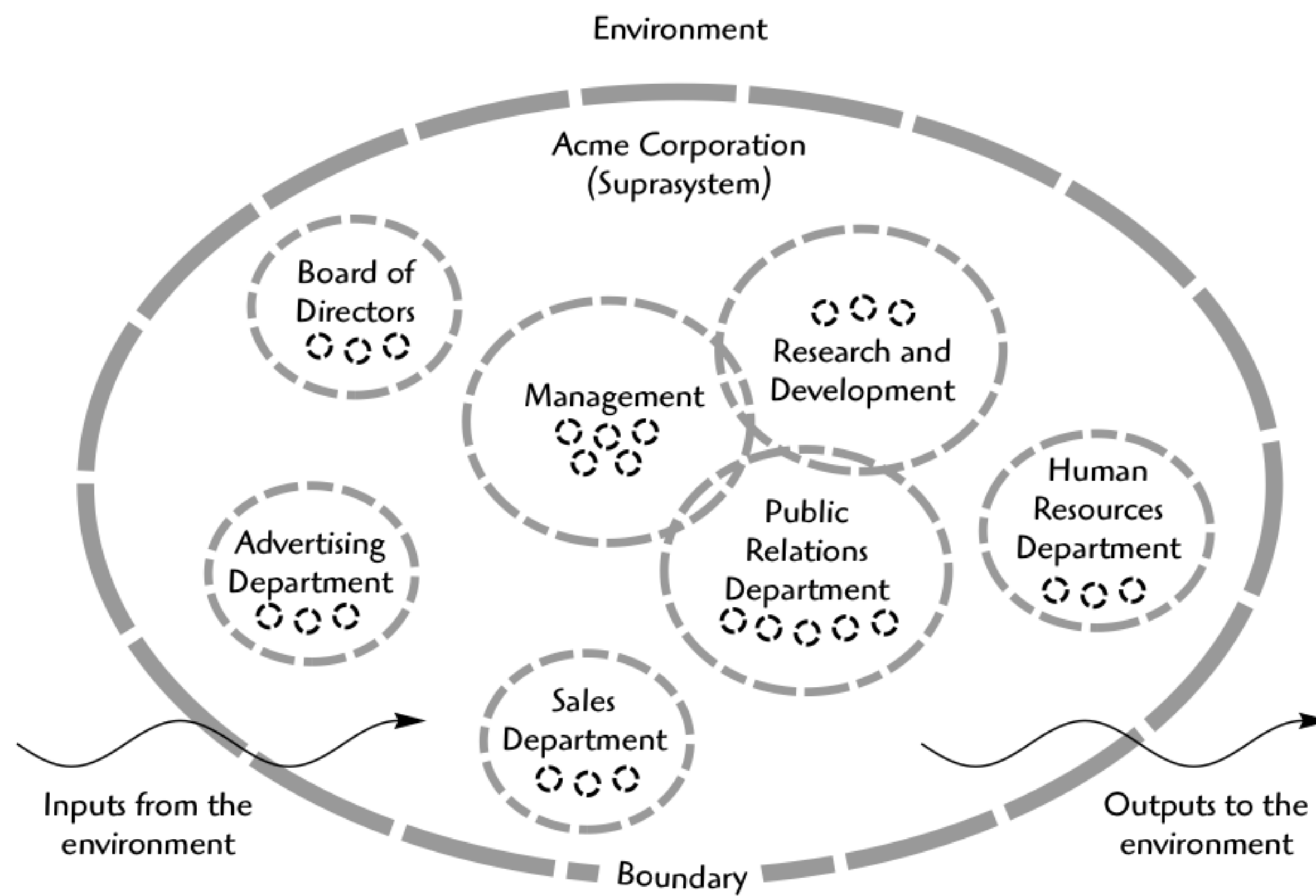


Figure 3.1
Suprasystems,
Systems, and
Subsystems in the
Acme Corporation

Hierarchy All systems have levels, or **subsystems**, and all systems are embedded in other systems, or **suprasystems**. Thus, systems are a **hierarchy**, a complex organization. Each of the subsystems can function independently of the whole system, but each is an integral part of the whole. Subsystems generally shift and change over time, but they may potentially become extremely close and turn into alliances or coalitions that exclude others. For example, if one parent confides a great deal in a son whereas the other talks to one of their daughters, two coalitions may form in the family, making interactions more strained and troubled. This property is mapped in Figure 3.1.

Boundaries Implicit in the preceding discussion about hierarchy and complexity is the notion that systems develop **boundaries** around themselves and the subsystems they contain. Because human systems are open systems (it is not possible to completely control everything that comes into or goes out from them), these boundaries are relatively permeable: They have **openness**. Thus, although the managers of a General Motors plant in Ohio may wish that their employees did not know about the strike at a General Motors plant in Michigan, they will be unable to prevent information and communication from passing through the boundary around their organizational system.

Calibration/Feedback All systems need stability and constancy within a defined range (Watzlawick, Beavin, and Jackson, 1967). **Calibration**, or checking the scale, and subsequent **feedback** to change or stabilize the system, allow for control of the range. The thermostat provides a common example illustrating this process. Home heating is usually set at a certain temperature, say 65 degrees. The thermostat will allow a temperature range around 65 before changing anything. Therefore, if the thermostat is set for 65 and the temperature is 65 plus or minus 3 degrees, nothing happens. If the temperature drops below

subsystems

smaller systems that are embedded in larger ones

suprasystems

larger systems that hold smaller ones within them

hierarchy

a property of systems theory stating that systems consist of multiple levels

boundaries

a property of systems theory stating that systems construct structures specifying their outer limits

openness

the acknowledgment that within all human systems the boundaries are permeable

calibration

a property of systems theory stating that systems periodically check the scale of allowable behaviors and reset the system

feedback

a subprocess of calibration; information allowing for change in the system

morphogenic

a term for when a system recalibrates (or changes)

homeostatic

a term for a stable system that isn't changing

equifinality

a property of systems theory stating that systems can achieve the same goals through different means

scientific method

the traditional method for doing research involving controlled observations and analysis to test the principles of a theory

deductive logic

moving from the general (the theory) to the specific (the observations)

inductive logic

moving from the specific (the observations) to the general (the theory)

62 degrees, the heat goes on; if it rises above 68 degrees, the furnace shuts off. In this way, the heating system remains stable. However, if conditions change in the house (for example, the family insulates the attic), the thermostat may need to be recalibrated or set at a slightly lower temperature to accommodate the change. After insulating, the house may feel comfortable if the temperature is set at 63 degrees.

Changing the standard (moving the temperature from 65 to 63 degrees) is accomplished through feedback. Feedback, in systems thinking, is positive when it produces change (the thermostat is set differently) and negative when it maintains the status quo (the thermostat remains at 65). When systems change they are called **morphogenic**, and when they stay the same they are called **homeostatic**.

Equifinality Open systems are characterized by the ability to achieve the same goals through different means, or **equifinality** (von Bertalanffy, 1968). This principle applies to human groups in two ways. First, a single group can achieve a goal through many different routes. For example, if a manager wants to increase productivity, he can raise wages, threaten the workers with firing, hire a consultant, or do some combination of these. There are several ways the manager can reach the goal. Additionally, equifinality implies that different groups can achieve the same goal through multiple pathways. For instance, PK Computer Systems may achieve profitability by adopting a casual organizational culture, whereas Western Communication Systems may achieve profitability by demanding a more formal workplace.

Overall, a systems approach instructs researchers to search for holistic explanations for communication behavior. Systems offers a theory-generating option that aims to model the phenomenon as a whole, admitting the possibility for change from a variety of outside influences.

The Research Process

In the example at the beginning of the chapter, we illustrated how interrelated theory and research processes are. Now we'll briefly discuss the research process. Our discussion will necessarily be brief here; we know many of you will take an entire class devoted to the study of research methods, so here we simply give you an idea of how important theory and research are to one another. At the beginning of this chapter, Dr. Stevens's study illustrated the theory-then-research model. Rolanda's transcripts are used to test what Communication Accommodation Theory predicts about communication behaviors in the workplace. Dr. Stevens will see if the speculations she made based on the theory's logic hold true in the conversations that Rolanda taped. This traditional process, known as the **scientific method**, follows **deductive logic** in that Stevens moved from the general (the theory) to specific instances (the actual conversations gathered in two workplaces). If Stevens had used **inductive logic**, she would have asked Rolanda to record many more conversations. Stevens would have refrained from hypothesizing, or guessing, about what she might find in advance of the data collection. Then she and Rolanda would

have listened to their tapes, trying to find some type of pattern that best explained what they heard. Finally, Stevens would have generalized based on her observations.

After Stevens has hypothesized about what she will find in the workplace regarding accommodations between workers and managers based on the theory, she then must **operationalize** all the concepts. This means she needs to specify how she will measure the concepts that are important to her study. In this process, Dr. Stevens turns the abstract concepts of the theory into concrete variables that can be observed and measured. For example, status difference is a critical notion in the theoretical framework, so Stevens specifies to Rolanda how she should measure this. In this case, measurement will be based on job title. Rolanda has to discover the job title for each of the people she observes and then compare those titles to a chart Stevens has given her classifying job titles into the two categories of “supervisor” and “subordinate.” This seems like a fairly straightforward means to operationalize the notion of status, but there may be instances where it is not a perfect operationalization. For instance, a lower-level employee who has worked for the company for many years might hold more status than a middle manager who has only recently arrived and is just learning the corporate culture. Additionally, women managers often report some problems with achieving the status expected from their job title. You can see how concepts that are more complex and abstract, such as love and intimacy, would be even more difficult to operationalize than occupational status.

The next step in the traditional scientific model sends Rolanda into the two organizations to make **observations** and collect **data** (in this case, the conversations and the job titles). When Rolanda returns with the tapes, Dr. Stevens will have to **code** the conversations, again using operationalizations for terms such as *convergence* (making your speech patterns similar to your partner’s) and *divergence* (making your speech patterns dissimilar to your partner’s). Some types of data do not need extensive coding to analyze. For example, if Dr. Stevens operationalized status based on income and then provided respondents with a survey asking them to indicate the category for their salary, these data would not need the same type of coding required in the taped conversations. The income categories could simply be numbered consecutively. In contrast, the conversations have to be listened to repeatedly to determine whether a given comment converges with or diverges from the comment preceding it.

The deductive approach allows Stevens to test a specific prediction, or hypothesis, generated from a generalization, or theory. The results of this testing allow modifications and corrections to the theory.

The inductive approach operates in the opposite direction and enables Stevens first to gather many specific instances in the hopes of then being able to generalize, or create, theory. This approach is called **grounded theory**. The grounded theory approach does not seek to test hypotheses to support theory; instead, theory “is discovered, developed, and provisionally verified through systematic data collection and analysis of data” (Young, 1998, p. 26) relating to the phenomenon of interest. In this manner, the components of the research process (theory, data collection, and data analysis) are in reciprocal relationship with one another.

operationalize

making an abstract idea measurable and observable

observations

focused examination within a context of interest; may be guided by hypotheses or research questions

data

the raw materials collected by the researcher to answer the questions posed in the research or to test a hypothesis

code

converting raw data to a category system

grounded theory

theory induced from data and analysis

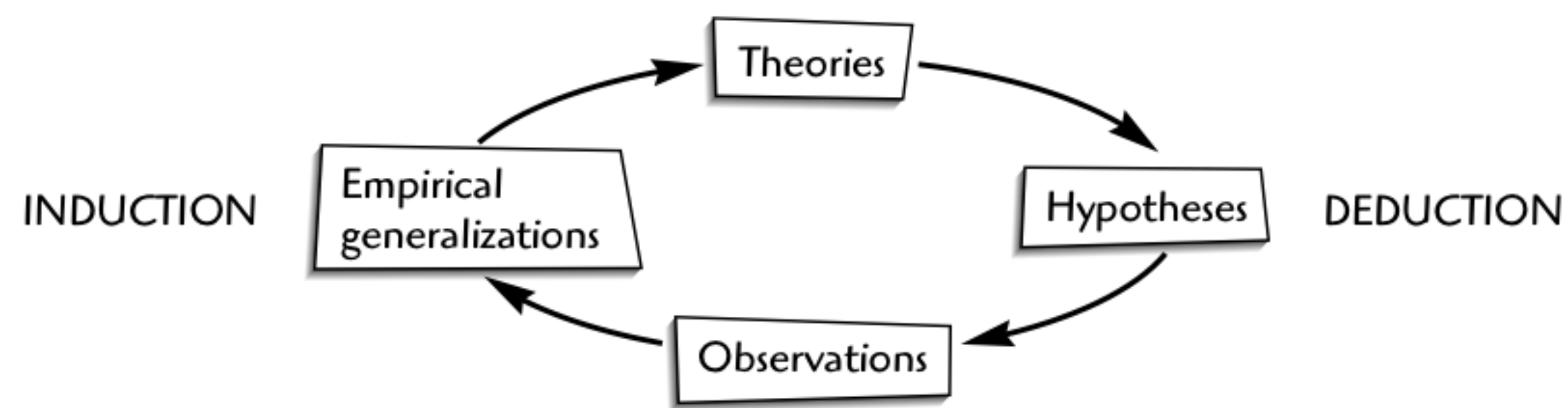


Figure 3.2 The Wheel of Science

Source: Loosely adapted from several conceptual drawings and reduced from the concept on page 18 of Walter L. Wallace, *THE LOGIC OF SCIENCE IN SOCIOLOGY* (New York: Aldine de Gruyter, 1971). Copyright © 1971 by Walter L. Wallace. Renewed 1999. Reprinted by permission of Transaction Publishers.

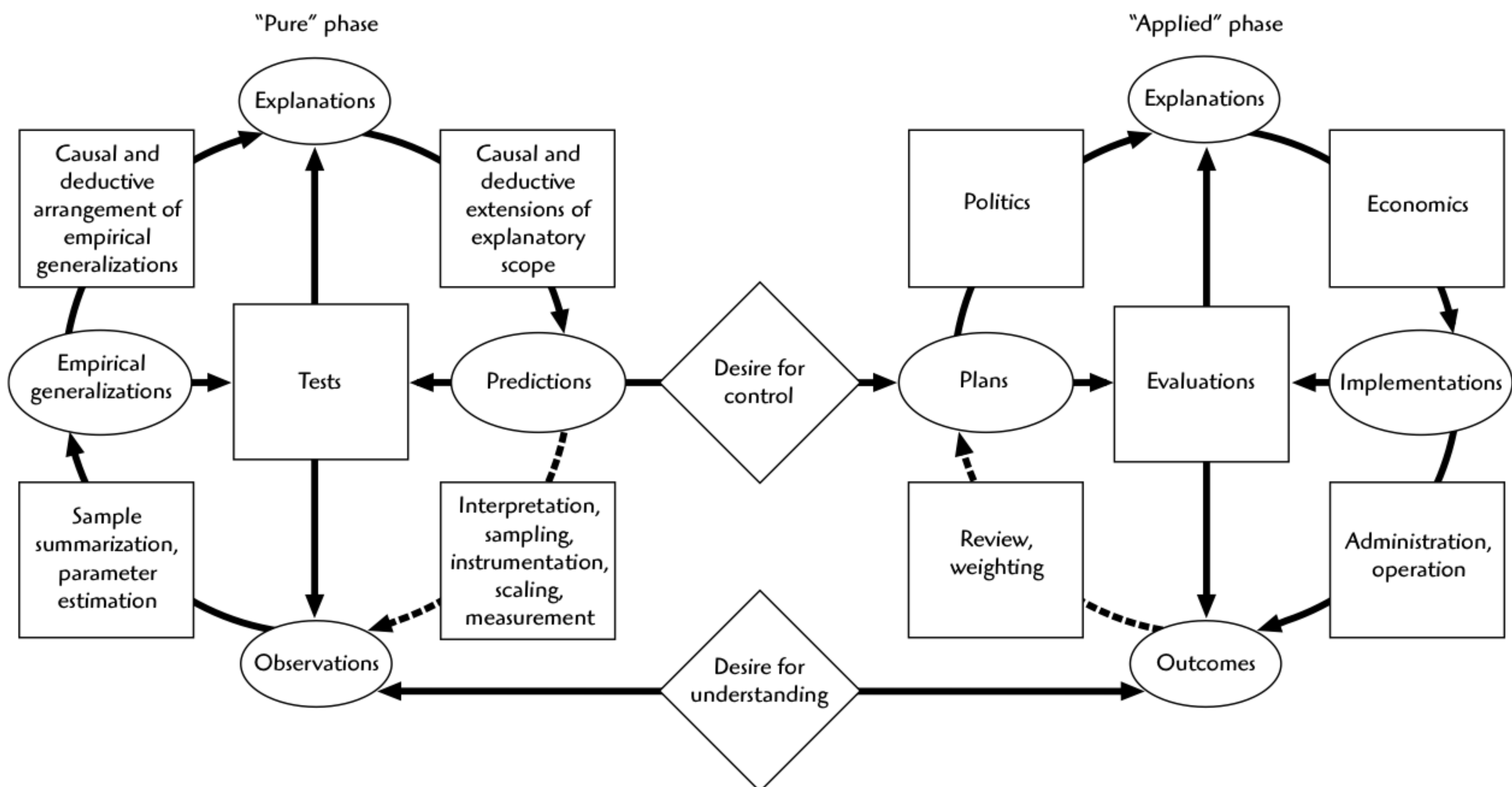


Figure 3.3 The Procedures of Scientific Analysis

Source: From Walter L. Wallace, *PRINCIPLES OF SCIENTIFIC SOCIOLOGY* (New York: Aldine de Gruyter, 1983), page 359. Copyright © 1983 by Walter L. Wallace. Reprinted by permission of Transaction Publishers.

Although some researchers approach their work strictly as hypothesis testers and some approach it more as theory generators, in practice most weave back and forth between the two. Walter Wallace (1971) suggests that the research process is circular, moving continuously between induction and deduction. Researchers refer to this as the wheel of science (Figure 3.2). Additionally, as Wallace (1983) noted elsewhere, this process is endless: “Each step presupposes that all the others have been taken before it—presumably at lower levels of understanding and control. Thus, although one may *consciously* start a given analysis by making certain predictions, one always has in mind (as largely unconscious background assumptions) certain prior explanations, empirical generalizations, tests, outcomes, implementations, and so on” (p. 358).

Furthermore, Wallace (1983) has expanded this wheel of science to include two types of research: pure and applied (Figure 3.3). In **pure research**, researchers

pure research
research to generate
knowledge

Theory Into Practice

Damien

I just got engaged, and I have a lot of questions about engagement and marriage rituals in the United States. I am kind of in conflict because I want to just jump in and celebrate this time in my life, but I am also analyzing it (a hazard of being a communication studies major, I guess). Some of the wedding ceremony strikes me as troubling. Do I really want my fiancé's father to "give her away" to me? After thinking about some of the issues we've discussed about the research process, I now want to conduct a study to see if any men my age feel this way after getting engaged. I have a hunch what I would find, but I would like to approach it from a grounded theory approach and let my respondents tell me what they think.

T*I*P



are guided by knowledge-generating goals. They are interested in testing or generating theory for its own sake and for the sake of advancing our knowledge in an area. In **applied research**, researchers wish to solve specific problems with the knowledge they or other researchers have generated. Figure 3.3 illustrates the relationship between these two types of research goals and processes. In our example of Dr. Stevens's research, we see her performing pure research. If a specific organization hired Dr. Stevens to consult with them to improve employee morale, however, her research would become applied. Theory and practice are intertwined, and pure and applied research are not unrelated processes. As Larry Frey and his colleagues observe (2000), "the interrelationship of theory and application is especially important in a 'practical discipline' such as communication that has enormous potential to make a difference in people's lives" (p. 36). In Figure 3.2, you can see the arrows running between the two types of research showing this interrelationship.

In the example of Rolanda and Dr. Stevens, we have seen how Rolanda's job utilizes theory and how theory and research relate in Dr. Stevens' study. In addition, Rolanda operates as an intuitive or naïve scientist in her daily life. An intuitive scientist follows many of the same processes and reasoning patterns that trained scientists do, just not in as explicit or rigorous a fashion. Usually, intuitive scientists follow inductive logic: They experience something and then generalize from that. So when Rolanda concludes that all men are untrustworthy, she is inducing a general statement about all men from her experiences with one man, Anton. This is similar to the process a researcher might follow; however, a social scientist would not make hasty generalizations, or move to theory, on the basis of one observation. Intuitive science proceeds on the basis of deductive logic as well, as Rolanda's theory about cities demonstrates. She believes that larger cities are more diverse than smaller ones. As she moves from Sheridan to Chicago, she will test that theory with her observations about life in Chicago. Here again, the issue of numbers of observations is important. How long does Rolanda have to live in Chicago before she can be

applied research
research to solve a
problem or create a
policy



abc



abc

abc

abc

abc



satisfied that her theory is correct? Does she have to sample life in other large cities to substantiate her theory, or is Chicago alone a sufficient observation? This is very similar to Dr. Stevens's concerns in her study. When Rolanda wonders about the number of conversations that she is collecting for Dr. Stevens, she focuses on a key point: How many instances do you need to observe before you can come to a conclusion? There are no absolute answers to this question, although there are some standards that are often accepted by practicing researchers.

In conducting research, one key difference between professional researchers and naïve ones rests on the definition of two terms: reliability and validity. Researchers say that something has **reliability** when you can get the same results over time. For example, if Rolanda visited the organizations in two years and her observations there yielded the same results that they do now, her observations would be called reliable. You can imagine many reasons reliability is difficult to obtain. For instance, if there had been a big turnover in personnel at one of the organizations, reliability would be difficult. Professional researchers conduct statistical tests to judge reliability, or they may return to ask participants if they still feel the same way they did when they were first questioned or observed. Naïve scientists usually operate as though their observations are reliable without ever testing for it.

Reliability is important, but validity is even more critical to the research process. This is the case because observations can be reliable even if they are not valid, but the opposite is not true. To draw useful conclusions from research, observations must be both reliable and valid. **Validity** refers to the fact that the observation method actually captures what it is supposed to. For instance, Dr. Stevens is interested in communication accommodation, so she is having Rolanda listen to workplace conversations in hallways to find it. If people engage in extensive conversations where Rolanda can tape them, then probably the observations are able to measure the concept of interest. But what if people in these organizations don't talk much in the public spaces of the office? What if Rolanda tapes a lot of casual greetings that don't show much of anything important to the notion of communication accommodation? Would Dr. Stevens be correct in concluding that people do not accommodate their communication according to status? Maybe not, if a lot of accommodating is going on behind closed doors where Rolanda didn't go. In that case, the measurement (taped hallway conversations) was not valid because it didn't capture what the researcher was interested in. Again, professional researchers are concerned about the validity of their observations and work diligently to demonstrate validity. Naïve researchers don't think too much about validity unless they somehow discover that they have been basing their generalizations on a mistaken notion.

Overall, the research process is similar for naïve and professional researchers, but professional researchers are more rigorous at every step of the process. Both draw conclusions based on their findings, and ultimately we are convinced by the arguments each advances about the strength of their process. When we believe that the results are based on good (reliable and valid) observations and careful logic, we accept the findings.

reliability

the stability and predictability of an observation

validity

the truth value of an observation