2.4: What Is a Theory?

Learning Objectives

1. Define “theory”
2. Identify the functions of theories
3. Evaluate the practicality of using theories

“There is nothing so practical as a good theory.”

Kurt Lewin

“Reality is that which, when you stop believing in it, doesn't go away.”

Philip K. Dick

“Can I make it through that intersection before the light turns red?” “Will I have enough money left at the end of the month to take my honey out to dinner at a nice restaurant?” “Can I trust my office mate to keep a secret?” Every day we apply conceptions of how the world works to make decisions and answer questions like these.

Many of these conceptions are based on our own past experiences, what other people have told us, what we’ve read or viewed online, and so on. Sometimes the conceptions are clearly present in our minds as we act; other times they lie beneath our awareness. In reality, the conceptions may represent a hodgepodge of fact, fiction, hunches, conjectures, wishes, and assumptions. And they may change over time for reasons we may or may not even be able to identify.

We may informally refer to these kinds of conceptions as “theories.” For instance, we might say, “He made a big mistake when he did that. My theory is that he was under a lot of stress because of getting laid off from his job.” In studying communication, however, we make use of a more refined definition of the term “theory” which is anything but a
Defining “Theory”

Hoover, Hoover, K. R. (1984). The Elements of Social Scientific Thinking (3rd ed.). New York: St. Martin's Press, p. 38. straightforwardly defined a theory as “a set of interrelated propositions that suggest why events occur in the manner that they do.” According to the National Academy of Sciences, Boss, J. (2010). Think; Critical Thinking for Everyday Life. New York: McGraw-Hill, p. 379. a scientific theory is “a well-substantiated explanation of some aspect of the natural world that can incorporate facts, laws, inferences, and tested hypotheses.” Similar definitions have been put forth by other authorities. All the definitions, however, describe theories as products of intellectual activity and as sources of insight into interpreting phenomena.

Some theories are solid and universally accepted. Examples include the heliocentric theory and germ theory. It’s assumed that these theories require no further testing or evidence to continue to be accepted.

Other more provisional theories, such as string theory in physics or self-efficacy theory in psychology, require continual exploration and testing in order to be supported and retained. Theories are never to be regarded as factual, but rather as models which conform to facts as closely as possible.

Functions of Theory

So—what can theories do for us? Their main function is to help us make sense of phenomena, including human behavior. They help us answer “why” and “how” questions about the world. More specifically, they can fulfill three major functions.

The first function is explanation. Theories can help us understand why entities—physical objects, processes, or people—behave the way they do, individually or in interactions with each other.

The second function is “postdiction.” Theories can help us interpret specific past incidents and events and account for why they would be expected to happen as they did. Thus, they give us an assurance that order exists in at least part of the world.

The final function is prediction, whereby theories help us gain confidence in describing what is likely to take place in the future. Many physical phenomena occur with a degree of stability and consistency over time. Although human beings often surprise each other, psychologists have contended that someone’s past behavior is the best predictor of that person’s future behavior. Thus, if our theories have properly and accurately postdicted the way someone has acted, they should lead us to a clear picture of what future behavior that person will exhibit.

Before they had reasonable theories regarding physical science, our ancestors found events like eclipses and earthquakes to be inexplicable. They responded to such phenomena with dread or superstitious speculation. The same was true with respect to complex bodily functions and the spread of disease. Having theories about our natural world and our place in it gives us as human beings a comfortable, reliable foundation upon which to strengthen and enlarge our knowledge. Theories, in short, free us to spread our mental wings and fly into new territory.
Three other characteristics are associated with good theories. First, they exhibit parsimony; that is, they are as simple as possible. Second, they should be consistent with previous theories. Third, they also need to be deniable.

Deniability means that those who hold a theory should be able to describe evidence that would cause them to abandon it. If this weren’t the case, choosing among competing theories would be a matter only of who spoke loudest or fought hardest on behalf of their opinions.

What Theories Are Not

Many ingredients make up human inquiry. We’ve established that theories rank among the most important. Several others, however, are part of the landscape and need to be differentiated from theories.

First of all, theories are not laws. Laws specify uniform cause-and-effect relationships that hold true under limited, defined circumstances. Unlike theories, which are broader, they do not claim to explain why the relationships exist. Consider Newton’s First Law of Motion, for instance: “Every object in a state of uniform motion tends to remain in that state of motion unless an external force is applied to it.” The theory of gravity, in contrast, more broadly states that any two or more objects exert a force of attraction on one another.

Second, theories are not claims. Claims are contentions based on belief or opinion. They do not necessarily rely on empirical evidence—i.e., evidence acquired through conventional sense perceptions and assessed through scientific processes. Individuals and groups may continue to maintain their claims without regard to investigations and discoveries which counter their beliefs. Theories, in contrast, are developed—and modified, if contrary evidence arises—by careful, systematic observation and testing among members of a community.

Finally, theories are not arguments. In everyday language, an argument is simply a reason someone offers for accepting or stating a particular claim. More formally, a logician would say that an argument comprises a premise and a conclusion. A premise might be “We all know that gray clouds sometimes produce rain. I see gray clouds in the sky.” This would be followed with a conclusion, such as “There’s a possibility that it’s going to rain.” A theory about the weather, beyond its relevance to specific conditions in the sky at a particular time, encompasses all sorts of meteorological phenomena and is meant to apply universally.

Are Theories Practical?

There may be more than meets the eye to Kurt Lewin’s statement at the beginning of this section concerning theory and practice. Obviously, not all theories will be equally practical. Some can be applied with more assurance to broader domains than others, some occupy a tenuous place among many other competing theories, and some are simply bad. Whether theories successfully guide action depends on whether they’re properly developed, whether they correspond well to reality, and whether they’re sufficiently flexible to evolve as circumstances change and new information becomes available.

Furthermore, it’s been pointed out that knowing theories does not necessarily mean that we will act according to them. Sandelands, L.E. (1990). “What Is So Practical about Theory? Lewin Revisited.” Journal for the Theory of Social Behavior, 20 (3): 235–262. And other forms of communication can sometimes be as provocative and valuable to us as...
theory. Good poetry, essays, and fiction all may inspire us and help instill the kind of confidence we need to make decisions and cover new intellectual ground.

Still, it’s clear that theory can serve as an important contextual factor as individuals and groups refine and elaborate upon the practices they follow. As we’ll see in the next section, group communication theory constitutes just such a valuable contextual factor for us.

**Key Takeaway**

A good theory can help us explain and predict phenomena.

Exercise \(\PageIndex{1}\))

1. The theory of gravity tells us that all objects, in all situations and at all times, exert an attractive force upon each other. Can you think of any statements about human interaction that apply in all situations and at all times? What makes you confident in your answer?

2. What are one or two major assumptions you make about people in groups which guide your own behavior as part of those groups?