3

The Process of Social Research

Ideas and Evidence

Introduction

Social research, in simplest terms, involves a dialogue between ideas and evidence. **Ideas** help social researchers make sense of evidence, and researchers use **evidence** to extend, revise, and test ideas. The end result of this dialogue is a representation of social life—evidence that has been shaped and reshaped by ideas, presented along with the thinking that guided the construction of the representation. This chapter focuses on how the dialogue of ideas and evidence is structured and how it is conducted—how ideas shape the understanding of evidence and how evidence affects ideas.

A major part in the dialogue between ideas and evidence is devoted to the analysis of the phenomena the researcher is studying. The term *phenomena* simply refers to facts or events. **Analysis** means breaking phenomena into their constituent parts and viewing them in relation to the whole they form. A researcher conducting an analysis of a revolutionary movement, for example, might try to dissect it in a way that illuminates all the different forces that combined to make the movement (see Jenkins 1994). This analysis would examine not only the social groups that joined the movement (for example, peasants, workers, soldiers, intelligentsia, and so on) but also the social groups that did not, the political and social context, the movement's ideology, and other factors that contributed to its formation.

In essence, the analysis of a revolutionary movement involves breaking it into its key component parts so that it no longer appears to be an amorphous, teeming mass of revolutionaries, but rather can be seen as a combination of key elements and conditions. These elements can be viewed in isolation from one another, and they also can be understood in the context of the other parts. For example, the ideology of the movement could be examined both in isolation (What are the key ideas behind the movement?) and in the context of the major groups involved in the movement (How do these key ideas resonate with the concerns of each group within the movement?). This understanding of the term *analysis*—studying something in terms of its aspects or parts—is necessary background for the concept of *analytic frame,* a key focus of this chapter.

The analysis of social phenomena, while important, is only part of the dialogue of ideas and evidence. The other important part involves the synthesis of evidence. **Synthesis** is the counterpart to analysis. Analysis involves breaking things into parts (in the example above, the constituent elements of a revolutionary movement); synthesis involves putting pieces together to make sense of them. When social researchers synthesize evidence, they form a coherent whole out of separate parts, making connections among elements that, at first glance, may seem unrelated. These connections may lead to further insights into the phenomena they are trying to understand. For example, based on a preliminary examination of evidence from a college sorority, a researcher might develop an initial portrait of it as a type of self-help group. This portrait might be based on interviews with members or observation of the internal support system of the sorority as shown at the start of meetings, where members may be invited to share feelings and personal news, while others actively listen and engage in helping other members as needed. This preliminary synthesis of evidence, in turn, would illuminate other aspects of the sorority, which could then be targeted for further study—for example, how competition between members is contained.

The process of synthesizing evidence is an important part of the dialogue of ideas and evidence. In this chapter, synthesis is presented as a process of forming evidence-based images of the research subject. In social research, representations of social life emerge from the interplay between analytic frames (which are derived from ideas) and images (which are derived from evidence).

It is important to examine the different ways the dialogue of ideas and evidence can take shape, because the character of the representations of social life that result from different ways of practicing social research is strongly

influenced by the nature of this dialogue. For example, the representation of what it is like to be a private in the U.S. Army constructed by a researcher who lives with a group of five privates is likely to differ substantially from the representation constructed by a researcher who uses a questionnaire to survey a random sample of 1,000 privates. In both types of research, there is a dialogue of ideas and evidence, but the two dialogues differ dramatically.

This chapter explains how the dialogue of ideas and evidence in social research is carried on through analytic frames and images. First, the chapter sketches a simple model of the process of social research as a way to introduce its four basic building blocks:

- Ideas
- Analytic frames
- Evidence
- Images

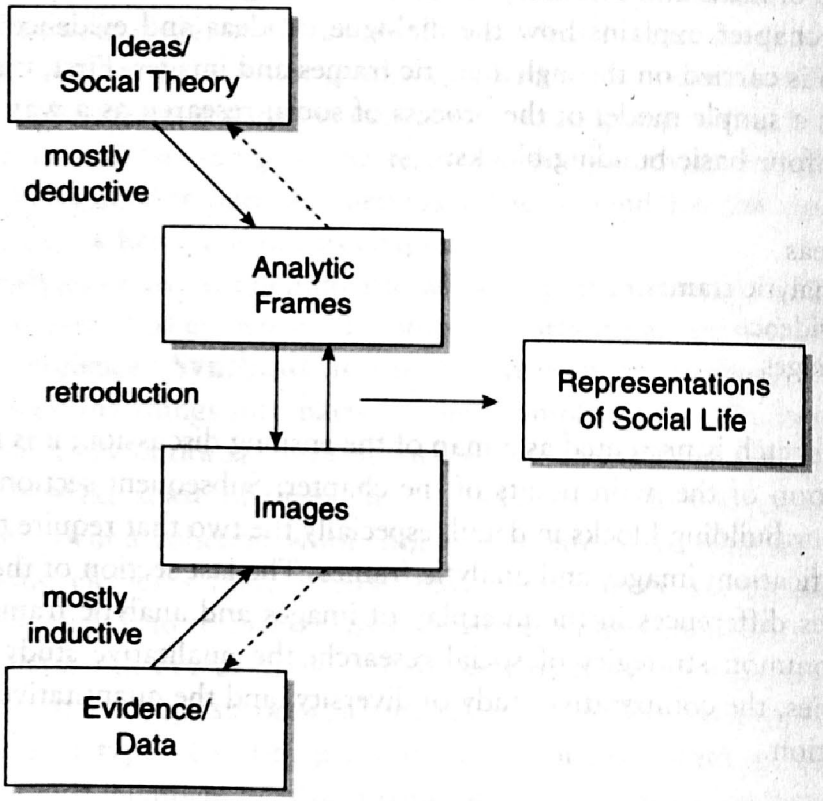
This sketch is presented as a map of the ensuing discussion; it is not a full elaboration of the main points of the chapter. Subsequent sections discuss these four building blocks in detail, especially the two that require the greatest clarification: images and analytic frames. The last section of the chapter addresses differences in the interplay of images and analytic frames across three common strategies of social research: the qualitative study of commonalities, the comparative study of diversity, and the quantitative study of covariation.

The Interpretive Model of Social Research

Figure 3.1 shows the understanding of the process of social research that guides the discussion in this chapter. At the base of the model is evidence/data. *Evidence* is the everyday word for what social scientists mean when they use the term *data*. Social researchers use a lot of evidence. Studies are often based on the examination of detailed, in-depth information on a small number of cases (as in the qualitative study of commonalities), a moderate amount of information on an intermediate number of cases (as in the comparative study of diversity), or a limited amount of information on many cases (as in the quantitative study of covariation). Ideas are at the top of the model. *Idea* is the everyday word used for what social scientists call "social theory." Social researchers draw on a pool of ideas when they conduct research, to help them make sense of the things they study.

Figure 3.1 The Interpretive Model

The **interpretive model** represents the specific concepts and relationships involved in constructing social research.



While research is generally described as following the scientific method (presented in Chapter 1), research more typically involves the interplay of ideas and evidence.

Ideas and evidence interact through images and analytic frames, as shown in Figure 3.1. Think of an **analytic frame** as a detailed sketch or outline of an idea about some phenomena. Ideas are elaborated through analytic frames. Frames constitute ways of seeing the things they elaborate.

An analytic frame might be used, for example, to articulate the *idea* of a table. People can recognize a table when they see one, even though tables differ greatly, because they have an implicit analytic frame for tables. They understand the category "table," and they can describe how tables vary—in size, color, material used to construct them, shape of surface, and so on.

The analytic frames of everyday life—like the one for table—are implicit; only rarely are they fully articulated or contested. The analytic frames that guide social research, however, are carefully specified and debated because

social researchers must be precise when they define and characterize the phenomena they study. Much of the work of social research centers on debating, clarifying, and using analytic frames to represent social life. These frames make it possible for social researchers to see social phenomena in ways that enhance their relevance to social theory. The analytic frame for revolutionary movements sketched in the introduction to this chapter, for example, provides a brief specification of some of its key components—the different groups involved, their ideologies, and other elements.

Images, by contrast, are built up from evidence. Based on observations of workers who run their machines so fast that they break, for example, a researcher might develop an image of these workers as troublemakers or insurgents who subvert production while appearing to work hard. To construct images, researchers synthesize evidence—they connect different parts or elements of the things they study in order to create more complete portraits based on some idea of how these parts are or could be related. Initial images suggest new data collection paths. For instance, the researcher working on an image of workers as insurgents who break machines to disrupt work might study the timing of these disruptions. At what points in the workday, the workweek, or even in the life of a labor contract do these production breakdowns occur? Initial images lead to the collection of more evidence and to a progressive refinement of the image. This image of some workers as insurgents, for example, might lead the researcher to look for other manifestations of subtle subversions of production in this work setting. In short, building images is primarily *inductive.*

This process of synthesizing an image from evidence and refining it goes hand-in-hand with the process of analyzing the evidence using analytic frames. In essence, by articulating ideas, analytic frames direct an investigation down specific data collection paths. Suppose, for example, in the research just sketched, the researcher had started with an analytic frame for "resistance" that specified a variety of different conditions for its appearance (perhaps drawing on the ideas of Burawoy 1979 or Hodson 2001). This frame might prompt the researcher to consider the subversion of production as a possible form of resistance. The evidence collected, along with other data, might support the image of some workers as insurgents. Once images are built up from evidence, they may confirm or amend an analytic frame, or they may summon new ones. For example, the image of workers as insurgents might be amended to distinguish between collective actions (such as work slowdown resulting from complete adherence to regulations) and individual actions (such as theft) that are responses to perceived lower pay relative to one's coworkers rather than a response to the perceived exploitation of self along with one's coworkers.

Sometimes the researcher seeks simply to find a good fit between the images constructed from the data and the analytic frames derived from theories. Often, though, the fit is not right, and the researcher must determine whether

different images can be constructed from the data or whether different analytic frames can be derived from theories. Alternatively, the researcher may use the images constructed from the data to devise new analytic frames or revise old ones. The interaction between analytic frames and images lead both to progressively refined images of social life and to better-specified analytic frames.

This process of refining images culminates in the representation of social life the researcher offers in a report of the results of the study. A social scientific representation thus can be seen as a product of the interaction between images and analytic frames. It is evidence that has been shaped by ideas, which in turn may have been selected and perhaps revised in response to evidence. The subsequent sections of this chapter elaborate the model in Figure 3.1. Of special importance in this discussion are the less familiar notions of images and analytic frames.

Ideas

Ideas about society come from everywhere: everyday life, a novel, an unusual event, an analogy, a misunderstanding, a slip of the tongue, a silly joke. Some ideas seem to appear more or less spontaneously. Most ideas turn out to be wrong or to be dead ends. For example, social scientists once thought that temperate climates caused higher forms of civilization to develop. As it turns out, this idea of climactic determinism does not do a very good job of explaining civilization. More than anything else, this thinking showed that those living in temperate climates were ignorant of non-Western cultures and of the complexity of most cultural forms.

Good ideas, or those that at least stand up under scrutiny, become part of the stock of knowledge that is passed from one generation of scholars to the next. In social science, abstract knowledge about social life is called social theory. Most people actually know a lot of social theory without studying it. They know, for example, that bureaucracies can become cumbersome and even choke on their own paperwork and procedures. They don't need to study organizational theory—a branch of social theory—to understand this. They also know that most people most of the time act in ways to maximize their material gains and other self-interests. They don't need a theory of rational choice—another branch of social theory—to understand this. Still, social theory is valuable because this body of thinking explores these and other ideas in depth: What are the types of factors that prevent bureaucracies from choking on their own procedures? Under what general conditions do people make what seem to be obvious irrational choices? Or, even more fundamental, is it always possible to tell which choices are rational and which are not?

The task of making sense of social life is daunting. The accumulated knowledge of social life represented in social theory offers an important

resource. Some social research, as noted in Chapter 1, seeks to improve this body of knowledge by testing ideas derived directly from theory or by identifying general patterns that elaborate theoretical ideas. Not all research, however, is theory centered in this way. Social researchers who seek to interpret culturally or historically significant events, for example, view social theory as a reservoir of possible interpretations. Likewise, researchers who seek to give voice, another key goal of social research (as described in Chapter 2), recognize that their research cannot proceed without some theoretical guidance, yet their primary theoretical objective is to contribute to theory by learning more about phenomena and groups that have been ignored or misrepresented. However, even researchers who are more concerned with contributing new knowledge to this pool of ideas than with using existing ideas participate fully in the dialogue with ideas.

Analytic Frames

When most researchers approach the pool of ideas known as social theory, they usually have a specific research question or problem in mind. For example, a researcher might be interested in understanding why people vote the way they do. What theoretical ideas (that is, ideas from the pool of social theory) might help in this research? Different ideas lead to different ways of framing and using evidence.

For example, one very simple theoretical idea is the notion that people act in ways that maximize their self-interests—they make rational choices. This theoretical idea sees the question of voting as an individual-level decision based on a sober assessment of the costs and benefits for the person. The researcher would thus see the act of voting as a calculation of individual gains and losses given different outcomes, a calculation that would vary across individuals depending on their characteristics (for example, income or family size). In short, the idea of rational choice would lead the researcher to construct a particular analytic frame for understanding voting, which, in turn, would cause the researcher to see voting in a specific way. For instance, if the researcher notices that income has an effect on voting, a rational choice perspective might lead the researcher to expect that a politician's stance on taxation would motivate voters differently based on their respective incomes. A different idea implemented through a different analytic frame might lead to a dramatically different view of voting, a different way of breaking it into its key components. For example, a theory that emphasized processes of social influence would turn the investigator's focus to the nature of each voter's social networks. So a researcher using this frame might center her analysis on the political beliefs of the voter's parents, spouse or partner, or close friends.

Thus, analytic frames are fundamental to social research because they constitute ways of seeing. While this notion may seem abstract, consider the operation of analytic frames in everyday life: As people go through their lives, they classify and characterize the things around them. For example, they know how to distinguish between "people standing around in a room" and "a party" because they understand and can use the term *party*. They also generally know what makes a party fun—which ingredients in what quantities, and so on—which is another way of saying they know how to characterize parties in different ways. Another way to describe people's understanding of parties is to say that they have an implicit *analytic frame* for parties. An analytic frame defines a category of phenomena (for example, parties) and provides conceptual tools for differentiating phenomena within the category (what makes them more and less successful; more and less formal; more this, less that; and so on). In short, analytic frames articulate ideas, in this case the *idea* of a party.

The person who is ignorant of the term *party* may not be able to tell the difference between a conference and a party. Both involve rooms full of people who are talking, often at the same time, often without listening to each other, often with laughter, and so on.

Now consider a related example from social research (Smith-Lahrman 1992) that further illustrates the frame as a way of seeing. In some coffee houses, people spend a lot of time *avoiding* interaction. They use posture and props such as newspapers and books to maintain social boundaries and social distance. In this sense, their noninteraction is intentional and therefore is a *social accomplishment*. A quiet coffee house is not a social vacuum; it is teeming with purposeful social behavior.

Armed with the proper analytic frame—one emphasizing nonverbal communication—it is possible for social researchers to *see* that the noninteraction is "accomplished." Without this frame, it might appear simply that "nothing is happening," when in fact significant efforts to achieve noninteraction are being exerted throughout the coffee house. In short, without a frame for accomplished noninteraction, researchers might be blind to its occurrences. They might also fail to consider similarities and differences among its occurrences across broad social spaces (for example, differences in how it is accomplished in trains, airports, elevators, and so on; differences in how tweens and teens accomplish it; and other important considerations).

The process of using analytic frames to classify and characterize phenomena is carried out explicitly and formally in social research. Sometimes a social researcher will study something because it is unclear what it is or how it should be characterized. Is the movement toward "political correctness" a fad? Is it a social movement? Is it a new religion? Is a wave of

anorexia among young women a response to fashion? Is it internalized misogyny? Is it an effort to erase gender differences by starving off secondary sex characteristics? Is it an emergent form of mass protest against traditional gender roles—a hunger strike? Which analytic frames work best? A researcher may try several frames to see which makes the most sense of the phenomenon and leads to new insights.

Consider a more detailed example: The decision by same-sex couples to hold a commitment ceremony could be understood as a "political act," and thus a researcher might study these ceremonies as one might study hunger strikes. Alternatively, a researcher might use the frame of "traditional cultural expression of love." When people decide to make a long-term commitment, a ceremony announces and publicly solidifies such intent as traditional, conventional, and potentially legally binding. To study commitment ceremonies is to examine the meaning of this act for the individuals involved. The researcher who uses the analytic frame of "political act" constructs a very different representation of the intention behind commitment ceremonies than the one constructed by the researcher who uses the frame of "traditional expression." In fact, ambiguities about the meaning of same-sex unions culturally, politically, and legally led Kathleen Hull to write the book *Same-Sex Marriage: The Cultural Politics of Love and Law* (2006). She interviewed 71 individuals in same-sex relationships to expand the body of knowledge concerning marriage rights beyond the context of constitutional, historical, or faith-based arguments by studying the people actually affected by the evolving legal system.

By debating, using, and formalizing analytic frames, researchers are able to relate their work to that of other researchers and to accumulate general knowledge about social life from their separate, individual efforts. For example, the researcher who uses the frame of "political act" to study same-sex marriages contributes to the body of knowledge concerned with the basic mechanisms of social change. The researcher who uses the frame of "traditional expression" contributes to the body of knowledge that addresses cultural rituals. This is not to say that researchers must select fixed analytical frames at the outset of their work; in fact, Kathleen Hull (2006) used a qualitative approach for her project specifically because this would allow her to uncover new perspectives that would not arise if she fixed her analytic frame in one way or the other.

Because analytic frames both classify and characterize social phenomena, they have two main components. When researchers use concepts to *classify* the phenomena they study, they **frame by case.** When they use concepts to *characterize* these cases, they **frame by aspect.** Both components of analytic frames are important parts of the dialogue of idea and evidence in social research.

Framing by case. When a social researcher states that most of what occurs in coffee houses is "accomplished noninteraction," he or she classifies the phenomenon. In essence, the social researcher answers the question, "What is this—the phenomenon being studied—a case of?" The social life of a coffee house provides a case of accomplished noninteraction. Framing by case (that is, answering the question, "What is this phenomenon a case of?") is an essential part of the process of social research (Ragin and Becker 1992).

When researchers claim that the people and events they are studying are an instance, or "case," of something wider and more important, a larger category, they offer a frame for their research. For example, to argue that it is important to study the genocide in Darfur, Sudan, as "a case of ineffective international intervention" is to frame this study as an instance of a more general category. Implicit in this statement is the idea that there are many such instances of "ineffective international intervention" and that the study of the genocide in Sudan should make a contribution to that general body of knowledge. Defining the case in conceptual terms—as an instance of something broader—is the most important part of the framing of a study. When more than one case is studied, they are often seen as multiple instances of the same larger category. For example, a comparative study of several instances of ineffective international intervention might examine specific United Nations resolutions that attempted to address the conflicts in Haiti, Rwanda, Sudan, and the former Yugoslavia.

The broad conceptual categories that frame social scientific studies do not always involve large units such as countries or abstract units such as social interaction. The units can be almost any size. For example, a researcher might frame a study of the conflict between the pro-choice and pro-life movements as an instance of "polarized social movements." Another case of polarized social movements in the United States might be the conflict between organizations representing unions and those representing corporations over "right-to-work" legislation seeking the elimination of compulsory union membership.

Still smaller units are involved when a researcher frames fraternities and sororities as instances of "same-sex communal groups." And even smaller units are involved when interaction rituals such as greetings are studied as instances of "efforts to cultivate relationships." All these examples involve framing by case. Even large-scale survey research involves framing by case. When a survey is used to examine the relation between economic interests and voting preferences, for example, the frame treats survey respondents as rational actors.

Framing by aspect. Specifying the broader category that is relevant to an investigation is only part of the process of analytic framing. Framing

also involves specifying the key features or aspects that differentiate the cases in a broad category. Framing by case establishes an important category, or set of phenomena; framing by aspect indicates how the cases within a category vary.

For example, social situations that qualify as sites of accomplished noninteraction (a category that includes coffee houses, airports, buses, elevators, waiting rooms, some types of bars, and so on) vary in important ways. How do people accomplish noninteraction in all these different settings? What verbal, nonverbal, and other behavioral cues are used? What features of settings influence which cues are used and how they are used? The list of relevant aspects of settings that should be considered in this frame is very long. Sometimes noninteraction is accomplished among strangers and sometimes among acquaintances. The settings where it is accomplished vary by social density: Sometimes people are spread out and can move about (as in an airport), and sometimes they are tightly packed (as in a plane). Some social spaces are closed (buses, for instance); some are open (parks). Social settings that manifest high levels of accomplished noninteraction vary in many other ways, as well. Each of these features may have an important impact on how noninteraction is accomplished in each setting. Once social researchers answer the question, "What is this a case of?" (that is, once they frame by case), they use theory and other ideas to identify the major features of cases in the frame, and thus frame by aspect.

Consider again the study of the conflict in Darfur, Sudan. To state that this conflict is an instance of "ineffective international intervention" only partially frames this case. It is also necessary to elaborate the important aspects of the instances within this category. There may be many different forms of international intervention with varying degrees of effectiveness, and each method of intervention may involve putting together a different combination of mobilization resistance, trade embargoes, United Nations resolutions, sanctions, non-governmental organization (NGO) interference, and regionally developed policies and strategies. Further, strategies that work well in some contexts may not work at all in others. In short, there are many different aspects to "ineffective international intervention." The researcher's analytic frame for the study of ineffective international interventions should embrace all of these aspects.

Framing by aspect helps social researchers see both what is present and what is absent in a given case. For example, assume that the analytic frame for "ineffective international intervention" is applied to the conflict in Sudan. This frame guides the researcher both to examine specific phenomena that were present in Sudan (such as strong NGO interference and global awareness of the conflict) and to consider the impact of features that were

absent in this case (such as a UN consensus on the nature of the conflict) but present in other cases covered by the analytic frame (Rwanda, for instance). Would NGO involvement and worldwide awareness have dampened the conflict if the United Nations had reached a consensus on the nature of it?

In all social research, some sort of guide is needed to see what is present and what is absent in a given case. Sometimes the things that are absent in a case help the most in explaining why it is one way and not another. Note, however, that it is easy to miss what is absent without an analytic frame to guide the analysis. Without this guidance, the tendency is to focus only on what is present.

Together, framing by case and framing by aspect constitute two key conversations that take place in the dialogue of ideas and evidence. How and when these conversations take place differ greatly from one research strategy to the next (Diesing 1971). Sometimes the analytic frame for a research project exists before the research begins and structures most aspects of the research; other times the frame is articulated in the course of the research. The interplay of analytic frames and research strategies is addressed in the final section of this chapter.

Evidence

When most people think about social scientific evidence, they usually think of questionnaires and telephone surveys. After all, social scientists conduct huge surveys on all aspects of social life and then publish their findings—the percentage of people who think this or that or who do this or that, broken down by gender, race, age, education, income, or whatever. However, social scientists are not limited to survey data. In fact, only a relatively small proportion of social scientists are survey researchers. Many study phenomena that cannot be adequately addressed with questionnaires.

All facets and features of social life offer evidence; virtually everything to a social scientist is "data," at least potentially. Some social researchers observe social life as it occurs in everyday settings. They take reams of **field notes** on people's daily routines of family, work, and play in their various locales: street corners and kitchens; offices and factories; country clubs and churches; bars, back alleys, and emergency rooms. Others conduct in-depth interviews with people from different walks of life and try to stimulate their subjects to be more introspective about their lives, to analyze their own thoughts and actions. A researcher interested in labor control, for example, might interview 50 employees of a factory, drawn from all levels and divisions of its workforce. Other researchers study past events, using historical documents and records from libraries and archives. Still other researchers

study patterns across whole cities and countries, using official statistics published in the reports of government and international agencies. There are many, many sources of evidence about social life, and social researchers have explored virtually every type.

Not only are there many different sources of data, but each instance of social life potentially offers an infinite amount of information. The **empirical** world is limitless in its detail and complexity. Social research thus necessarily involves a *selection of evidence.* Most evidence must be ignored as irrelevant; otherwise, research would be impossible.

Consider the seemingly simple task of taking notes on what occurs in a classroom during an hour-long lecture. First of all, it's necessary to set the stage properly with a physical description of the lecture hall, its atmosphere, the number of people in attendance, their distribution in the lecture hall, and so on. This description could easily fill one notebook. Next, there is the lecture itself. Exhaustive notes on the content of an hour-long lecture could fill another notebook. But then there's also the lecture as a performance, which includes nonverbal behavior (gestures and other bodily movements) and the interplay of the verbal material and nonverbal behavior. This information could easily fill several notebooks. There should also be notes on the reactions of students in the audience. Of course, with enough resources, it would be possible to monitor the behavior of each person throughout the hour, including his or her verbal and nonverbal behavior, note taking, social interaction, and so on. This would yield enough information to fill at least one notebook for every person in attendance. And don't forget that it is also possible to take notes on the interaction between the lecturer and the cues—verbal and nonverbal, conscious and unconscious—that the listeners send to the lecturer. A videotape of this interaction could be studied for many years and yield many more reams of field notes. In short, to try to capture the full details of social life—even a very small slice of it—is a colossal undertaking.

Because every slice of social life potentially offers an unlimited amount of evidence, researchers must be selective in their use of evidence. It would take an infinitely long research report to use all the evidence a typical case offers. Although social researchers usually collect large volumes of evidence, the quantity they collect can, at best, constitute only a tiny fraction of the evidence they *potentially* could collect. They try to focus on only the most significant portions, using their ideas, analytic frames, interests, past studies, and so on to help them assess what seems most important to their research questions. The problem of selecting evidence returns us to ideas and analytic frames. Without some sort of sensitizing ideas or concepts, the world seems an amorphous blob. We perceive evidence and select some of it as especially relevant because of our ideas and frames. As will become evident in the next

section, however, the images social scientists construct from these bits of evidence may not conform to the initial ideas and frames that defined the evidence as relevant in the first place.

This need for selectivity introduces a problem: When a writer becomes an advocate for a particular point of view, he or she "selects" for reporting only the bits of evidence that support that position. This kind of selectivity involves an ignorance of evidence, either willful or unconscious, that favors opposing points of view. Ignoring evidence is not always willful, however; sometimes it is a product of limited awareness or limited resources and thus is unintentional. For example, before the rise of feminist perspectives in the social sciences, many researchers did not see the pervasiveness of sexism in everyday life. Thus, evidence bearing on sexism was often missed in studies of a wide range of social relations. Many other forms of ignorance and unrecognized bias infect all research. While it would be great if every social scientist had some way to recognize the impact of such bias on his or her own research, there is no automatic safeguard. Social scientists are only human, and they can't designate evidence as relevant if their unrecognized biases persuade them to ignore it.

The only real safeguard to unrecognized bias is the fact that social science is *communitarian* (Merton 1973). Social scientists write for other social scientists and they judge each other's work. They try to detect bias. Often a social scientific representation of social life is evaluated by other social scientists before it is published or made public in some way. This, however, is less true with the dramatic increase in blogging and self-publication. Many well-respected social scientists have discussed ideas and presented data analyses in blogs with peer response rather than peer review. The debates that used to occur around university seminar tables now frequently take place in cyberspace. Peer-reviewed work is usually subjected to close scrutiny both before and after it is published. In fact, social scientific representations are subjected to more scrutiny than most other representations of social life. Of course, if all or even most social scientists share the same unrecognized biases, as is sometimes the case, then the influences of biased selection of evidence will not be immediately recognized. However, social scientists believe that future generations of social scientists will uncover and correct the unrecognized biases of preceding generations.

Images

Ideas and analytic frames direct the researcher's attention to specific kinds and categories of evidence. From an ocean of potential data, the researcher selects what seem to be the most relevant portions. Once a sufficient body of

relevant evidence has been collected, the researcher's next task is to make sense of it and at the same time relate it back to the ideas and frames that motivated the collection of evidence in the first place.

Researchers make sense of their evidence by constructing images of their cases from the data they have collected. In effect, an image is constructed by the investigator when he or she brings together, or synthesizes, evidence. Images often imply motives or say something about causation. When a researcher notes that people with more income tend to vote for the Republican Party, for example, he or she creates part of an image of how a preference for Republicans comes about. Thus, an image is the product of the effort to bring coherence to data by linking bits of evidence in meaningful ways.

Consider an extended example: The researcher who wants to understand how medical students become doctors may start the research with specific ideas about the professions and the nature of professional socialization. One common notion is that each profession upholds certain values or principles and that professional socialization involves learning how to apply these principles in everyday situations. For the medical profession, one central value might be that the health of the patient comes before all else. Because this analytic frame emphasizes the application of abstract principles, the researcher might initiate data collection by observing medical students in clinical practice, with special attention to whatever general principles seem important in these settings. A few weeks of fieldwork in the clinics of a teaching hospital would no doubt result in a huge volume of notes on what was observed. During the process of digesting his or her observations, the researcher may ask questions about the relationship between these abstract principles and professional socialization such as the following: What images of medical students and their professional training emerge from this fieldwork? Which images make the most sense of this new body of evidence? Which aspects of the professional socialization of medical students should be investigated next?

Images are formed from evidence in order to make sense of it, summarize it, and relate it back to the ideas that initially motivated the collection of evidence. To construct images, researchers connect different aspects of cases to form coherent portraits. Suppose the researcher studying medical students found that clinical decision making revolved less around the best interests of patients, and more around the needs of doctors and hospital officials to protect themselves from charges of malpractice. The *image* of professional socialization that emerges from this connection is that training centers on getting medical students to exaggerate the correspondence between this need for protection from malpractice charges, on the one hand, and the best interests of

patients, on the other. After all, charges of malpractice can be avoided in part by exercising extraordinary caution—for example, by ordering many laboratory tests on each patient so that every possible diagnosis is covered. This excessive use of laboratory tests could be construed as "thoroughness" or "expert care" and thus "in the patient's best interest," even though testing is often invasive, unpleasant, expensive, and may cause serious reactions and even secondary illnesses.

This image of professional socialization, built up from evidence, both elaborates and challenges the initial frame. The initial frame emphasized the importance of abstract professional values in professional socialization (for the medical profession, "putting the patient first"). The image constructed from evidence, however, indicates that, in everyday settings, professional values are learned primarily in the context of practical and institutional concerns (for example, avoiding charges of malpractice). In other words, practical and institutional concerns *modify* how professional values are understood and implemented. This image of the training of medical students, built up from observations of decision making in clinics, organizes the evidence the researcher has collected in a way that highlights its relevance to the original analytic frame.

Consider another example of images in social research: Researchers have noted that many inner-city neighborhoods have lost their middle-class families to more prosperous, outlying areas, and that these losses have accelerated the decline of these neighborhoods (W. Wilson 1980, 1987). This connection between the loss of middle-class residents and accelerated neighborhood decline contrasts two images. The first is a "thriving minority community"—what it presumably was like before the flight of the middle class: a neighborhood composed of individuals with different income levels (poor, working class, and middle class), with the more successful members offering community leadership, role models, information on how to get ahead, jobs in locally owned businesses, and many other resources for less fortunate members. The second image—the post-flight community—is an "inner-city ghetto" and offers a striking contrast: uniformly poor members with high rates of unemployment, crime, violence, drug addiction, welfare dependence, teenage pregnancy, despair, and so on. Linking these two images is the "exodus" of the minority middle class. This example of the construction of images can be used to illustrate three of their important qualities:

1. Images are **idealizations** of real cases. Every real neighborhood is complex and ever-changing. It is doubtful that any neighborhood perfectly fits either of the two images just elaborated, the "thriving minority community" or the "inner-city ghetto," at least not for any great length of time.

Images are exaggerations because they are necessarily constructed from selected pieces of information; they cannot reproduce real cases because these are infinitely detailed and complex. Thus, images should be seen as pure or idealized cases (Weber 1949). These two terms—*idealized* (as in idealized cases) and *idealization* (the process)—are used here not to indicate desirability, as in the statement, "This area offers an ideal climate for year-round outdoor sports." Rather, they are used to indicate that images are *abstractions*. Unlike theoretical ideas, however, they are abstractions that have a specific grounding in a body of evidence. The process of constructing idealized cases (idealization) involves abstracting from information about empirical cases to conceptually elaborated images. As idealized cases, images can be linked to theoretical ideas expressed in analytic frames.

2. Most images imply or embody *explanations*. Most explanations are *causal*, which means simply that they offer accounts of why things are the way they are, emphasizing connections among different phenomena. When we explain the accelerating decline of inner-city neighborhoods by pointing to the exodus of the minority middle class, we pinpoint a causal connection. The key part of a causal explanation is its *cause* words. Cause words, such as *exodus*, are the most important part—the action part—of the images that social scientists construct. Exodus connotes collective, willful abandonment of a specific locale. It's packed with meaning. Words like exodus link images to analytic frames, ideas, and ultimately to social theory. There are social scientific theories, for example, that seek to conceptualize the variety of push-and-pull factors that cause people to move from one community to another. These theories are relevant to many kinds of migrations: the exodus of minority middle-class people from inner-city neighborhoods, the gentrification of other urban neighborhoods, and the back-and-forth migration of Mexicans to and from particular villages in Mexico and specific communities in the United States.

3. Images are *guides* to further research; they suggest new research questions and new avenues to explore. Images help researchers see what they might otherwise miss and thus lead them to examine social life in a more systematic way. For example, we can ask the following questions: Have we omitted any important aspects in either of these two images? For instance, do most "inner-city ghettos" also lack grassroots political organizations? Are there important differences between those with such organizations and those lacking them? Here is another example: Are there inner-city minority neighborhoods with a good cross-section of income groups (poor, working, and middle class) that nevertheless developed high rates of crime, violence, drug addiction, teenage pregnancy, and so on? If so, why didn't the existence

of middle-class role models, leaders, and so forth forestall these developments? For still another example, would the return of middle-class minority members to an inner-city ghetto help roll back the rising tide of violence, drug addiction, welfare dependence, and the like? These questions follow directly from the two images constructed.

Once formed, images interact with analytic frames. The process of constructing images (or **imaging**) complements the process of deriving analytic frames from theory (or framing by case and framing by aspect). While these two activities, framing and imaging, seem to correspond to deduction and induction, it would be a mistake to limit them in this way. Even though imaging is mostly inductive, it uses evidence that has been defined as relevant by the ideas and frames the researcher brings to the study. It is difficult to form an image from evidence without first using some sort of initial analytic frame to highlight or define relevant evidence.

Likewise, even though framing is mostly deductive, the body of knowledge from which frames are derived summarizes accumulated, evidence-based knowledge about social life. Thus, framing is based on a vast body of systematized evidence. Furthermore, at the start of most research projects, the analytic frame for the research is usually only half-developed, at best. Social theory is abstract, general, and often vague, so much so that several different frames can be derived from the same set of ideas. In the course of the research, if the images formed from evidence are compatible with the initial analytic frame, then they can be used to clarify and refine it. However, sometimes the images formed from evidence reject the initial framing and force the investigator to seek out or develop new frames (Walton 1991, 1992). This interaction between images and frames is best understood as a process of *retroduction* (see Chapter 2).

Representations

The dialogue of ideas and evidence culminates in representations of social life (see Figure 3.1). In social research, analytic frames and images interact to produce a progressively refined portrait or picture, which becomes the representation (and the explanation) that the researcher offers.

In many ways, social scientific representations can be compared to photographs. The photographer selects an image to be represented, taking care to ensure that the right elements are brought together in the image. By bringing together these elements, the photographer conveys the message or idea he or she intends. The image in the photograph is framed in several ways. Within the photographic image itself, it is framed by focus—some parts of

the image are foregrounded and the focus is sharp, while others are backgrounded and out of focus. The photographic image is framed as well by its boundaries. It can be cropped in a variety of ways; each cropping has a different effect on the meaning of the image. Consider the fact that the world around the photographic image is seamless—it goes on forever. The frame established by the photographer limits the context of the image. Images are unclear if they are not properly framed.

So it is in social research. The main part of the representation is the image, which is built up from evidence. Researchers link pieces of evidence together to make images. The analytic frame provides the context for creating and understanding the image, establishing conceptual boundaries around the evidence-based image. It is important to understand that in both social research and photography, representations appear to audiences as finished products, complete with images and frames. However, these finished products result from a long process. There is interplay of possible frames and potential images in the construction of every representation.

At the core of every social scientific representation is an explicit or implicit explanation of some major aspect of the phenomena it represents. The explanation is what gives the representation coherence, because it is very difficult to "tell about" social life (that is, represent it in some way) without giving some kind of account of it (that is, explain it). For example, the researcher who studies interaction in a coffee house explains how people accomplish noninteraction; the researcher who studies ethnic tensions in a range of countries explains how conflict may be prevented or at least postponed; the researcher who studies medical students explains how they come to see a correspondence between the practical concerns of doctors and hospitals and their professional commitments to patients; and finally, the researcher who studies inner-city neighborhoods explains how their loss of middle-class members contributed to their decline.

Ways of representing the final product of the interaction of frames and images in social research are varied, and the intended audience for a representation has a strong impact on how it is presented. While it is possible to imagine a variety of ways of representing the results of social research (documentary films, dramatic performances, text mixed with still photographs and sound recordings, multimedia presentations, and so on), social researchers tend to use academic books, journal articles, textbooks, and an occasional article in a mass-circulation magazine. In other words, they use traditional academic outlets almost exclusively. Within each of these media, however, different formats may be employed: tables, charts, equations, transcripts, narratives, vignettes describing typical or exemplary cases, and so on.

Analytic Methods	
Deduction	The process of deriving more specific ideas or propositions from general ideas, knowledge, or theories, working out their implications for a specific set of evidence or specific kinds of evidence.
Retroduction	The interplay of induction and deduction, and is central to the process of scientific discovery. The process of constructing representations from the interaction between analytic frames and images involves retroduction.
Induction	The process of using evidence to formulate or reformulate a general idea. The process of constructing images via the synthesis of evidence is mostly inductive.

Processes and Strategies of Social Research

While all social research involves interaction between images and analytic frames, the nature of this interaction can differ significantly from one research project to the next. A key consideration in understanding these differences is the role of analytic frames in research. In some research, frames are **fixed** at the start of the study, while in others they may be either **flexible** or **fluid** and change in the course of the investigation.

Analytic frames may be elaborated at the outset of a research project and remain more or less the same throughout the study. This use of fixed analytic frames is often necessary, for example, in studies that seek to test theories. In essence, the analytic frame implements a hypothesis to be tested. If images constructed from the evidence are inconsistent with the hypothesis, then the hypothesis is rejected. Fixed frames are also common in research that seeks to make predictions based on current trends and in studies that seek to document broad patterns.

Fixed frames are most compatible with quantitative research on covariation (see Chapter 7). In research of this type, there is sometimes a close correspondence between the analytic frame developed at the outset of the research and the data set that the researcher then constructs. Recall that analytic frames elaborate ideas by specifying both a category of phenomena and the major ways phenomena within the category vary. For example, a frame that looks at voters as rational actors sees voters as the category and their individual-level differences (such as their different educational backgrounds

or income levels) as aspects that might explain their different choices. This analytic frame readily translates to a survey format, where potential voters are queried about their demographic characteristics and their voting behavior (see Page and Shapiro 1991). This simple translation from the analytic frame to survey data permits a direct test of the idea that inspired the frame in the first place—that voters make rational choices. If the images constructed from the data do not correspond to the idea of rational choice, then the hypothesis is rejected.

In other studies, the analytic frame is flexible; it is elaborated as a guide for research, showing which kinds of factors might be relevant in which contexts. A flexible frame is useful, for example, in studies that seek to explore diversity or advance theory. A flexible frame shows the researcher where to look and what kinds of factors to look for without forming specific hypotheses about relationships among factors.

Flexible frames are common in comparative research (see Chapter 6), especially when the goal is to make sense of a range of diverse cases. Consider a researcher who is interested in tyranny and explores it by studying many of the major tyrants of the 20th century (Joseph Stalin, Adolph Hitler, François "Papa Doc" Duvalier, Rafael Trujillo, Saddam Hussein, and so on; see Chirot 1993). The analytic frame might direct the researcher to examine a range of factors: how these tyrants came to power; what good, if any, they accomplished; who supported them, both domestically and internationally; what ideologies they used, if any, to justify their cruelty; how much suffering they caused; and so on.

Examination of this evidence might lead the researcher to differentiate types of tyrants. For example, the evidence might show that the more ideological tyrants (Hitler and Stalin, among others) caused more suffering than the less ideological ones. In this way, the researcher could elaborate the analytic frame, used initially as a way to guide the research, with these evidence-based images (the two main types of tyrants—more ideological and more abusive versus less ideological and less abusive). Thus, the research could offer important leads for the advancement of theories of political oppression (Chirot 1993).

Finally, in some research, analytic frames are fluid. Researchers who seek to give voice (one of the goals of research discussed in Chapter 2), for example, may want to limit the influence of pre-existing ideas. Of course, they must have some initial ideas about their research subjects; otherwise, the research could not be started. But these ideas might be quickly set aside once the research is underway. Alternatively, the researcher might start with several frames and move fluidly among them, depending on the nature of the evidence as it accumulates. The use of multiple, fluid frames is especially

appropriate when researchers seek to give voice because a fixed analytic frame might prevent them from hearing the voices of the people they study.

Fluid frames are most common in qualitative research (see Chapter 5). Often researchers will not know what their case is "a case of" when they first start their investigation. When there are many possible framings, each can be explored to see which help make the most sense of the evidence. Sometimes multiple frames are retained throughout a project and included in the representation, especially if these different framings illuminate the subject in complementary ways. The American Civil War can be framed in many different ways: as a fight over slavery, as a fight over states' rights in a federal system of government, as a struggle between a plantation society and an emerging industrial society, and so on. These different frames can be integrated into a single, encompassing portrait.

Framing a case in different ways enriches our understanding of the case when each frame offers insights for other frames. When this occurs, the case or cases that are the focus of the study are said to be "rich" because they provide so much raw material for the advancement of social thought. Unfortunately, this creative interaction among frames is relatively rare in social research. Typically, in qualitative research investigators struggle simply to come to terms with their cases. Existing frames may not work well at all, and the case becomes a platform for developing new ideas and new frames.

The Challenge of Social Research

Ideas and evidence are everywhere. It's no great surprise, then, that there are so many people busy constructing representations of social life, from poets and painters to playwrights and political scientists. Different ways of constructing representations require different kinds of regimen. The regimen of poetry, for example, is to construct representations that make the most of as few words as possible. The regimen of social research is also strict, though quite different, and it is reinforced by the primary audience for social research—social scientists.

The regimen of social research demands both clear specification of the ideas that guide research and systematic examination of the evidence used to build images and representations. The challenge of social research is to construct powerful and instructive representations of social life that contribute to social theory (the ongoing conversations about social life), and at the same time embrace a breadth or depth of evidence about social life in a systematic way. This challenge can be met by building a dialogue of ideas and evidence—analytic frames and evidence-based images—into the process of social research.