Chapter

3 Asking Research Questions

OVERVIEW

The **research question** guides the empirical research study. It sets in motion research activities that yield information and lead to a special type of story, a research report. These activities aim at producing data that meet the criteria of "the scientific method," a particular way of knowing. The "findings," or the answers you create by analyzing the data you gathered in response to the research question, must be **objective, generalizable, falsifiable,** and **reproducible.** The research question and the story that answers it (i.e., the findings) must be conveyed in a **science vernacular.** Qualitative research differs from quantitative research in being more flexible in organizing evidence and framing of the stories. In this chapter, we discuss the research question, offer you guidance on developing your own RQ, and present two examples to help you think through some of the key issues pertaining to the asking and answering of RQs. We also offer tips on where to get ideas for research questions and how to word them.

INTRODUCTION: WHAT IS A RESEARCH QUESTION?

Research questions guide research projects. Nowadays, few research projects simply describe, blow-by-blow, a slice of social "reality" in the manner of a well-written blog, a vivid piece of journalism, or detailed nonfiction writing. Almost all empirical studies, qualitative or quantitative, attempt to answer a particular question or cluster of questions, usually about variation and diversity in social arrangements or behaviours. Some studies are concerned with how similar **cases** or situations produce different outcomes, while others examine how very different cases or situations yield similar outcomes. Why do some cities have higher crime rates than other cities? Does identifying as a man or a woman affect individuals' voting choices and political views? Which religious groups have the highest suicide rates and what accounts for the differences? Why and how do some youth end up dropping out of high school? Why does the United States have a high rate of incarceration? Sometimes the research question focuses on uniformities or a lack of variability in

arrangements and behaviours. For example, why do all Western societies shun mutilation as a method of punishment? What similarities can we find in the organization of drug gangs in large U.S. cities, and what social forces account for these similarities?

Without a guiding research question (or cluster of related questions), empirical studies would be mere reports of observations, at best entertaining to read but more likely amounting to a disorganized set of field notes or a hot mess of aimless numbers. The research question motivates and structures data and their collection, the process of analyzing data, the creation of theories to make sense of the data, and the composing of a story that brings it all together. In short, the research question is a necessary catalyst in a sociological study, and it plays an integral role in every phase of the research process. When in doubt about any phase or aspect of your study, pay a visit to your research question—it almost always will bring some clarity to the matter.

We hasten to mention that your research question is likely to change *substantially* throughout your study, as you move from formulating the question to strategizing data production, and then possibly continue to change as you conduct your analyses. Many textbooks treat the research question as though it's a static "thing," an unyielding foundation on which you build a study. As we'll see, this couldn't be further from the truth, especially in qualitative research, where the research question sways and bobs on the dynamic current of the "dialogue of evidence and ideas" (Ragin 1994) of the research process. At some point, however, you will have to solidify your research question, but this point could be much later in the game than most other textbooks (or instructor-scholars) might admit!

WHAT DOES A RESEARCH QUESTION PRODUCE?

The research question gets you going on a number of research activities that produce a special type of information called "data," and a final report that organizes the data and your manipulation and interpretation of it into a compelling "story." Research and the stories we tell about what we find—called **research reports**—generally follow a set of rules derived from natural science methods. Every scientist's activities, including her choices, occur within a very large framework, a **way of knowing** that is called the **scientific method**. Not all social scientists adhere strictly to the scientific method but all are influenced by it—even if they decide to reject it explicitly. The scientific method lurks in the back of the sociologist's mind as she asks her research questions, and she typically avoids asking questions that cannot be answered within this framework (e.g., Is there a higher power running everything?)

The Sociologist's Way

Sociology is the study of people doing things—and/or not doing things—together. As a qualitative researcher, your job is to craft a **representation of social life** (Becker 2007). This means that you will be using the scientific method, as it applies to qualitative research, to "tell a story" about a social phenomenon that interests you and to answer questions that you have formulated about it. These questions are formulated well in advance of carrying out research activities, but in qualitative research, they often change dramatically during the initial research experiences.

You might be telling a sociological story of how customers and artists interact in tattoo parlors, how upper-class families in France raise their children, how street gangs participate in the illicit drug economy or how they contribute value to their communities, how binge drinking happens among college students. Or, you might be trying to explain "accomplished

noninteraction," the ways people go about *not* interacting with each other in public spaces, such as doctor's office waiting rooms, public transportation vehicles (trains and buses), or lines at the grocery store cash register.

The Scientific Method

Every single day we "represent" social life: We tell our friends and families stories about what happened during the day, we go to parties where we exchange comic or tragic stories of events we have witnessed or heard about, and we review our day's activities—complete with characters, events, and theories of why things happened the way they did—as we fall asleep at night. But sociological representations differ from these more casual storytelling forays. And they differ from the structured representations that journalists compose for newspapers and television news programs. Sociological representations have their own structure and often must adhere to a different set of rules. These **rules of sociological representation** enable *and* constrain the sociologist's way of making representations of social life and telling stories about it. Our shorthand name for these rules is the *scientific method*. It is a way of knowing, of arriving at knowledge of the world around us.

There is considerable controversy about the extent to which the social sciences—and especially qualitative research—can and should use the scientific method, but a majority of researchers would say that in very broad terms the scientific method does apply to the study of social phenomena, although it needs to be suitably adjusted to the fact that human action takes place in a **historical context** and that humans are **self-reflexive and symbol-using beings**, not inanimate or wordless objects. Moreover, the scientist in this case is a human; the same goes for the "subjects" of the study. This can make everything much more complicated—in terms of rules—than it is when the scientist is a chemist and the subject is polyisoprene vulcanization (burning rubber latex).

The Scientific Method: A Set of Rules Guiding Procedures, Presentation of Evidence, and Storytelling

The criteria that comprise the scientific method resemble the **rules of evidence** applicable to legal proceedings in Anglo-American law, where the evidentiary standard is "proof beyond a reasonable doubt that the accused party is guilty," a cornerstone of the American criminal justice system known as the "presumption of innocence." From this premise flows a further set of rules governing the stringent procedures that the prosecution must use to convince a judge or jury that no "reasonable person" could conclude that the defendant is innocent of the crime. These rules play out in an "adversarial system," where the defense and prosecution go up against each other in constructing two different, competing stories of what happened. In presenting evidence to the judge or jury, each side attempts to "falsify"—in the sense of "cast doubt on"—the story told by the adversary. In the United States, it is believed that truth is most likely to emerge from this battle of representations, in contrast to the continental systems in which a lone investigating magistrate sets out to discover the truth. In both systems, however, the "facts" in the story (or contending stories) must meet criteria such as relevance, materiality, and competence, and there are very strict rules about presenting evidence.

The scientific method is a similar kind of framework that governs the quality of evidence and the search for "truth." Sociologists continuously strive to demonstrate the **plausibility** of their social representations. They wish to convince the reader/audience that their "proof" meets specific criteria and is therefore "rigorous" or "robust." And they assemble their various forms of

"evidence" (called "data" in sociology) to construct a representation that others—usually peer scholars—will find convincing. Essentially, the sociologist follows the scientific method in her quest to demonstrate beyond a reasonable doubt that her particular story is potentially truthful, that it holds up well against challenges, and that it is supported by the evidence. In addition, every sociologist brings his "reasonable doubt" into the scrutiny of others' research findings by applying the tenets of the scientific method to determine how compelling and persuasive the other scholar's findings are.

Principles of the Scientific Method

In the discipline of sociology, roiling debates encircle the scientific method—some scholars summarily reject it, others embrace it wholesale, and some feel either ambivalent toward it or adopt a utilitarian, practical position that entails selectively applying and adapting one or more of its basic principles. But it's a good starting point for our discussion, because even those who reject it completely still operate in reference to it.

What are these principles (or tenets)? Just as juridical systems employ rules of evidence, the field of sociology rests on a foundation of central principles that come alive in the doing of research, whether quantitative (numeric) or qualitative. These fundamental tenets include **objectivity**, **generalizability**, **falsifiability**, and **replicability (or reproducibility)**. The researcher uses these tenets to achieve *plausibility* for the conclusions. That's a lot of big words ending in "ity" . . . let's break them down a bit.

OBJECTIVITY *Objectivity means that the information is not influenced by personal feelings or opinions of anyone. Objective statements "match what is out there" regardless of how individuals feel about this match or even whether they can perceive it.* When a tree falls in the forest, the impact on the ground sets up sound waves, regardless of whether anyone is there to hear them. The principle of objectivity tacitly presupposes the existence of "facts" that do not depend upon the mind for their existence.

Scholars and laypersons argue endlessly about the problems in this definition. Statements of fact come from the human mind and almost always are constructed through interaction with other humans. Hence, every fact emerges not directly from the "world out there" but through a mix of social construction and neurologically determined workings of minds. In the social sciences and the study of human actions, statements of fact are embedded in even thicker layers of social construction than in the natural sciences. So some scholars object to the use of terms such as "objective" and "fact" at all.

Yet we would argue that it is still reasonable to say that statements formulated in research have different degrees of objectivity. For example, "El Salvador has a higher level of income inequality than Denmark" is a relatively objective statement. Once we have decided that income inequality is worth talking about (a notion that might just be a subjective value or might be related to other research questions) and decided how to measure it (thereby socially constructing income inequality as a fact), we would all agree that there is more of "it" in El Salvador than Denmark. Notice how we often assign higher degrees of objectivity to statements that are based on a prior agreement about how we define something, especially by measuring or counting.

Qualitative researchers concern themselves with objectivity as much as quantitative researchers, but they often call it something else: **believability**. Scientists realize but often do not publicly admit that facts are only facts when there is a socially agreed-upon paradigm for

identifying and labeling a phenomenon as a fact or a nonfact. Every scientist, when pursuing the scientific method, works toward constructing a story about the world—natural or social—that readers will find *believable*—or **plausible**—or at the very least *not unbelievable*. Believability, as sort of substitute for complete objectivity, must entail a full, complete, and transparent description of procedures of research to convince the reader that the researcher looked at "something out there" and did not invent a story based only on her opinions and feelings, although these opinions are legitimate reasons to have *undertaken* the research to begin with. We must be convinced that if we went to the same place and situation and used the same methods, we would obtain very similar results (a conviction called *replicability*) because the results are basically a product of something "out there" in the real world even if it is filtered through human minds and interactions.

GENERALIZABILITY *Generalizability means that the information applies to someone other than those people or situations for which it was directly observed or produced. We ask ourselves "Does this study's findings tell us anything convincing/believable about anyone other than the people who were studied?"*

After studying experiences of violence among gang members, for instance, the author may first decide that any gang member is more likely to be assaulted by a fellow gang member than by the member of a rival gang and then offers the conclusion that *intra*-gang victimization is more likely than *inter*-gang victimization. Let's assume that his observations of the gang were correct—believable findings supported by evidence. But what about his conclusion? Does it apply to any gang other than the one he studied? How far can he stretch this finding? Who is it really about? Does it apply to other gangs in the researcher's city, to gangs throughout the country, to all contemporary gangs across the globe, to all gangs for all times and places...? As skeptical readers who go into the reading with "reasonable doubt" about the story's "truth," we must ask ourselves and each other whether or not the researcher's methods and data were rigorously enough developed to make the story applicable to gang members *whom the researcher did not observe, interview, or otherwise study* (i.e., the "unobserved cases").

It may be useful to replace the word "generalizability" with **relevance.** A study (or scientific story) of a specific set of gang members might not be generalizable to all gang members in all cities across the planet, but it might have relevance to the way many or most or a significant number of other gangs operate. This is an important point. Very few studies, even the most scientifically rigorous, can be considered fully generalizable. Many of them, however, address "generic social processes," which Becker (2007: 395) defines as "abstracted formulations of social behaviour." A detailed study of a single urban tattoo parlor, for instance, may not be generalizable to all tattoo parlors in the world, but it may well generate broadly relevant insights concerning how the parlor operates. The study might find that social, economic, and cultural processes within this single shop have parallels in free health clinics. A study of a classroom might yield findings that illuminate the similarities between schools and prisons.

Those who are interested in generic social processes are less concerned with how all members of a particular socially constructed category are alike; they are more concerned with documenting processes that operate across social sites. This emphasis on documenting *processes* in *contexts* is particularly strong in qualitative research; we highlight both the word "processes" and the word "context." It is important to emphasize that focusing on **generic processes** as a form of generalizability is not an effort to render invisible the social-historical specificity that often gives qualitative research its depth. As Schwalbe (2004: 421) note, "To call these processes 'generic' does not imply that they are unaffected by context. It means, rather, that they occur in multiple contexts wherein social actors face similar or analogous problems."

FALSIFIABILITY *Falsifiability means that conclusions from a study can be refuted or to use a common phrase, "proven wrong." The conclusion is stated in a form that allows it to be challenged, and the evidence for the conclusion is presented in a way that can be scrutinized and possibly reinterpreted to refute the conclusion.*

A simple example from personal injury suits will clarify the issue here. When a plaintiff says that an accident caused back pain, a feeling of disbelief often sets in among the jury. Unless very clear damage to the spinal cord or vertebrae can be shown, the claim of back pain (unlike that of many other injuries—mangled limbs, scarred faces, disturbed gait, etc.) is hard to observe and hence hard to challenge. How can it be refuted? If it can't be refuted, it can't be proven. It is actually its *nonfalsifiability* that makes the claim suspect.

The strongest research studies tend to exhibit a high degree of falsifiability. In other words, the more falsifiable your research study is, the stronger (i.e., more influential, more scientifically sound) it will be. This may sound backwards, weird, counterintuitive, or just plain wrong. Don't we want our theories and our findings to assume the resilience of "iron-clad truth"? The answer is a resounding "no!" The strongest hypotheses tend to make predictions about what cannot be observed—they take a risk by stating that certain things cannot happen, or more commonly, that they are unlikely to happen.

For example, we might venture the hypothesis that college students who paid their own way through college are more concerned about their grades than those whose college costs are paid by their families, with suitable definitions for terms such as "student" and "care about grades." If we wanted a ridiculously high level of falsifiability, we would specify that all self-paying students care more about their grades than all family-supported ones, in which case one counterexample would knock out our conjecture. More likely, we would be looking for statistical patterns, not complete determination, and our statement would sound something like this: Self-paying students check their grades more often, or more of them check their grades frequently, than family-supported ones. We would collect our information and be able to decide if our conjecture was supported and if so, strongly or significantly enough that we feel comfortable generalizing it beyond our sample of students and institutions.

A word of caution about falsifiability: understanding when a single counterexample challenges a hypothesis (or a theory) requires thinking about probabilistic models of behaviour. As long as the proportions of self-paying students who care about grades are significantly higher than the proportions of family-supported students, we can conclude that grades are more important to former, while recognizing that there is variability among the students—a few don't care at all and some care only slightly. Most findings in the social sciences are not fully generalizable, as we discussed above, and a finding may be of value even if there are a few cases in which it does not hold up. It is very rare in the social sciences to find a situation where a single, individual case is sufficient to dismiss a hypothesis that holds for a large number of cases. Usually instead of immediately throwing out the hypothesis because of a single counterexample, we would try to understand the reasons why it did not work in that instance. In qualitative research, we would use descriptions of behaviour and situations, rather than probability sampling and tests of statistical significance, to convince our readers of the plausibility and generalizability of our findings.

A weak theory exhibits nonfalsifiability. Nonfalsifiability is inherent in hypotheses that include beings whose existence is a matter of faith, not empirical evidence: "Space aliens cause crime" or "in accidents, guardian angels save our lives." Weakness often stems from poorly developed definitions, too much subjectivity which makes the "theory" just a restatement of opinions, and **tautologies** in which definitions and procedures for collecting information are confounded. A simple example will illustrate the point. My hypothesis is that people sing along to

songs that exhibit energy. I then measure "energy" according to a scale of how likely people are to sing along to a song. Lo and behold, when I define a song as "high energy" I see and hear people singing along to it. This is *tautological*. My definition and measure of my target term, the cause, and the effect are one and the same! The theory's cause refers back to its effect, and vice versa, so it's very weak. Counterfactual historical statements are nonfalsifiable because we cannot produce data concerning their premise: "If the French had won the French and Indian War, the American Revolution would not have taken place." We can, however, muster empirical evidence for the falsifiable hypothesis that the French defeat in the war was one of the causes of the American Revolution.

REPRODUCIBILITY *Reproducibility means that the research project could be repeated by another person and would produce very similar results. A research project should not be so particular and idiosyncratic that no other person could ever come along and replicate it.* This is a critical criterion in the use of the scientific method to assess a study's rigor. Every researcher concerned with generating accurate representations of actuality should do her work in such a way that others can read it, understand it, and then try to replicate the study. In other words, as a researcher you must work very hard to leave behind a methodological "footprint." If the project depends entirely on your unique personality or your personal interpretations of what you saw, then it may be the basis for an interesting story, but it is not research.

Throughout the research process, you will want to keep detailed notes and memoranda to yourself regarding decisions you make, new insights that occur to you, adjustments you make to the research program, and all of the preconceived notions you hold concerning the subject matter and/or hypotheses. Keeping detailed notes, memoranda, and a research log will go a long way toward maximizing the replicability—and therefore the scientific rigour—of your project. Just imagine that you're a criminal, and you're not only plotting a complex crime (such as a bank heist), but you're also leaving a detailed plan so that the detectives and the world at large can understand exactly why and how you pulled off the job.

One of the most important aspects of this process is **reflexivity**—thinking about what you are doing. From the get-go, you need to get on paper all of the reasons why you have chosen this particular topic. In addition, you should work very hard to specify the presuppositions, prejudices, and biases you have. Some of these might be positive/favourable, while others will be negative and might even be rooted in racism, sexism, or some other systematized pejorative belief system directed to a group, culture, or population. Being clear about the emotional responses you have during the research process will also help others to understand the choices you made. Finally, getting all of this internal matter onto paper will allow you to improve your project through becoming more clearheaded, more analytical, more precise, and more careful.

Reflexivity means always asking yourself the question, "How could someone else come along and do this research project?" Qualitative projects often revolve around the idiosyncratic dimensions of the researcher himself. You use these dimensions of personality, of self, to gain access and to create data through interaction with subjects. Try to recognize and record how you go about "trading on" these features of your identity to carry out your research project. Many identity features just are ... they can't be changed. The "fact" of being white/Caucasian among African American gang members, for instance, cannot be changed. But whiteness can be used, tapped, exploited in such a way as to enhance the researcher's ability to gather valid and reliable data. To use this very simple example, being different (white, female, non-drug using, whatever) can be advantageous if the researcher learns how to assist research subjects in defining this difference as a good thing and/or as a reason for, *not against*, getting involved in the researcher's

project. Your roles, identities, and unique personality traits do not make the research worthless, but they require you to be alert and aware about how you are deploying them in the research.

The bottom line is that you need to record in detail all the ways that you, as a living and breathing human researcher, affect the scene you're researching. And you need to be just as diligent in recording how the scene affects you because there's little doubt that the project's effects on you will change your behaviour down the line, which will change further the scene you're researching, and so on.

FRAMING RESEARCH QUESTIONS

Now that we've discussed the principles of the scientific method, it's time to take up the issue of how to ask a question that will produce a research project that meets these criteria. Asking the question requires that you know the language—the vocabulary—that gives shape and meaning to the **logic of scientific inquiry**. Research in the social sciences, and specifically qualitative research, has its own **vernacular**, or specialized language belonging to a specific group of people—in this case, qualitative researchers. Let's explore how they use language to assign meaning to their ideas and activities.

Learning the Language: Qualitative Research Vernacular

LOST IN TRANSLATION—UNDERLYING AGREEMENT BETWEEN QUALITATIVE AND QUANTITATIVE RESEARCHERS Before going to spend a long period in a foreign country, you likely would try to learn the language in order to survive and thrive. In the land of social science research, you'll encounter two "nations"—the qualitative and the quantitative—whose long-storied antagonism has gradually eroded as residents of each nation begin to realize that they have a lot more in common than they thought and that they are talking the same language, albeit different dialects.

The vernaculars of qualitative and quantitative researchers arguably share more similarities than differences. As stated earlier in this book, quantitative researchers most typically work with a large number of **cases** and a relatively small number of **variables**. The qualitative approach, on the other hand, generally entails the analysis of a small number of cases and a very large number of variables. This is the main distinction between these two main "camps" of social science inquiry.

In a study of poverty, for instance, quantitative researchers might consider the level of poverty among 100,000 urban dwellers across the United States and attempt to discern the factors associated with variance in household income. These factors may include level of education, age, household size, and race/ethnicity. A qualitative researcher, on the other hand, would be more likely to choose a smaller group (or a few smaller groups) of city dwellers, and to spend a significant amount of time observing and interviewing them about their individual and collective experiences of poverty. Variation in the subjective experience and/or the objective poverty-related behaviors would still be the "thing" to explain, but the researcher would take a different approach to building an explanation.

Quantitative researchers focus primarily on the question of "what variables" are related to each other, while qualitative researchers ask questions such as, "How did these factors come to be associated?" and/or "How did these factors become factors in the first place" and/or "What kinds of meaning do people attach to these factors?" As we stated above, qualitative researchers often look for patterns in *processes* within *contexts*, rather than at variables that predict patterns in

individual behavior. For example, researchers might study one school to answer the question "How do young people decide to drop out of high school?" rather than the question, "What are demographic and household characteristics that predict which individuals are likely to leave school?"—a question more typical of quantitative research. A gross simplification might sum up the main difference between these perspectives: Quantitative researchers ask questions that begin with "what?" Qualitative researchers ask questions that begin with "how?" Nevertheless, one could argue that regardless of which camp a researcher calls home, the process of formulating the question and seeking answers to it is nearly identical across camps.

So let's look more closely at **qualitative research vernacular.** We will be defining key terms in the language of qualitative researchers and, where relevant or necessary, we contrast the meaning of a term with the meaning assigned to it in the quantitative camp.

FORMULATING A RESEARCH QUESTION AND ITS ASSOCIATED HYPOTHESES—DOS AND DON'TS Every research project begins with an interest, a hunch, an idea, a tickle of a question. Oftentimes these preliminary, suggestive questions seem to come out of nowhere—driving to work, exercising, walking down the street ... Eventually, however, the tickle of an idea becomes a formally stated *research question* (RQ). The RQ isn't just any old question; rather, it's a question that stimulates and requires an answer that comes about through structured scientific inquiry. It leads into hypotheses, though in qualitative research these are not always stated explicitly.

RQs must be specific and falsifiable. A good RQ is one that suggests hypotheses that can either be supported or refuted through the collection of information—that is, **empirical data.** We have already discussed several types of nonfalsifiable hypotheses to avoid. The hypotheses that flow from the research question should lend themselves to looking at empirical evidence, or "facts" in a broad and loose sense.

RQs focus on behavioral outcomes —actions that can be observed directly or, in some cases, indirectly. Activities and ideas are both behavioral in the sense that actions can be viewed and ideas can be expressed through speech, which is a behavior ("speech act"). Some theorists prefer words such as "action," "practices," and "discourses" rather than the language of *behaviors*.

RQs stay away from the values, beliefs, and tastes of the researchers themselves. You would not, for instance, ask the question, "Is it better to live in poverty and be happy than to be wealthy and miserable?" Aside from being nonspecific, the question smacks of personal taste and your own individual judgment. The next researcher down the line would have a very difficult time trying to support or refute the research you conduct around this question. Instead, you might ask the question, "How do people living under the poverty line define 'happiness'?" This is a more specific RQ, lends itself to inquiry, and could be replicated by future researchers.

DEFINING YOUR UNIT OF ANALYSIS The next element of research, or vocabulary word, to explore is the **unit of analysis** (UOA), the type of case that you are studying. When you set out to conduct research, you must get your data, or information, from somewhere, and in qualitative research it often—but not always—comes from people you observe and/or interview. The **individual** is a very common level of UOA.

Groups of people are also common UAOs, however. These groupings could include gangs, formal organizations, informal friendship groups, and even communities. One might be interested in how so-called "street gangs" operate in relation to the supply/sale of illicit substances, for instance. Here, the RQ takes you in the direction of examining group-level phenomena, such as social network composition, level of cohesion, nature of inter-member communication, and the group's position in the "marketplace" of heroin, cocaine, and/or marijuana. You are really interested

in gangs—that's your UOA—but a lot of your information will be based on observing and interviewing individuals. In qualitative analysis, these two levels are often not as distinct as they are in quantitative studies.

A special type of grouping that is a very popular UOA is the **organization**, an entity that operates at the *meso*level of society. Many sociologists (and researchers in fields such as management and public administration) would like to know more about the culture and functioning of organizations, characteristics of the whole group, not just a sum total of individual characteristics. Many scholars define the organization as a set of planned, coordinated, and purposeful actions in which people engage as they attempt to produce something (whether tangible, such as tennis shoes, or intangible, such as advice on marketing tennis shoes to the public). Social scientists often add to the definition the notions of "permanence," formality/legality, clear boundaries, and rules. The many actions required to make tennis shoes, for example, share a common frame—workers share formal membership (they're on the payroll and organizational chart) and they must subject themselves to a common set of formal rules or else risk losing their jobs.

Finally, **places** can be UOAs too. In quantitative research, we often are studying cities, states, or countries. For example, we might be comparing crime rates in different cities and try to explain the variation. In qualitative research, a whole community might be the UOA, for example, a small town, a suburb, or a city neighborhood. Ethnographers sometimes try to study all the people in a defined space or territory.

When places are our UOAs we have to be careful not to commit the **ecological fallacy**, a false generalization from rates based on one category of individuals in a place to other individuals who share the space. For example, states with a high proportion of residents who are newcomers have higher suicide rates than other states, but we cannot conclude (without further data) that the individuals who are committing suicide are the newcomers.

One of the most important things you can do as a researcher striving to craft a solid, convincing representation of the social life you're studying is to clearly define your UOA. This entails recognizing **limits** of your UOA and knowing how far your UOA can take you in terms of understanding the realm of social life you're investigating. You need to be careful in switching back and forth from observations based on individuals to conclusions about groups and places.

AVOIDING REDUCTIONISM Reductionism means posing a research question in a way that points to a single cause, especially one that is less complex and interactive than causes usually are in human societies. This cause often, but not always, corresponds to psychological traits of group members. For example, a researcher might "reduce" complex phenomena, such as street gang life, to a single, psychologically inflected cause by hypothesizing that street gangs help individuals solve the problem associated with low self-esteem. This researcher then sets out to conduct psychological surveys (aka scales or measures) that assess level of self-esteem within individuals. Finding that the majority of street gang members possess low self-esteem, the researcher erroneously concludes that low self-esteem among individuals causes street gangs to form. Here the researcher has committed an act of *reductionism*, reducing complex phenomena (street gang formation and perpetuation) to a single cause (low self-esteem) and, moreover, has done so on the basis of individual-level data. This is *psychological reductionism*.

Economic reductionism occurs when the researcher concludes that a complex social phenomenon can be explained solely in economic terms. For instance, think about your own closest friends and the resources each has available—access to a car, private space for parties, tickets to concerts, a swimming pool, alcohol or drugs, and so on. If we were to conclude that the only reason the group formed and stuck together was access to each other's resources, without

regard for people's feelings and shared interests, we would be engaged in "economic reductionism." We have "reduced" the complexity of group cohesion to a very simple material formula that doesn't capture all of reality.

VARIABLES Research questions are often formulated as efforts to relate two or more variables to each other, explaining the distribution of one variable by examining the distribution of other variables. For example, in the gang research literature, we read that gangs form in neighborhoods that are disorganized; that is, the hypothesis is that the variable of gang presence is related to the variable of community disorganization.

Many students of the social sciences argue that quantitative and qualitative research differ mainly because the former deals with variables, while the latter deals with something other than variables, such as "situations," "context," or some other vague notion. This isn't accurate. Both methodological schools deal with variables. Quantitative researchers, however, make their **variable-oriented** (Ragin 1994) approach more explicit, while qualitative researchers often discuss or specify their variables in more subtle ways, by embedding them in the "thick description" (Geertz 1973) of a particular scene. In qualitative research, the variables are complex and contextualized.

Let's look at few examples of "embedded variables" from qualitative research in the sociology of education and socialization. In a number of studies, the "outcome variable" is the way youngsters are prepared for occupations and locations in the structure of social classes. Le Wita (1994) relates the continuing power of the French bourgeoisie to their methods of raising their children in the institutional settings of families and schools that encourage self-discipline and a sense of entitlement. Cookson and Persell (1985) document how prep schools teach youngsters to exercise power (the outcome variable) through their demanding curriculum, the high expectations of teachers, separation from the family, bonding with peers headed for the same elite status, and an experience of loneliness and individuation in boarding school. Anyon (1980) uses a descriptive comparison of four types of schools to show that the class origins of students are related to their teachers' behaviors and classroom interaction, and that this cluster of "independent variables" in turn produces habits of mind (the "dependent variable") appropriate for the children's probable occupations and class destinies. In all these cases, the central variable relationship is conveyed by a large amount of description that serves as evidence for the linkages. When you strip down any given piece of qualitative research, you will find many variables, many of which will be hidden in detailed accounts of events, relationships, and places.

A **variable** is a characteristic or trait of a UOA. By definition the trait must vary, either over time or between units. For example, in the study of an organizational UOA, the tattoo shop, one variable or trait that varies in a study of 30 such shops is *age* or "how long the shop has been in operation." Notice that the variable applies to the UOA, the shop, and not to individual artists or customers. And the variable of *age* is quantitative or numeric—it corresponds to a number. Don't make the all-too-common mistake of assuming that numbers aren't important in qualitative research because they are, or can be, very important.

Keeping the tattoo shop as our UOA, we might specify that they also differ in the *kind* or *aesthetic* in which their artists specialize. This is a qualitative, or non-numeric, variable, one best captured by text, perhaps accompanied by pictures. A given shop might specialize in "traditional" tattoos, the kind most popular among members of the armed services in the 1940s. Another shop might specialize in "tribal" art—artists in these shops tend to work with designs rooted in, say, indigenous Polynesian figures. Our research question might be, "What accounts for the type/kind of specialization among and between tattoo parlors?" In this case, we would specify various

hypotheses, or educated guesses, regarding the **variables** or traits that we think will likely influence our **outcome variable**, the formation of a specialty within a shop.

The variable that we're trying to explain, the main outcome that interests us, in this study of specialization among tattoo parlors is their type of specialization. Qualitative in nature, "type of specialization" is our primary "outcome" of interest. It's known as a **dependent variable** because type of specialization "depends on" the particular configuration and/or confluence of other variables. For example, "type of apprenticeships the artists completed" might be one of the variables that explain the specialization a given parlor develops over time. In addition, we might hypothesize that the geographic location of a shop makes a difference because we believe that parlors in more affluent areas are more likely to deal in tribal art, whereas shops in more economically distressed locales specialize in "traditional" ink. In any event, the type of specialization is our dependent variable, and the independent variables are those traits or characteristics whose variation, or difference from each other, helps explain the differences among types of specialization.

So we know that variables vary across cases, or units, and that the trait can be expressed either with a number or with a description. And we know that our research project should have a single variable that interests us the most—the outcome, or dependent, variable. Our hypotheses, or educated guesses, lead us to specify the different variables that we think explain why the outcome variable varies, or differs, from one unit/case to another. When we look at variables, we can see quite easily how we could conclude that some variables "cause" other variables to happen. This is where things get tricky. In the social sciences, most scholars shy away from making claims about "causation." When we observe patterns in our data, across UOAs, that lead us to believe that certain variables have a relationship with our dependent variable, we must be careful to recognize the distinction between "correlation" and "causation." However careful we know we should be, we still end up making or implying causal relationships.

HYPOTHESIS Hypotheses are statements linking variables. They offer tentative or provisional answers to the research questions—answers that are going to be subjected to *falsifiability* and the test of evidence. In the preceding paragraph, we loosely defined a **hypothesis** as "an educated guess." This is pretty much correct, but it's time to flesh it out a bit. At the beginning of this chapter, we emphasized the centrality redundant of the research question. The RQ is the driving force behind everything else that happens, every choice that's made, in the research process. The hypotheses are indeed educated guesses—they offer potential answers to the research question. And our research project is geared around testing the effectiveness and the viability of these answers. Hypotheses derive from our belief that certain kinds of relationships between certain variables will explain the outcome that interests us, will give us the answer (or part of an answer) to the RQ itself.

The hypothesis is therefore a formal statement that indicates a **relationship among variables**, and this relationship (we believe) explains some part of the variance in our dependent variable.

DOUBTS AND CONCERNS: ARE WE BEING TOO SCIENTIFIC?

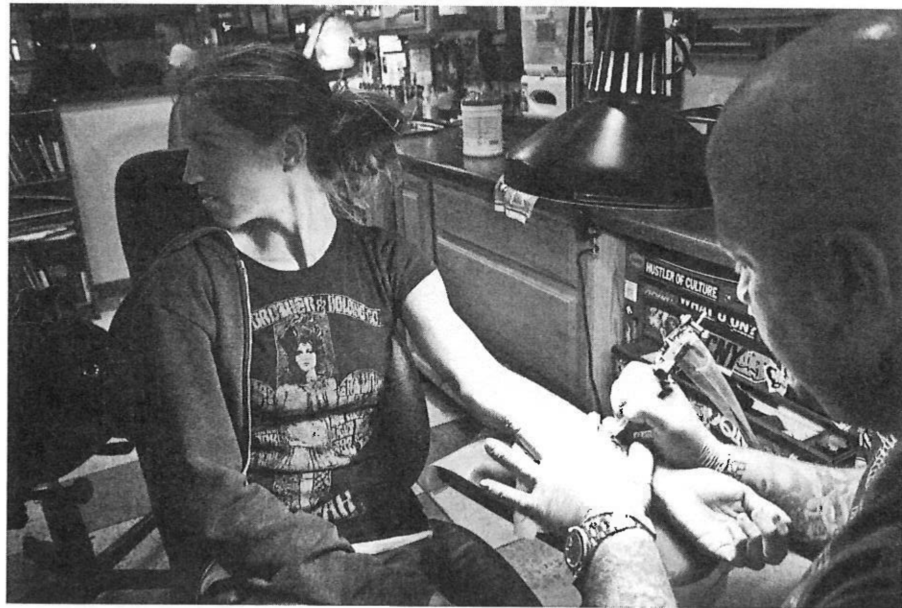
At this point, we can hear two cries of alarm from colleagues. The first objection is that the process that we have described for formulating research questions is too close to the scientific method; some individuals engaged in social inquiry do not use these rules and in fact explicitly reject them. These scholars use the word "positivist" as a pejorative term to label inquiry that

follows the canons of the natural sciences, which they believe are inappropriate to use in inquiry into the human condition. These scholars see themselves as much closer to the humanities—literature and philosophy, for example—than to the natural sciences. Other researchers accept the rules of the scientific method but believe they have to be substantially modified to work in the study of the social world.

We will return to this issue when we discuss writing a qualitative research narrative, and we will see that some scholars engaged in social inquiry refuse to write research reports guided by the scientific method; they do indeed see themselves as engaged in social inquiry but reject what appear to them to be the trappings of natural science research. The second and closely related objection is that we have blurred the lines between quantitative and qualitative research. Later in this book, we devote a chapter to the use of multiple methods in a single study. So if you were somewhat troubled by our discussion of the scientific method we are asking you to be patient—we will return to the issue.

CHOOSING RESEARCH ACTIVITIES

Now that we have covered the basic terms of qualitative research, the question becomes, "What do qualitative researchers actually do?" Well, in the process of examining the vernacular of qualitative research, we have ventured into some of the most important activities in which any researcher of any stripe must engage: defining the research question, specifying hypotheses, and establishing the independent and dependent variables. Ideally, every move a researcher makes in some way relates to the research question. Some research questions are best answered through the gathering and analysis of numeric data, while others would be best served with qualitative data. Remember the distinction between questions of "what?" and questions of "how?" In the qualitative realm, most questions relate to *how*? Our tattoo parlor example illustrates this quite well: How do tattoo artists distinguish themselves from their walking, talking canvases—their customers?



A tattoo artist working on his "canvas" (Photo by Greg Scott)

Once you have determined that qualitative (i.e., mostly non-numeric) data would provide you with the means for best answering your research question, you must figure out how you will create the data. Yes, create. By "create" we do not mean "make it up" or "falsify" or "invent." All data, quantitative and qualitative, emerge out of a relationship between a researcher who asks questions or makes observations and a human subject who knowingly or unwittingly provides the data through speech and/or behavior. Even dead people provide data. Their act of dying places them in a pool of potential research subjects for studies that examine causes of death (e.g., heroin overdose or heat wave). Even after they discontinued life on earth, they can live on as subjects in very important studies that have the potential to prevent premature death in the future. Dead people who produced texts that shed light on social history also can be research subjects; their texts are the principle means by which we can understand the past. Okay, so back to the question of how you get the data, you need to test the hypotheses whose viability or nonviability will allow you in turn to offer an answer to your research question.

Qualitative researchers get their data from their UOAs in a wide variety of ways. Some choose to conduct in-depth interviews with a manageable number of people; others opt to spend a great deal of time observing people and speaking to them more informally (while going to great lengths to record in writing what they say); and still others decide that they will "move in" to a particular setting, group, or culture, and stay there long enough to develop an "insider's view" on life there. In Part II, we will look at all of these activities for collecting data and, ultimately, crafting a representation of social life.

WHERE DO RESEARCH QUESTIONS COME FROM?

Research questions are the guiding device for all research projects—but where do they come from? At this point, you may be wondering how you can produce one for a project you would like to carry out—you have a general idea of the group, place, or situation you would like to study but you are not sure you can formulate a research question. There are four general sources of research questions:

- Research questions can come from you. They can arise from the *life experiences, values, and basic human curiosity* of the researcher. You should be at least somewhat passionate about your research study, as it's this passion that carries the researcher through all the tedious and frustrating moments of research. It may also provide the energy to design research that addresses social problems or seeks to change the world, rather than merely interpret it. Many older textbooks, particularly in the quantitative tradition, argue that researchers should adopt a "dispassionate" and/or "value-free" approach to their subjects. This is folly. Not only is it impossible to rid oneself entirely of his or her personal values and interest in the world but doing so would also spell the demise of one's research endeavors. Indeed, the quality of qualitative research studies hinges in part on the degree to which the researcher invests her work with passion and enthusiasm. It's the statement of the hypotheses that needs to be value-free, not the project as a whole.
- Research questions can grow out of *theory,* and we will argue later in the book that theoretically driven research questions add depth and longevity to a research project.
- Research questions can emerge from *previous research and systematic observation* carried out by the researcher.
- Research questions can be formulated on the basis of *a review of the literature*, an analytic overview of other social scientists' findings and conclusions on this topic.

All four of these sources are important in research, and they're not mutually exclusive. In most cases, a project's research question comes from a combination of these "ideal type" sources. But they are treated differently in formal social scientific writing. Scholars frequently "cover up" their debt to their own life experiences. The canons of scientific writing typically discourage any personal reflection or at most allow it limited and fleeting mention. The other three sources are viewed as "more acceptable" by the stewards of the scientific method.

In a later chapter we discuss the use of theory, as studies differ widely in the extent to which they address theoretical issues. The researchers present prior findings (both their own and those of others) in a section of the research report called the **literature review**. The review of the literature is considered to be an excellent way of reconstructing how the researchers arrived at their research question. The review of the literature is usually placed at the beginning of a final research report, and the entire research report is framed as if the research questions emerged from the review of the literature (Pan 2008). In Chapter 23, we provide suggestions for how to organize the "lit review."

Right now you are probably thinking two thoughts—that's a lot of abstract vocabulary to learn! And that's a lot of rules to follow! To address both of these objections, we will walk you through two research projects (Boxes 3.1 and 3.2) to show you how qualitative researchers actually use the scientific method, and we will provide a few down-to-earth tips for going through the process of formulating research questions.

BOX 3.1
Studying a Tattoo Parlor: Using the Scientific Method

To explore some examples of research questions, variables, and hypotheses in qualitative research, let's look at a project based in a tattoo parlor. Two graduate students at DePaul University in Chicago, Illinois (USA), began working on a research project centered on a single tattoo parlor in the city. They chose the site out of convenience (close to campus) and because it's arguably one of the most famous and popular parlors in the city. Choosing research locations is a question we take up in a different chapter, but suffice it to say that some of the best, most often cited research endeavors began with a scholar selecting a research site out of convenience (close to home, campus, a vacation getaway, etc.). Based on their interest in tattoo parlors (and tattooing in general) and the convenient location and strong reputation of a particular shop, Sarah Schar and Maize Jacobs-Brichford set out to conduct an ethnographic study of "getting inked."

Ethnography is one kind of qualitative research. Later in this book, we will explore this methodological branch in more detail and examine other research designs (or strategies, or logics of inquiry) such as historical-comparative analysis and social autopsies. For now, let's just say that ethnography involves deeply immersing oneself in a particular culture or setting, the goal being to understand the organization of culture from the inside out. In this case, Sarah and Maize spent a lot of time "hanging out with a purpose" in the tattoo parlor. Over time, they developed an interest in how tattoo artists differentiate themselves and their fellow artists from the clientele they serve. Using the terms we've covered so far, the outcome/dependent variable of interest here is the ways or methods that artists use to create "social distance" between themselves and their customers. The central hypothesis, or educated guess that explains the different ways artists accomplish this task, is that artists engage in "speech acts" that maintain a hierarchy of status wherein the artists are elevated above the customers, who serve as living, breathing canvases for their work.

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In qualitative research, the central hypothesis is likely to be accompanied by at least one (and usually more than one) **buffer hypothesis**. This hypothesis essentially qualifies the central hypothesis, places conditions on it, and establishes the limits of the central hypothesis. In the tattoo parlor study, several buffer hypotheses emerged. The meaning of the term "buffer hypothesis" should become clearer as we explore them. First, tattoo artists tend to employ a nonartist "gatekeeper," someone who works at the shop's counter and is responsible for dealing directly with paying customers. This person's conversations with customers typically entail information exchange—pricing, artist availability, and other logistical matters. This is the "grunt work" that tattoo artists define as a "necessary evil" of doing art on live human beings. Only after a given customer has made her way through the gatekeeper (i.e., she has passed the seriousness-screening process) does she get to interact with an actual artist. Employing a gatekeeper to deal with the mundane aspects of this artistic enterprise reduces the overall number of speech acts that occur between artist and customer. So this is one hypothesized method that enables the creation and maintenance of social distance between artist and customer—the live canvas.

The second hypothesis is about the nature/content of the speech acts themselves. Once customers make their way past the gatekeeper and enter the realm of artists, who conventionally work in a shared space separated by a wall, gate, or counter from the customer waiting area, they become part of a series of speech acts. In this artist-centered realm, however, the speech acts tend to be exclusionary. That is, they exclude or at least render improbable and/or unwelcome, the customer's participation. In short, artists talk to each other in a way that discourages customers from joining the conversation. Artists use "inside jokes" and humorous stories as they orient their speech to other artists, not to customers. They also talk about professional development and the more rarefied aesthetics of "doing ink." This hypothesis posits that the nature of speech acts in tattoo parlors relegates the customer to little more than a

Tattoo parlor—Customers, artists, and the gate between them

"paying canvas" and the artist to an elevated position of authority.

A third buffer hypothesis is about the ways that artists increase cohesion among each other—how they solidify their "in-group" status often at the expense of customers. Here we predict (and Sarah and Maize find) that when artists find themselves alone together in the shop, without customers around, their speech acts revolve around lampooning customers who've come and gone. The speech itself may be playful, and the artists may not intend any malice, but it nevertheless serves to elevate artists above customers. In this sense, the artists are "doing difference" even when their contrapuntal foils are not present.

In this research study, Sarah and Maize conceptualized their UOAs not as individuals or networks or groups or even the shop as an organization. Rather, their UOA is the "speech act." Their dependent variable is how artists differentiate themselves from customers, and vice versa, through the social organization of speech acts in the tattoo parlor. Their independent variables include control of total volume of speech acts (gatekeeper), exclusionary language employed by artists, and in-group cohesion building (use of ridicule behind customers' backs). Hopefully, this example makes clear some of the vocabulary terms covered so far, and sheds new light on how one might go about conducting a qualitative study focused on "interaction events" as UOAs.

Remember that hypotheses should be "value free" even if your own values motivate your choice of a topic. They should *not* be statements concerning what you, as the researcher, think or believe the state of affairs "ought to" or "should" be. For instance, going back to Sarah's and Maize's project on the tattoo parlor, it would be unproductive to state the following hypothesis: "It is only right (i.e., morally correct) that tattoo artists define and see themselves as being equal in all ways to their customers." It's ok to believe this and feel that it is morally right, but it has no place in a list of hypotheses. It's a value statement that reflects how you would like the world to operate, ideally. And remember that each hypothesis needs to be specific. "Tattoo artists and customers behave in different ways" is a very vague and therefore very weak hypothesis.

BOX 3.2

Qualitative Research Principles in Action: Paul Willis, *Learning to Labor: How Working Class Kids Get Working Class Jobs*

Paul Willis selected the topic of how young English working-class men fail in school. The "how" question was in many respects also a "why" question—why do they fail? Willis studied "the lads"—male, working-class youth in one particular school in England. This topic was related to larger social issues of concern about the drop-out rate, preparation for an increasingly complex global economy, and the limited economic opportunities that working-class kids have when they do poorly in school or fail to complete secondary school. But beyond the concrete social problems that the study addressed, there loomed a larger question about how people in positions of class disadvantage in modern societies understand their own situation.

His research questions were the following: How is the outcome of low academic achievement produced through interaction within the context of the school? Why do some youth but not others engage in rebellious behavior? How do the lads perceive and understand their own rebellion and disengagement from school?

His answers to these three questions were that the "lads'" rebellion and their boisterous, disrespectful behavior led them into rejection of schooling and to school failure. The lads who were most involved in rebellious behaviors were the ones most strongly socialized to a working class "us versus them" view that their fathers had brought home from their experiences in factories—"the

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shop floor." Although the lads saw class inequality clearly and indeed rebelled against it, their rebellion led to their own relegation to working-class jobs and—even more poignantly—to a rejection of "mental labor," of habits of mind and body associated with formal education and ultimately with intellectual activity of all kinds.

Willis chose qualitative methods, interviews and the observation of behaviors and interactions among young people and between them and teachers in one school in England with predominantly working-class students. He focused his observations of behaviors and his interviews on white working–class males because they seemed to be the most overtly rebellious and hostile to the school environment. This research design was his choice and he could have pursued an alternative strategy, such as looking at data based on all secondary schools in England and identifying variables correlated with noncompletion of a diploma or with low grades. The quantitative strategy would have answered a related but differently worded set of research questions than the strategy of observing and interviewing in a single school. His qualitative strategy enabled him to understand the "how" of school failure, to track interactions, behaviors, and processes that led to low achievement, disciplinary problems, and dropping out. It also gave him a close-up understanding of how the young men viewed school, their futures, and their own behaviors, and especially how they talked and gave meaning to their own actions.

The results are strongly generalizable. Willis implies that his observations in one school can be generalized to the condition of low-achieving working-class kids throughout Britain, and perhaps to any modern, economically developed capitalist country.

Willis anchored his work in Marxist theory. He analyzed the actions and choices of working-class white males ("the lads") in terms of their perceptions of class relationships and power and showed how they were able to arrive at "partial penetrations" of the capitalist system—they understood it in terms of exploitive and unequal class relationships—but they were not able to see that their rejection of mental labor limited their individual opportunities for social mobility and also kept them *as a class* from developing a larger and more analytical understanding of capitalist society. A dogmatic Marxist might insist on the nonfalsifiable premise that the working class is always ready for revolutionary action, but Willis had to come to the conclusion that the lads' rejection of mental labor left them ill-prepared for political leadership. He recognized that the young men in his study were not class-conscious revolutionaries, but rebellious lads who had a limited comprehension of their situation and held attitudes that narrowed their educational, occupational, and above all, political horizons.

This example shows us how research questions involve making choices—Willis could have asked his question in a way that would have led to different kinds of research strategies and activities, different types of data, and different ways of conceptualizing the process of school rebellion and failure. He chose to use Marxism as the foundational theory of his research. His report convinces us that the process he observed in one school could be generalized to many other schools and probably most economically developed capitalist countries.

Was his underlying hypothesis falsifiable? Yes, because his research questions, hypotheses, and methods of observing and interviewing left open the possibility of finding evidence against his main hypothesis of self-relegation to school failure. For example, he could have discovered that the young men were pushed out of school by administrators who did not like the presence of low-achieving youngsters or that they had to drop out of school to support their families.

TIPS FOR FORMULATING A RESEARCH QUESTION

- Select a topic that interests you.
- Read what others have written about this topic. Look at how they formulated their questions, how they carried out their study, and what they found.
- Ask yourself a number of related smaller or more manageable questions that revolve around a central theme or topic. Eventually you can pull them together into a single

broader question or develop them as buffer hypotheses. Often these questions are about variation in social arrangements or behaviors and ask us to think about possible reasons, explanations, or even causes for this variation.

- Frame the questions in a way that can be answered by empirical research and the available research methods. If your research is primarily qualitative, lean toward "how" questions and away from "what predicts—" or "how many?" Qualitative research often focuses on processes within contexts, interactions, and the meanings that people assign to their situation.
- Be clear about your choice of units of analysis. Do you want to reach conclusions about individuals or about groups, organizations, or places—or both levels at the same time?
- Think in terms of variables and explanations, even if these variables are complex and contextualized.
- Experiment with stating your ideas both as questions and as hypotheses.
- Avoid reductionism and thinking only about simplistic, one-cause explanations.
- Don't let a concern with falsifiability overwhelm you, but do keep in mind that your conclusions must be evidence-based and face up to skepticism and challenge and that your evidence will need to match and support your conclusions.
- Consider the bodies of theory to which the questions can be linked to give your research deeper and more lasting value. A base in theory will tie your findings to the work of other sociologists and contribute to a bigger picture that develops our "sociological imagination."

CONCLUSION

In this chapter, we have discussed the basic principles of qualitative research in relation to a modified scientific method paradigm. We also have examined the language, or vernacular, of the qualitative research tradition. Finally, this chapter has brought us to the point where we can draw upon a common language to formulate a strong research question. In the next couple of chapters, we explore the actual doing of research. Get ready to go out and get your hands dirty in the messy world we call "reality."

Exercises

1. Return to the five topics that you listed for the exercise in Chapter 1. For each one, state at least one research question that you would like to answer. What would you like to explain? Can you reformulate the research question in terms of specific, testable hypotheses? Why or why not? Do your questions lead to research that meets the criteria of objectivity, generalizability, validity, replicability, and falsifiability? Can you identify a main hypothesis and buffer hypotheses for each of your topics? What are the units of analysis for each topic? What research activities would you carry out to answer your research question/test your hypotheses?
2. Begin to sketch the research question (or principle hypothesis) for a topic corresponding to each one of the designs described in Chapter 1. We will return to this exercise later in more detail in the chapters in Part II.
3. Observe a trial (or watch a criminal justice or law enforcement television show such as *Law and Order: SVU*, keeping in mind it is not reality). Based on what you've learned so far in this book, compare and contrast the legal procedures you see in the courtroom (or illustrated in the program) and the "truth-finding" process of qualitative research. Use as many of the key terms from this chapter as you possibly can.

Key Terms

avoiding ecological fallacies *40*
avoiding reductionism *40*
avoiding tautologies *36*
believability *34*
buffer hypothesis *46*
cases *31*
dependent variable *42*
empirical data *39*
falsifiability *34*
falsifiable *31*
generalizability *34*
generalizable *31*
generic processes *35*
groups *39*
historical context *33*
hypothesis *42*
individual *39*
limits *40*
literature review *45*
logic of scientific inquiry *38*
objective *31*
objectivity *34*
organization *40*
outcome variable *42*
places *40*
plausibility *33*
plausible *35*
reflexivity *37*
relationship among variables *42*
relevance *35*
replicability (or reproducibility) *34*
representation of social life *32*
reproducible *31*
research question *31*
research reports *32*
rules of evidence *33*
rules of sociological representation *33*
scientific method *32*
science vernacular *31*
self-reflexive and symbol-using beings *33*
unit of analysis *39*
variable-oriented *41*
variables *38*
vernacular *38*
"vernacular" of qualitative research *39*
way of knowing *32*