



Now that you know what type of data you want, the next step is easy. You have to pick the right method to collect the data. Not all data collection methods are suitable for all data types. Some work best with one kind; others work best with another.

Table 4.1 summarizes the main possibilities. Here's how to read it:

- The 14 types of data covered in Step 3 are listed across the top, and 12 common data collection methods are listed down the left side.
- Find the type of data you need along the top of the table. Then read down the column until you encounter an X or (X). Follow the row to the left, and you'll find a method you can use to collect the data you need.
- The X means that the method is always able to collect this type of data. The (X) means that it can work in some situations, usually as a by-product of collecting data of another type.

In this chapter, we'll explore several of the common data types to see what data collection methods work best with them. You'll see how these methods work with a few sample research questions, including some of those encountered in Step 1.

# STEP 4

## Data Collection Method

TABLE 4.1 How to Pick a Data Collection Method

First, find the type of data you are looking for at the top. Then read down the column underneath the data type. Where you encounter an X, look to the left and note the suggested method. An X in parentheses means that the method can collect this kind of data, though it usually does so as a by-product of collecting one of the other types.

		Types of Data														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	
		Acts, behavior, or events	Reports of acts, behavior, or events	Economic data	Organizational data	Demographic data	Self-identity	Opinions and attitudes (shallow)	Opinions and attitudes (deeply held)	Personal feelings	Cultural knowledge (things everyone knows)	Expert knowledge	Personal and psychological traits	Experience as it presents itself to consciousness	Hidden social patterns	
Data Collection Methods	A	Public and private records	X	X	X	X						(X)				
	B	Detached observation	X													X
	C	Ethnography (participant observation)	X	(X)		(X)			(X)	(X)		X	(X)			X
	D	In-depth interviews		X		(X)		X	(X)	X	X	X	X	(X)		(X)
	E	Surveys/questionnaires		X	(X)	(X)	X	X	X			X	(X)			
	F	Phenomenological interviews								(X)					X	
	G	Critical incident interviews		X					(X)	(X)		(X)	X			
	H	Focus groups							(X)			X	X			
	I	Psychological scales and their kin												X		
	J	Content analysis										X		(X)		X
	K	Discourse (or narrative) analysis										X				X
	L	Grounded theory														X

## Match Your Method to Your Data

The key to Step 4 is to choose a data collection method that can gather the type of data you need to answer your research question. This should be obvious. If your research question calls for people's opinions, but you've collected their acts or behavior, you're not going to be able to answer the question you posed. Conversely, if you are asking about behavior but collect opinions, your research is going to go astray. That's what Table 4.1 helps you sort out. Let's walk through the first nine columns of that table, to see which data collection methods are best for those nine types of data.

### Data Type 1: Acts, Behavior, or Events

I'll start with the Column 1 data type: **acts, behavior, or events**. These are either things that people<sup>1</sup> *do*, or things that *happen to them*. They are not opinions, not beliefs, not ideas about self-identity, or any other such heady stuff. Nor are they a form of knowledge—though knowledge and other heady stuff often generate human behavior. They are, instead, things that happen in the real world. I walk up a flight of stairs: That's an act. I tell you that I've walked up a flight of stairs: That's a *report* of an act, and reports and acts are not the same kind of thing. I think that walking up a flight of stairs is a good thing: That's an opinion or an attitude. Each of these types of data is different, and each calls for a different data collection method.

What method do you use to record acts, behaviors, or events? You have to observe them. You can't simply ask people about what they did, nor can you ask people what they think or feel about such things. Those are other data types. If your research question calls for *acts*, then observation is the only way to go.

If this is clear, revisit Table 4.1 and read down the column to the two Xs in Rows B and C. Looking to the left, you find the Xs are next to two kinds of data collection methods: **detached observation (Row B)** and **ethnography (also called participant observation<sup>2</sup>) (Row C)**. Both ask the researcher to observe something, but they differ in key ways. Detached observation is just that: You watch, listen to, or perhaps measure whatever it is you are investigating. If you are observing tree sloths, for example, you find some sloths, pull up a chair, and track their activities. Over time, you'll notice that sloths come down from their trees about once a week to defecate, then climb back to their perch. That's when they are the most vulnerable to predators. That's also when you can get hair samples to measure the amount of algae on them. All this is detached observation, because you are not interacting with the sloths. You are just watching.

Natural scientists do this all the time, but social scientists do it too. Let's go back to one of the mass transit topics from Step 1. Let's say that we're investigating traffic jams and we are particularly interested in short-lived "phantom jams." These happen when there's plenty of space on the road but a group of cars gets bunched up anyway.

We could ask the people who were involved in these jams what happened, but that won't tell us what's going on. That's because participants don't really know. Drivers experience such phenomena, but they don't usually understand how they work.

Instead, we're best off observing traffic flow and measuring the collective results of drivers' braking and accelerating to maintain space behind the cars ahead of them. That's what causes these jams.<sup>3</sup> Close observation reveals the large-scale cumulative effects of scores of individual actions—including acts that occur several miles ahead of where the phantom jam happens. Scholars have found that phantom jams flow through freeway traffic like waves in water. Individual drivers' braking and accelerating keeps the waves going.

It took lots of detailed observation to find this pattern. Our research question, in this case, might have been this: "What observable patterns of driver behavior, if any, contribute to the development of phantom jams?" Such a research question calls for detached observation.

Ethnography is a bit different. It combines the direct observation of behavior with the researcher's involvement with the people being observed. Ethnographers watch people do things and ask them to explain what they are doing. An ethnographer studying phantom jams might ride along with drivers, watching when and how they hit the brakes, accelerate, and so forth. She or he would also ask for the driver's explanation of what is going on, why the driver braked or accelerated, and how the driver explained the phantom jam phenomenon. Watching captures what people actually do; asking for the drivers' explanations tells us what they are thinking. Ethnography (participant observation) gathers both types of data, whereas detached observation gathers only the first.

## Data Type 2: Reports of Acts, Behavior, or Events

Column 2 involves **reports of acts, behavior, or events**. Sometimes we don't have to watch things. We can ask people what they have done or typically do, and their reports give us the data we need. For example, if we want to learn about commuting patterns, we don't have to watch traffic. Instead, we can ask people to log their driving. This produces a form of **public and private records (Row A)**. Such records can tell us a good deal about individuals' driving patterns. We can learn when they leave home, what roads they take, and so on.

Let's say we want to learn how commuters avoid sitting in rush hour traffic. We can ask people to keep track of their commuting by writing down when they leave work, what route they take, what traffic they encounter, and so on. If enough people are reporting, we can get a pretty good picture of traffic patterns in a given city. We can also learn how people make choices about where and when to drive.

In essence, this is how crowd-sourced traffic apps for smartphones work. Drivers push a button on their phones when they encounter a jam, an accident, construction, and so on, and the app reads their GPS

**THINK ABOUT IT**  
Why do we treat acts and reports of acts as different types of data?

location and posts the slowdown to a mapping program. Other drivers can see the posts and avoid the area. Such reports aren't perfect. People make mistakes, and sometimes the slowdowns vanish pretty fast. Still, they're usually more up-to-date than the traffic reports on the radio. By the time a radio station's traffic helicopter has called in and the information makes it to the news announcer, the backup has usually been cleared. The point is, reports are often all you need.

Sometimes they aren't, though. At the start of Step 3, we saw what happens when we ask people to report their church attendance: They often inflate their figures. We also learned a way around this, by asking people to keep a log of what they did the previous day. We consult their logs to see what they actually did on Friday, Saturday, or Sunday, depending on which religion they follow. If we don't tell them that we're looking for church attendance, they'll probably report it accurately.

How do you collect reports? Column 2 indicates several ways, marked by four Xs and one (X).

Public records report some kinds of behavior: how many people got married; how many renewed their driver's licenses on time; how many were arrested, jailed, and convicted. Private records report other things: television watching, book sales, sports attendance, and the like. The problem here is access; not all companies that collect information let scholars look at it. Amazon.com, for example, doesn't share sales of its e-readers because it doesn't have to.

**In-depth interviews (Row D)** do a fine job of collecting certain kinds of reports. Both they and **critical incident interviews (Row G)** let you go into depth with a small number of informants. This gives you lots of details. The difference between the two methods is that critical incident interviews use specific incidents to get people talking about a topic, whereas in-depth interviews are more general. You might, for example, interview traffic engineers about how they manage roadways to keep traffic jams to a minimum. You could ask them general questions, letting them describe how they typically work, or you could ask them about a specific incident that shows the kinds of problems that traffic engineers typically face. To do the latter, for example, you might say, "Let's talk about the worst traffic jam you've ever had to handle. When was it? What, in particular, made it so bad? How did you handle it? What did you and your team do well? What do you wish you had done differently?" These questions focus the interview; they often produce very rich accounts of what happened in a particular time or place. In-depth interviews can produce equally rich accounts, though they do it by other means. (We'll see some examples of each in Part II of this book.)

You could also use a **survey or questionnaire (Row E)**. Surveys and questionnaires gather shallower information, but they can gather information from far more people. A short survey may take 15 minutes to complete. That's next to nothing, so you can get a large number of people to tell you about what they've done. An interview, by contrast, frequently takes much longer. This limits the number of people you can interview on the same research budget.

A commuting survey, for example, might ask people what time they left their homes each workday in the previous week, how they got to work, how long it took

them, and if they encountered any problems along the way. It can also measure their satisfaction or frustration with their commuting patterns. It just can't measure any of these with much nuance. That's the trade-off. Interviews provide depth at the cost of getting information from fewer people. Surveys provide breadth without nearly as much depth. Both are valuable ways to gather people's reports of their actions.

There's one more option, marked by an (X) in square 2C of Table 4.1. You can use ethnography (participant observation) (Row C) to collect small numbers of reports from individuals while you are observing their social scenes. My own ethnographic observations of a radical Catholic commune, for example, gave me lots of opportunity to ask people how and how long they had been working for social change.<sup>4</sup> I couldn't, however, talk with large numbers of people. That's the problem with ethnographic studies: They are very local. That's why this X has parentheses around it. Yes, you get reports of acts, behavior, and events but as a by-product of collecting another type of data. There are more direct ways to collect reports of acts, behavior, or events, if that's the only data type you need.

### Data Types 3, 4, and 5:

#### Economic, Organizational, and Demographic Data

I'm going to treat the data types 3, 4, and 5 as a unit, because they are all somewhat alike. As we saw in Chapter 3, **economic data**, **organizational data**, and **demographic data** are typically reports of behavior or identities that describe the economy, organizations, and populations. We typically find these in the public and private records (Row A) collected and reported by various entities. The U.S. Census Bureau, for example, collects demographic data about the U.S. population. It tells us how many men and women live in different parts of the country and how many have various racial backgrounds, marital statuses (married, single, divorced, widowed), levels of income, housing types, and so on. We can take these data at the national level, the state level, the county level, or the level of the census tract. The latter is the smallest geographic unit for which the Census Bureau provides figures. Tracts aren't all the same size, but each of them is large enough that you can't identify a particular individual or household by looking at the data.

As you learned in Step 3, economic data measure aspects of the economy, whereas organizational data measure attributes of organizations. Economic data, for example, let you compare the levels of employment, business activity, and so on in various cities. School data provide information about numbers of students, numbers of teachers and other employees, spending per pupil, and so on. All of these data report on economic activity, organizational structures, and different population attributes.

Public and private records are a fine way to get all three kinds of information—and more are available to the general public than you might think. Not only do local, state, and national governments collect economic and demographic data, but most large businesses have to report core data about their sales, earnings, numbers of employees, and many other things. You can also use surveys (Row E) to collect

economic and organizational data. You can, for example, survey business owners, chambers of commerce, and other groups. I've put parentheses around those two (3E and 4E) to indicate that you have to survey organizational leaders for this information. Ordinary workers don't usually know enough to help you. Surveys also collect good demographic data from individuals. Indeed, the Census Bureau collects most of its data using a series of very broad surveys, which it releases to the public in summary form.

You'll note that I've listed ethnography (Row C) and in-depth interviews (Row D) as ways of getting information about organizations, though I've put parentheses around them (4C and 4D). That's because they are not terribly efficient compared with surveys. These methods are good, however, for uncovering hidden social patterns in organizations (Column 14). Such studies inevitably produce data about the organizations as well. (I'll talk about organizational ethnographies later in this chapter.)

### Data Type 6: Self-Identity

**Self-identity** refers to the set of labels or ideas that people use to identify themselves, subjectively. This is not the same as demographic data: Demographic labels are typically decided by someone in authority, whereas self-identity is decided by each individual. These things are sometimes in conflict.

Until 2000, for example, the U.S. Census Bureau insisted that people identify themselves as White, Black, Native American, or Asian or Pacific Islander. (*Hispanic* was treated as an ethnic group, so Hispanics could be of any race.) My niece and nephew had no place in this schema, because their father is White and their mother is Asian. They had to choose one or another; they could not choose both. This was a case of imposed identity. Starting in 2000, however, individuals were allowed to choose multiple racial identities. This let people describe themselves however they wanted on the census forms.

The census forms are surveys (Row E)—one of the two data collection methods that I've marked as suitable for collecting self-identities. Surveys collect people's self-identities at a relatively shallow level, by asking them to choose from a set of boxes. They are best used for research questions that ask people to sort themselves into preestablished categories. These can be racial and/or ethnic; economic (lower class, working class, middle class, upper class); occupational, depending on how (or whether) people self-identify with their occupations; or based on personality (introvert, extrovert) or on any number of other factors. Surveys work best when people's choices are clear and the distinctions between the identities are common knowledge.

For example, sociologists have known for decades that the division of U.S. society into lower, working, middle, and upper classes doesn't correspond to reality.<sup>5</sup> These terms are common on surveys, however, because most Americans have a rough idea of what they mean. Most people identify themselves as "middle class," with "working class" running second. These are self-identities but at a relatively shallow level.

In-depth interviews (Row D) give people a much wider opportunity to describe who they are and allow them to identify themselves at greater depth. I once carried

out an interview study in which I asked long-term social activists about their religious lives.<sup>6</sup> Among other things, I asked them how they identified themselves religiously, and asked what that identity meant to them. The results were extremely rich. They provided long, nuanced discussions about their religious backgrounds, what they liked and didn't like about the religious organizations to which they belonged, and their own sense of religious journey. These data were hard to summarize. They were, however, deep. That's what interviews do. If your research question asks you how people identify themselves in detail, then you should plan an interview study. If your question asks you to collect shallower self-identities, then a survey will do.

### Data Types 7 and 8: Shallow and Deeply Held Opinions and Attitudes

The two opinions and attitudes data types have a lot in common. Both are thoughts: things that people carry around in their heads and that orient their behavior. Some people, for example, believe that traffic ebbs and flows at particular times of day, so they adjust their travel accordingly. Other people may believe that traffic is random; they see no point in adjusting their travel times, as it won't make any difference. Still others may think that traffic is always heavy when they're trying to get somewhere fast. There's seldom traffic, they say, when they have lots of time. In effect, they think that the traffic gods are out to get them. (Opinions and attitudes come in all kinds.)

Some opinions and attitudes are relatively shallow and others are relatively deep. Shallow opinions are easily captured quickly; deep ones take more time and effort. We can, for example, ask people if they support mass transit systems and to rank their support as "strong," "moderate," "weak," or "nonexistent." Or we can ask them to rank their support or opposition to a particular transit project on a seven-point scale, ranging from "strongly support" (7) through "neutral" (4) to "strongly opposed" (1). Surveys (Row E) ask such questions. They give us a quick sense of people's shallower views. Unfortunately, they also lack nuance. They don't tell us why people have the views they do.

If you want to know the details about people's opinions or why they hold them, you have to go deeper. You have to use in-depth interviews (Row D). For example, one person might think that mass transit is socialism and not want to pay taxes so that other people have buses or trains to ride. Another might favor some projects and oppose others, especially ones that they think are financial boondoggles that make construction companies rich. Interviewing uncovers such details.

Look at Columns 7 and 8. The only Xs are in Rows D and E, because those data collection methods gather deep and shallow opinions, respectively. There are also a few Xs in parentheses. Ethnography (Row C), in-depth interviews (Row D), critical incident interviews (Row G), and **focus groups (Row H)** let you gather shallow opinions and attitudes while collecting their primary data types. Ethnography (Row C), **phenomenological interviews (Row F)**, and critical incident interviews (Row G) let you gather **deeply held opinions and attitudes** as a by-product of collecting other types of data.

How does this work? Here are two examples. Critical incident interviews can give you both shallow and deep opinions, because people often express such things while they are talking about the incidents that you are asking them to describe. Focus groups give you mainly shallow opinions, because these are group interviews and you often can't get people to speak deeply in a group made up of people they don't know.

You shouldn't choose any of the methods that have Xs in parentheses as your primary data collection methods. They can, however, give you data that supplement what you've learned from the more focused methods.

As a general rule, if you want to gather shallow opinions from lots of people, a **social survey** is the best way to go. If you want to gather deep opinions from a relatively smaller number of people, then an in-depth interview will likely succeed.

### Data Type 9: Personal Feelings

**Personal feelings** are a lot like deeply held opinions and attitudes. In brief, in-depth interviews (Row D) are good data collection methods to use. I've covered those above, so there's nothing new to add here.

## Three Examples (that include data types 10–12)

This takes us through the first nine columns of Table 4.1. Rather than continue through all the data types, let's shift gears. This is a book about research design, and it's often easiest to learn something by watching it being done. We'll look at the remaining data types and data collection methods as we explore some concrete research projects.

First, I'll propose some questions related to the research topic we looked at in Step 1: "How does mass transit affect people's everyday lives?" You'll see how opinions, feelings, cultural and expert knowledge, and so on can help you to answer specific research questions on that topic. Then, I'll propose some questions on a new topic: "What kinds of organizations are the best places to work?"

In each case, I'll show you how a research question tells you what type of data you need to collect, and that data type demonstrates what data collection methods are possible. In this way, you'll see how the design process operates.

### Example 1: Mass Transit and Property Values

We'll start with one of the research questions encountered in Step 1: "How do property values change after the construction of a mass transit system?" This question calls for economic data (Column 3). We are looking for property values, which are economic in nature. The easiest way to locate those data is through a search of public and private records (Row A). These come in several types.

#### THINK ABOUT IT

Our research question calls for economic data: How do property values change after mass transit construction?

Certain relevant records—specifically, property sales figures—are typically available to the public. Anyone can find out what houses and buildings sell for. The same is true of another kind of public record: assessments of property values for tax purposes. Which of these records should we use to tell us how property values change?

We should start with property sales figures, as these are typically more accurate ways to gauge true property values. They indicate the amount that people are willing to pay for property. Tax assessments, by contrast, can be distorted in several ways. Some cities undervalue property, and certain tax authorities undervalue property of specific types. In Texas, for example, you can lower your tax assessments on vacant land by keeping a cow on it until a few days before you start building. Developers often start building malls and housing tracts just after assessment time, so they get a year of lower taxes. This makes tax assessments a problematic source of property valuations.

But sales values can also be distorted. Perhaps lots of owners sold their property right before the transit project and very few sold right afterward: Simple supply and demand would push prices lower before and higher after, even if the project itself produced no change. Or perhaps there was a recession that lowered property values about the time the project was completed. That would also throw off the comparison.

The point is, public and private records are useful, but you can never take them at face value. You always have to think through the real causes of the pattern you see. Even so, such records are a good place to start.

Suppose you want to gather the same type of data using another method. You could conduct a survey (Row E) of property values in the relevant neighborhood. You could make appointments with property owners and ask them, hypothetically, the level at which they would be willing to sell their homes. This would give you an idea about how they value their property. This approach could work in an area where there are few property sales; in such places, public records would not reflect current values. In this case, you are asking for information corresponding to reports of acts, behavior, or events (Column 2)—though in this case the acts would be future ones, not ones in the past.

What if you ask property owners a different question? Suppose you ask for their sense of whether property values have risen or declined. This is a decent question, but it doesn't address the research question we asked. People's ideas about things are their opinions, but the question we started with calls for reports of people's potential behavior. Opinions and reports of behavior are different data types, so surveying people about their opinions would be a poor way to answer your research question.

You could, however, change your research question a bit. You could ask, "How do people's impressions of local property values change after the construction of mass transit?" This question asks for people's opinions, so a survey would be appropriate. Note how we let the research question tell us what type of data we need and then we choose a method to find the data.

Here's another research question: "What changes do people report that mass transit has brought to their lives?" The phrase "people *report*" should give you a clue about the data type: You want people's reports of their own behavior.

We've already talked about such reports, though, so let's tweak the question so that it calls for another data type. "What do people think about the changes they have seen since the mass transit system was installed?" This asks us to collect people's *personal opinions*. As we discussed earlier, we can do this at either a deep or a shallow level.

Looking down the personal opinion columns (Columns 7 and 8), we find several methods: in-depth interviews, surveys/questionnaires, critical incident interviews, and focus groups. Each method gets at a slightly different kind of report.

In-depth interviews (Row D) let you talk with people at length. People can tell you quite a lot about their views and experiences in 60 to 90 minutes. You can ask for examples, which can give you an excellent sense of the changes they think mass transit has made. As you'll see in Part II, the main difficulty with interviews is keeping them balanced. You want to give people a chance to express themselves, because you are interested in their unique experiences and ways of seeing things. But you don't want the conversations to wander all over the place. Good interviewing is a learned skill. In Chapter 9, we'll suggest how to do it well.

Another drawback of interviews is that good ones take a lot of time. Only a limited number of people can be interviewed for a single research project. You need to figure out how to get a breadth of opinion while still keeping those opinions deep. Again, we'll take this up in Chapter 9. In the meantime, however, you might want to read "How Many Subjects?" in the "Research Guides and Handouts" section at the end of this book. It provides a strategy for making sure that interview projects gather as broad a range of views as possible, without taking forever to complete.

You might, however, not be interested in collecting complicated data. You might want to focus on just a few of the effects of mass transit, but you want to know how widespread these effects are. For example, you might want to know what percentage of the business owners in mass transit neighborhoods lost money during construction, or what percentage saw their revenues increase as a result of foot traffic around

stations. You don't need deep, nuanced accounts; you need a survey or questionnaire (Row E).<sup>7</sup> Specifically, you need to poll a randomly selected sample of your target population, so that you can say with some accuracy what your whole population thinks. We'll talk more about this method in Chapter 8.

One more thing: The survey I've suggested doesn't really answer our whole research question; it focuses on just a part of the picture: business owners' revenue changes around the time of construction. Were you to take this path, you would change your research question to something narrower: "What revenue changes do business owners in the areas surrounding transit stations report during construction and after the project's completion?" This question generates the research I described in the preceding paragraph.

#### THINK ABOUT IT

What would you ask business owners in order to find out the changes that mass transit has made to their businesses?

You are, by the way, witnessing something important about the research process. In most cases, you work both forward and backward until you get the research design you need. You choose a question, see what data type it needs, then choose a data collection method, and then go back and change the question slightly to make sure that the question, the data type, and the method all fit together. That's why research design takes time. The steps are interconnected.

There are other possibilities. We could, for example, convene focus groups (Row H) to discuss any of the research questions I've posed in the last few paragraphs. As mentioned earlier, focus groups are small group interviews in which several people are asked for their experiences and views simultaneously. They would be appropriate for our "What changes . . . ?" project, because they would encourage participants to cover a number of issues that they might otherwise forget. We can imagine a group conversation in which one participant says to the rest, "Remember how difficult it was to get across that street before they built the traffic diverter?" and the others chime in with their agreements, disagreements, and similar examples. On the plus side, focus groups give us a sense about how communities, not just individuals, see things. On the minus side, they can be dominated by particularly loud individuals, while quieter people drop into the background. A skilled interviewer has to manage the focus group well. Such groups are better for bringing up ideas than for determining the degree to which they are widespread.

## Example 2: Mass Transit and Street Life

Here's another transit-related research question: "What is the observable character of street life in places with and without mass transit hubs?" This question asks about acts, behavior, and events (Column 1)—even though the phrase "observable character" asks us to generalize from the specific acts, behavior, and events themselves. In reviewing Table 4.1, we see two possibilities: detached observation and ethnography. We'll treat the second of these methods later, so let's concentrate on the first for now. How could we use detached observation (Row B) to generate data to answer this research question?

First, we need to choose pairs of places to observe. One location in each pair should be around a transit hub, for example, at a subway stop, a commuter train station, a light-rail loading point, or the like. The other should be a place without such facilities but otherwise as similar as possible to the first location. Our pairs need to match on as many dimensions as possible, such as demographics, the proportion of residences to businesses, social class standing, distance from downtown or other destinations, and so on. Ideally, their only major difference is that one has transit and the other does not. We may not reach that ideal, but we should try. (Using several matched pairs makes it more likely that the differences we find really are caused by the transit facilities.)

Then we need to spend time in each location recording what we see. How many people are there? What kinds of people? What are they doing? What are their patterns? What businesses are there? What kinds of people patronize them? How do they

do so? The point is to record as much observable information as possible. We record until we reach what is known as “saturation”: until we’ve pretty much captured the ordinary acts, behaviors, and events that typify each of the places we’re observing.

Then we look for patterns. Do particular kinds of people use each neighborhood differently? Do people linger in one type and walk swiftly through the others? How much pedestrian traffic does each see? How new or old are the buildings? Have the transit stations attracted new construction? What can we conclude from the many observations we’ve made? Good, detailed observations should tell us the characteristic differences between places with transit stops and those without them.

Note that the related research question “Are there any systematic differences in the ways that residents of transit-served and transit-less neighborhoods describe the quality of life in their area?” calls for in-depth interviews (Row D), not observation. The question asks for residents’ descriptions of their neighborhoods. That’s a different data type than the acts, behavior, and events that you get from observation. In fact, it is *reports* of acts, behavior, and events (Column 2). Interviews are one good way to get such reports, particularly if you want richness and depth. People’s descriptions will almost certainly contain ideas, judgments, and so on, simply because the observers are part of the social setting they are trying to describe. That’s why you can’t treat them as direct observations. If you want to know what actually happens, you have to watch.

Interviews would also be a good way to gauge a related question: “How do people feel about the neighborhood changes that mass transit projects bring?” This question calls for a different data type: personal feelings (Column 9). Interviews are about the only way to get at personal feelings. Critical incident interviews can do this, though probably not for this particular research question, as it asks for general feelings. The point is that you can use various data collection methods to gather a given type of data, just as different data types can share data collection methods. You just have to line them up correctly: The research question determines the data type, and the data type determines the data collection method—not the other way around.

We’ll explore two other research questions from our transit project before moving on. First, imagine our topic is “What are the main barriers to constructing mass transit projects?” This topic could produce many different research questions, so let’s get more specific: “What are the main barriers that transit experts report encountering in bringing mass transit projects to fruition?” This question asks us to collect **expert knowledge (Column 11)**. In reviewing Table 4.1, we find we can interview transit experts (including using a critical incident technique) or we can assemble a focus group made up of these experts. Surveys don’t tend to be deep enough, but we might use a survey if we already had a list of potential barriers and wanted to know which ones the experts thought were most significant. We could consult already-written records of such barriers as part of our literature review, though we would likely want more details than such records typically provide. Ethnographers<sup>8</sup> typically collect expert opinion in the course of their studies, though they focus on specific social

scenes rather than trying to assemble expertise from widely spread cases. In any case, this research question calls for some kind of interview, either individual or collective.

There is a second kind of knowledge, however. Expert knowledge is known by the few, whereas **cultural knowledge (Column 10)** is known by (nearly) everyone in a particular social milieu. How do we collect common knowledge about mass transit? There are several ways.

We have to start with an appropriate research question. Let's take this one: "What do people in City X know about mass transit?" It doesn't matter whether City X actually has a mass transit system; people will still have ideas about it. We want to know what they are.

There are several ways to collect data about cultural knowledge. Ethnographers collect cultural knowledge by spending long periods of time with residents of a limited social scene, participating in their daily lives. They, however, need scenes that are small enough that they can get to know them well. For the questions "What do people living in the \_\_\_\_\_ neighborhood in City X know about mass transit?" or "What do the people working at \_\_\_\_\_ school know about mass transit?," ethnography (Row C) would be a useful data collection method. For larger groups, we could use some of the interview methods mentioned previously. For still larger groups, we might construct a survey, though we would have to know the contours of popular knowledge before doing so. We could ask questions such as this one: "Which of the following statements most closely expresses your views about mass transit?" This would give us a sense of what "everyone" knows and also how widespread this knowledge is among city residents.

Reading down Column 10, we find two other possibilities to help us with our research question: **content analysis (Row J)** and **discourse analysis (Row K)**. These data collection methods also collect cultural knowledge, but they do so in an unusual way.

Both forms of analysis involve locating the implicit cultural assumptions embodied in various kinds of texts. American newspaper articles, for example, have particular ways of presenting stories about social problems. They typically start with an anecdote: what has happened to a particular person whose situation illustrates a more general pattern. Then they describe that pattern, returning to the individual at the end of the article. It's a formula, a genre, a particular narrative style. The fact that it is so ubiquitous tells us something about Americans' cultural assumptions—particularly about the individualism that lies at the culture's heart.<sup>9</sup> A suitable mass-transit research question might ask, "What cultural assumptions about mass transit do we find in the American news media?" Content and discourse analysis would let us find out.

Content analysis is conceptually simple. You collect a set of texts on the relevant topic—in this case, newspaper and television stories about mass transit—and examine them, looking for patterns in the way the topic is portrayed. Once you have identified patterns, you go through the collection methodically, counting the number of



**THINK ABOUT IT**  
What can experts  
tell us that  
ordinary people  
cannot?

instances of each pattern. Scholars have used content analyses to count the number of violent instances in children's television cartoons, to highlight the ways that *National Geographic* magazine portrays various parts of the world, and to trace changing ideas about the nation-state among intellectual publics worldwide.<sup>10</sup>

Discourse analysis is a bit more complex. As developed by Norman Fairclough and others, discourse analysis seeks to reveal the ways in which people's ways of speaking are shaped by systems of social and political power.<sup>11</sup> It focuses not just on the content of texts but also on how those texts are produced and consumed. Cindy Myers, for example, used discourse analysis to show that the term *poverty* meant something different to the editorial writers of the *New York Times* than it did to the editorial writers of the *Wall Street Journal* during a 20-year period stretching from the mid-1980s to the early 2000s.<sup>12</sup> *New York Times* editorials portrayed poverty as powerful and active, as an entity that captures people and mires them, from which they are unable to escape. The *Wall Street Journal* editorials didn't describe poverty; they described poor people. They saw such people as active, often choosing poverty rather than affluence or (if they are government bureaucrats) making others poor with their misguided policies. Neither vision is real exactly, but both have political consequences. The *New York Times's* way of speaking encourages people to embrace organized solutions to poverty: government programs, charity efforts, and the like. The *Wall Street Journal's* language encourages people to reject such collective efforts, because the problem lies with individual bad choices and irresponsibility.

That's the point, for Fairclough and others analyzing sociocultural discourses. These discourses are inherently political. Any study of the discourses surrounding mass transit would look at who controls the terms of debate, how they accomplish that control, and how they ensure that alternative ideas are not taken seriously. Analyzing the content of newspapers, television stories, and so on is a key part of that project. But discourse analysts always want to know who benefits from the ways in which people are led to see the world.

### Example 3: Best Places to Work

That's enough about mass transit. I'll use another topic to discuss the remaining data collection methods: "What kinds of organizations are the best places to work?"

To refresh your memory, this is a research topic, not a research question. You can tell because it isn't very specific. In fact, it covers a lot of potential research questions. A research question ought to tell us exactly what we're looking for. A research topic does not. We'll need to narrow down this topic, so that we can see how asking for a specific type of data points us toward a data collection method that can deliver it.

As a first step toward narrowing our topic, I'll focus on a subtopic: research on *organizational culture*. Specifically, I'll take the approach developed by Kim Cameron and his associates at the University of Michigan Business School.<sup>13</sup> They developed a system for analyzing organizational culture that has generated lots of empirical research. They found four distinct cultural types:

- *Hierarchies* are structured and rule oriented.
- *Adhocracies* are entrepreneurial and dynamic.
- *Market-oriented* organizations emphasize results and getting the job done.
- *Clan* organizations are personal, familylike, and participatory.

Hierarchies and market-oriented organizations emphasize stability and control; clan organizations and adhocracies emphasize flexibility. Hierarchies and clan organizations handle everything in-house; adhocracies and market-oriented organizations outsource as many things as possible.

We can use this typology to generate a research question: “What kinds of people gravitate to these four kinds of organization?” What do we have to do to answer this question?

First, we need to identify organizations that fit each of these four patterns. Though Cameron and Quinn are clear that no organization is homogeneous, we can use a test such as the Organizational Culture Assessment Instrument (OCAI)<sup>14</sup> to find the organization’s central tendency. This questionnaire asks people to rate their organizations on their relative emphasis on flexibility or control, and their tendency to handle tasks in-house or to outsource those tasks to others.

As with our pairs of neighborhoods in the mass transit project, we want to make sure that the organizations are enough alike that we’re sure that any differences are due to organizational culture instead of some other factor. For example, comparing large organizations with small ones risks mistaking differences of size for differences of culture. The same is true if we pair new organizations with old, established ones. As we saw in Step 2, any time we make a comparison, we need to take into account a whole host of factors.

Once we’ve found several organizations of each type, our research gets interesting. First, we want to see if these organizations attract different types of people, demographically speaking. Our question becomes, “Are there any demographic differences between the employees who say they are happy working for the four kinds of organizations?” This question calls for demographic data (Column 5). These are figures related to people’s gender, race, social class standing, education level, marital status, family type, and other social identities.

Are women happier in clan organizations that are oriented toward people? Do adhocracies and market-oriented organizations attract hard-charging men? It’s pretty easy to find out. Use public and private records (Row A) to find the relative balances of men and women at each of the four types of organization (making sure to match them by industry and the like). Then create a survey (Row E) to ask employees about their relative happiness. This would let you see whether men are happier in one kind of work and women in another. (To be clear, I think this won’t be the case, certainly not in any simple manner. Yet it *is* a straightforward research project.)

#### THINK ABOUT IT

What is the best place you’ve ever worked? What made it so good?

Next, let's check self-identities (Column 6). An appropriate research question would be: "Do people working in the four types of organizations have systematically different senses of identity? Or are the choices of place to work not a matter of self-identity, but of something else?" This involves finding out how people categorize themselves, as opposed to the way that society categorizes them. These questions can be complex, which often rules out surveys and other data collection methods that don't give people a chance to lay out the nuances of their situations. If you expect this, then in-depth interviews (Row D) are in order. We'll see in Part II how to construct an interview protocol to elicit the information you want.

Finally, we can look for differences in **personal and psychological traits (Column 12)** to see if people with different psychological characteristics fit in better or worse with the four types of organizations. Our research question could be, "Are there any personality differences between the employees who say they are happy [or sad or frustrated] working for the four kinds of organizations?" This research would be similar to the demographic research project, except that we would focus on personality traits rather than on demographics. We would use one or more **psychological scales (Row I)** to measure the particular traits that we think might be relevant.

I can't say which psychological scales we'd use; there are hundreds of them, and I'm not enough of an expert about them to recommend particular ones. If you want to do this kind of research, you'll need to immerse yourself in the psychological literature. My point is that psychological traits are their own data type, and psychological tests are the best method for capturing them. (See Chapter 10 for some examples of how to use them in research.)

### Data Type 13: Experience as It Presents Itself to Consciousness

We're going to skip **experience as it presents itself to consciousness (Column 13)**, because it doesn't lend itself to research on organizations. It doesn't lend itself to research on mass transit, either, nor on schools. As outlined in Chapter 3, this particular data type is used only in phenomenological investigations. Such studies are detailed and difficult. They involve a particular type of in-depth interviewing that I cover in Chapter 9.<sup>15</sup>

### Data Type 14: Hidden Social Patterns

This leaves us with just one data type that we haven't yet covered here: **hidden social patterns (Column 14)**. As noted in Step 3, these are patterns of social behavior that are typically invisible to their participants. This can be as simple as how closely people stand to each other and as complicated as the ways in which some societies hide status differences beneath a veneer of equality.

The problem with hidden patterns is that the participants themselves are seldom aware of them. You can't discover such patterns by interviewing people, nor by surveying them. These methods depend on people having some idea of what is going on; that's not the case when the patterns are unknown.

Looking down Column 14 in Table 4.1, you'll see that I've marked five data collection methods suitable for revealing hidden patterns. The first, detached observation (Row B), is pretty obvious. An outside observer can often see patterns that locals miss. Edward T. Hall made a career out of highlighting hidden behavior patterns in books like *The Hidden Dimension* and *The Silent Language*.<sup>16</sup> He observed people in various cultures, seeing how they stand, gesture, and so on. He then observed cross-cultural interactions, noting which of these body patterns got in the way of communication. This kind of observation isn't apt to take us very far with our topic at hand, though: "What kinds of organizations are the best places to work?"<sup>17</sup>

Ethnography (Row C) can do a much better job with that topic. This method also calls for an outsider to observe social and cultural patterns, but now the observer does not stand outside the social scene. He or she joins in with others, watching and talking to them in order to understand their lives. The term *ethnography* comes from two Greek words that mean "describing peoples." The ethnographer describes societies holistically. She or he spends a long time inhabiting a people's social world and then portrays that world as its members understand it. Simultaneously, she or he locates and describes social patterns of which those people are unaware.

Ethnography integrates two different data types into one data collection method. The first is an analysis of a group's beliefs or worldview: how the group members understand their world, including their place in it. The second is an analysis of the hidden patterns in their shared lives. Both parts are important, though right now we're more interested in the patterns than in people's belief systems. How can ethnography help us with our current project: trying to understand what makes an organization a good place to work?

In one example of *organizational ethnography*, in the late 1960s, John Van Maanen spent a year as an ethnographer with the Philadelphia police force, learning its routines, its tacit rules, and its hidden patterns.<sup>18</sup> Rather than simply observing from the outside, he attended the police academy. He graduated with the other officers, rode on patrol, and protected his patrol partners in dangerous situations. He learned what officers thought about their jobs, the ways they skirted regulations, and the compromises they thought they had to make to keep both themselves and the public safe. His portraits of police life say a lot about what it was like to work in that particular organization at that particular time.

This study speaks to a research question of the form "What are the work patterns, both hidden and conscious, at Organization X at such-and-such a time and in such-and-such a place?" Ethnography does not produce generalizations about what kinds of organizations are good places to work. It does, however, provide deep portraits of particular organizations. This ability to portray nuances and contradictions is without peer among these related data collection methods. It is, however, a very slow method: Good studies seldom take less than a year of fieldwork and sometimes they take much longer.<sup>19</sup>

How else can we investigate such hidden organizational patterns? I previously discussed using content analysis (Row J) and discourse analysis (Row K) to collect

cultural knowledge, such as the amount of violence in children's television cartoons and the semiconscious assumptions found in editorials about poverty. Scholars have used these methods to analyze hidden patterns in educational organizations. Liz Morrish, for example, noted the growth in management discourse at British universities and showed how the constant administrative references to "targets," "objectives," "performance indicators," and "mission statements" turn these universities into vehicles for training corporate middle managers and away from their traditional focus on educating citizens.<sup>20</sup> Norman Fairclough examined "marketization" language in university advertisements, showing how various ways of attracting students and faculty to universities signal different power relationships among schools, faculty, alumni, and administrators.<sup>21</sup>

**Grounded theory (Row L)** is a final way to uncover hidden patterns in social scenes. This data collection method is a bit of an odd duck. Barney Glaser and Anselm Strauss developed it in the 1960s as part of a study of dying hospital patients.<sup>22</sup> They were interested in patient, family, and staff interactions, which sociology at the time provided no good ways of investigating. The research standards of the time called for investigators to make a hypothesis—basically a guess about what was going on—figure out what type of data could test that hypothesis, and then collect the data to see if the hypothesis was right. This assumed that all research ought to be experimental or quasi-experimental, an attitude that we have outgrown. Glaser and Strauss argued that you can't create hypotheses until you have some sense of the situation. Hospital interactions were an understudied topic, and uninformed hypotheses are not very useful.

Instead, Glaser and Strauss entered the wards without preconceived ideas about what they'd find. They noticed things, took notes on them, located possible interaction patterns, and then checked to see whether the patterns were real. They first called this the "constant comparative method" because they were constantly comparing what they thought they were seeing with the data they observed as they investigated further. Later they renamed it "grounded theory," arguing that in such circumstances theory (hypotheses) emerges from a thorough immersion in the data. Low- and middle-range theories don't start with some armchair thinker saying, "This is the way the world works."<sup>23</sup> They begin with people noticing patterns, wondering whether those patterns hold true, and then investigating to find out. Glaser and Strauss argued that grounded theory gave them a rigorous way to do so.

Two points are worth noting. First, Glaser and Strauss developed this method to study human interactions. They based their work specifically on what sociologists call "symbolic interactionism": the study of how human beings cocreate the social patterns through which they structure their ordinary lives. This approach to social life was new in the 1960s, and standard sociological research methods couldn't produce the data it needed. In our schema, these other methods collected the wrong type of data. Grounded theory collects data about hidden patterns of social interaction—exactly what symbolic interactionist studies need.

Second, grounded theory wasn't really new; anthropological ethnographers had been doing much the same thing for nearly a century. They, too, went into the

field, looked around, noticed patterns, and then tried to find out if the patterns they noticed were real. Glaser and Strauss gave us a much more rigorous way of doing this, but the result was the same.

In that case, why don't we treat "symbolic interactions" as their own data type? Because they aren't. Such interactions are a type of hidden social pattern. Multiplying data types too far creates confusion, and it's better to stay simple. Any time researchers can say, "Ah! This research question looks for hidden patterns of social interaction," grounded theory is an option. It's a good tool for this.

If ethnography and grounded theory are so similar, why don't we list the latter as a way to collect the other types of data for which we find ethnography useful? The reason is that ethnographers look for several different kinds of hidden patterns, of which interaction patterns are just one. They also look for cultural knowledge. To that end, they consult experts, they conduct deep interviews, and so on—things that grounded theorists avoid. The two methods indeed have similarities, but they are not the same.

Fortunately, organizations have lots of hidden interaction patterns for researchers to explore. Consider this question: "What hidden interaction patterns shape social life in the \_\_\_\_\_ Department of Corporation Y, and what results do those patterns have, both for corporate functioning and for the people who work there?" Asking this sort of question does not violate the "no preconceptions" rule—at least not fatally. Such research may take a while—all fieldwork does. But grounded theory techniques can help you on your way.

This concludes our tour of data collection methods. Before moving on, I want to reiterate the central point: *The key to choosing a data collection method is to identify the type of data you want to find.* Your research question tells you the type of data you need, and from there you choose a method that will produce data of that type. The idea is simple. Clarity on this point makes for much more successful research.

**The Rule: The key to choosing a data collection method is to identify the type of data you want to find.**

## Research Ethics

Choosing a data collection method has one more complication: It must be ethical. Data collection is not always innocent. Research can harm people, and researchers have an obligation to prevent or minimize that harm. This means more than just avoiding experiments that cause undue pain. It is a matter of making sure that people who participate in research benefit from it as much as possible. At the very least, investigators must make sure that the benefits to society as a whole significantly outweigh the possible harm to any particular research participant. They must also minimize whatever harm that participant suffers. No individual or group of individuals must be hurt just so knowledge can grow.

**Research ethics** involves the evaluation of the benefits and harms that specific research projects can cause.

### Unethical Research

A couple of examples of research gone wrong can help you to understand the importance of research ethics.

**Tuskegee Syphilis Study** In 1932, the U.S. Public Health Service collaborated with the Tuskegee Institute to study the effects of syphilis on a group of impoverished Alabama sharecroppers.<sup>24</sup> A total of 600 men were enrolled, of whom 399 had contracted syphilis before the study began. Originally planned as a 6- to 9-month study of the disease course, to be followed by treatment, the project became a 40-year study of the disease's progress. Participants were not told of the study's original nature nor of this shift. They were told that the spinal taps to check for neurological effects of the disease were "special free treatment" for "bad blood." They were given free health care for minor ailments and promised free funerals, if they allowed themselves to be autopsied after death. Study participants were not informed of their disease, nor were they given penicillin when it became the standard (and first effective) treatment for syphilis in the 1940s. In some cases, study staff actively prevented participants from getting treatment, though by the 1960s most had received treatment of one sort or another.<sup>25</sup> The program ended in 1972 when a whistleblower leaked details of it to the press. A firestorm of criticism made it the poster child for unethical medical research.

**Tearoom Study** Not all unethical research is so deadly. In the late 1960s, Laud Humphreys conducted a famous ethnographic study of men who participated in anonymous homosexual sex in public restrooms—"tearooms" in the gay slang of the day. His book, *The Tearoom Trade*, described these covert sexual interactions, which he observed by playing the role of a "watch queen"—someone who observed the sex and also stood on the lookout for police or anyone coming to use the restroom in question.<sup>26</sup> He did not say he was a researcher; in fact, these encounters involved very little talking on anyone's part. As homosexuality was illegal in that era, his research could have jeopardized these men's reputations, family lives, and careers.

There's more. Humphreys knew that these men came from diverse backgrounds and most were not simply gay. Many considered themselves straight, and some 54% were married and middle class. To document this, Humphreys wrote down some of the men's car license plate numbers, located them, and interviewed them many months later in their homes, posing as a health service worker. He did not tell them about his study, nor did he "out" them to their wives, some of whom sat in on his interviews. He also made sure that none of them could be identified from either his book or the dissertation on which it was based. His work contributed to changing the image of homosexual sex in America. It was an early step in reshaping the image of such sex as a victimless "crime."

That, at least, was one positive outcome of the study. More negatively, Humphreys was criticized for potentially endangering his research subjects in an era when homosexuality was more hated and feared. Had word gotten out, some zealous prosecutor might have subpoenaed his field notes and gone after the men for sodomy. His research could have destroyed lives. It would almost certainly have destroyed marriages and careers.

Like the U.S. Public Health Service managers of the Tuskegee Study, Humphreys did not get the consent of his participants before involving them in his research. He protected them at least to the extent that he made it impossible to trace them from his writings, but he did maintain a list of license plates, from which he got the names and addresses for his follow-up interviews. He coded the notes, lists, and interviews and kept them in a safe-deposit box in a different state from the one where he did his research. That's some protection. Would he have gone to jail rather than turn over his notes to a public prosecutor? Rik Scarce did.<sup>27</sup> He was a graduate student studying radical environmentalist groups when one of those groups vandalized a university laboratory. He spent several months in jail for contempt of court for refusing to turn over his field notes.

These cases raise ethical issues, none of which are easy to address. The Tuskegee study attracted the most opprobrium, but Humphreys's study divided the Washington University department where he did his dissertation and has been used as an example of ethically marginal research ever since.

### Implementing Ethical Practices

Governments and the research community jointly decided to change this state of affairs. Partly as a result of the Tuskegee and Tearoom studies—and of others, mostly in the medical field—the U.S. Department of Health, Education, and Welfare brought together a group of researchers and ethicists in 1974. Meeting as the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, they were tasked with producing a framework for evaluating medical and social science research on human beings. They issued a series of reports, culminating in the **Belmont Report**, which was published in the *Federal Register* in April 1979. That report forms the basis for current regulations controlling research in the United States.

The Belmont Report enshrined three core principles:

1. Research participants must be informed of the research that is being done on them. They must be given adequate information about that research, about the potential dangers it presents, and about any personal benefit they may receive from it. They must neither be bullied into participating nor given any undue enticement that might lead them to disregard their own interests. The basic principle here is **respect for persons**.

**THINK ABOUT IT**  
What could Humphreys have done to protect his informants? Did he need to deceive them for his project to succeed?

2. Investigators must minimize the harm done to participants and minimize the risks that those participants run, both during and after the study. The benefits of the study must significantly outweigh those harms and risks. The basic principle here is **beneficence**.
3. Investigators must ensure that their research procedures are reasonable, non-exploitative, and administered fairly—with particular attention to making sure that they protect vulnerable or less-powerful populations. So, for example, research may not be done on prisoners unless it has a direct connection to the criminal justice or prison system; prisoners cannot be used in research just because they are a handy population. The same is true of people who are hospitalized, the mentally ill, and so on. Similarly, children are a protected class. Both parents and the children themselves must assent to participation. All research on these protected classes must be approved in advance by an independent review board. The basic principle here is **justice**.

These principles have had great influence worldwide. They are now a required part of any U.S. federally funded research; they are also required of any research carried out by organizations that receive U.S. funding of any sort.

### Institutional Review Boards

The Belmont Report is the basis for the current system of **Institutional Review Boards (IRBs)**, which must approve all U.S.-based medical and social scientific research using human subjects. All universities have them, as do all public research institutions and most private ones. Other countries have similar requirements, though the details vary from one place to another.

The bottom line is that you have to demonstrate that your research is ethical. You have to show that you aren't hurting anyone by doing it and that you are specifically not endangering vulnerable populations. Or, if you are putting people at risk, you have to show that the value of what you might learn outweighs the potential harm. You also have to minimize those harms. Typically, this involves taking a short training program, thinking through your research carefully, and then writing a clear research proposal for your organization's IRB.

This is actually a good thing. First, it requires you to think through your research more carefully than you might otherwise. IRBs are typically staffed by experienced researchers, who will often catch research flaws that you might have overlooked and will suggest ways to minimize dangers to your participants that might have escaped your attention. Writing a clear research proposal and showing it to experts is always a good thing.

Second, IRB approval may encourage people to participate in your study. Even if you are working with nature or animals, you need people's cooperation. If you can say that your research has passed ethical examination, people are more likely to help you out.

Third, it forces you to confront a key question: “Is my research worth doing?” Usually, the answer is yes, but sometimes it is not. It is far better to discover this early on, before you have sunk too much labor into a project that is not worthwhile.

You’ll note that I’ve been talking about people. That’s because human-subjects research calls for special cautions. Animal research does, too, and IRBs have special procedures for dealing with research on animals. The list is long and specifically designed to prevent the abuses common in the recent past. Among other things, the research benefits for animal or human health or for social welfare must significantly outweigh any suffering the research causes. Laboratory animals must be acquired legally, cared for well, and not be subjected to unnecessary harm or pain. Lab studies must have the potential for significant expansions of knowledge, more so when animals must suffer or die as by-products of the investigations. Research on animals in the wild must not interfere with natural animal behavior. Researchers must recognize that their own presence could harm wild populations. The knowledge that studies might gain must help protect or manage the target species; any harm done to individuals must help the species as a whole.

In a sense, these goals are the same as the second and third goals articulated by the Belmont Report for research on human subjects. Research animals are to be treated with both beneficence and justice. The first of these goals minimizes risks to the research subjects; the second ensures reasonable, nonexploitative, and well-thought-out research procedures. Both call for the benefits of additional knowledge to outweigh whatever harm the research causes.

Whether investigating animals or people, researchers have to make sure that their data collection methods do not unduly harm their research subjects. We’ll explore how this works in practice at the end of each chapter in Part II. There, we will see how each of the research examples chose to maximize the benefit and minimize the harm it caused.

## Review Questions

1. How does knowing the type of data you need help you to choose a data collection method?
2. What are the respective strengths and weaknesses of surveys versus interviews? What kinds of data are best collected by each method?
3. What are the differences between detached observation and participant observation?
4. What are the differences between the kinds of interviews listed in Table 4.1?
5. What are the strengths and weaknesses of the methods that can be used to collect data about hidden social patterns?
6. What role do Institutional Review Boards play in the research process? How can they help your research be better than it might otherwise be?

The open-access Student Study Site at [study.sagepub.com/spickard](http://study.sagepub.com/spickard) has a variety of useful study tools, including SAGE journal articles, video & web resources, eFlashcards, and quizzes.

## Notes

1. Or animals or natural systems. The table works for designing both social science and natural science research. Social science research is much more complicated, however, as it involves so many more types of data. Natural scientists design their research using the same six steps. They don't, however, have to take into account such things as what the tigers, atoms, or blood cells think about being research subjects. Social scientists do.
2. Sociologists traditionally used the term "participant observation," and anthropologists use the term "ethnography," though the latter term is now used across several disciplines. Both involve the direct observation of human communities and a personal engagement with the people whom one is observing.
3. Benjamin Seibold, "Traffic Ghost Hunting," *Nautilus Magazine* 3, July 2013.
4. James Spickard, "Ritual, Symbol, and Experience: Understanding Catholic Worker House Masses," *Sociology of Religion* 66 (2005): 337–358; Meredith McGuire and James Spickard, "Narratives of Commitment: Social Activism and Radical Catholic Identity," *Temenos: Studies in Comparative Religion* 37–38 (2003): 131–150.
5. Joseph Bensman and Arthur J. Vidich, *The New American Society: The Revolution of the Middle Class*. Quadrangle, 1971.
6. McGuire and Spickard, "Narratives of Commitment."
7. Most people use the terms *questionnaire* and *survey* interchangeably, though this is not quite correct. A questionnaire is a list of questions you ask people. They are typically short and easy to answer. A survey involves asking that list of questions to a select set of people—either to everyone in a particular group or to a sample that represents the group—so that you can tell what people in that group think. The survey is the process, and the questionnaire is the tool. I'll use the term *survey* from here on.
8. Ethnographers typically spend long periods of time living with groups of people, observing their social lives, shared activities, and habits, and interviewing them about their shared beliefs. Sociologists sometimes call this activity "participant observation." See the explanation at the beginning of this chapter.
9. See, for example, Hervé Varenne, *Americans Together: Structured Diversity in a Midwestern Town*. New York: Teacher's College Press, 1977. Varenne was a French anthropologist who

studied American cultural beliefs about individualism, noting that Americans almost universally thought of themselves as individualistic, despite doing nearly everything together.

10. Kristen Fyfe, *Wolves in Sheep's Clothing: A Content Analysis of Children's Television*, 2006. Retrieved from [www.parentstv.org/PTC/publications/reports/childrensstudy/childrensstudy.pdf](http://www.parentstv.org/PTC/publications/reports/childrensstudy/childrensstudy.pdf); Catherine Lutz and Jane Collins, *Reading National Geographic*. University of Chicago Press, 1993; Adrienne Redd, *Fallen Walls and Fallen Towers: The Fate of the Nation in a Global World*. Nimble Books, 2010.
11. See Norman Fairclough, *Analysing Discourse: Textual Analysis for Social Research*. Routledge, 2003; Louise Phillips and Marianne Jørgensen, *Discourse Analysis as Theory and Method*. Sage, 2002.
12. Cindy Myers, "Talking Poverty: Power Arrangements in Poverty Discourse," PhD dissertation, Program in Human and Organizational Development, Fielding Graduate Institute, 2005.
13. See Kim Cameron and Robert Quinn, *Diagnosing and Changing Organizational Culture*, 2nd ed. Jossey-Bass, 2005. This theory resembles one developed years earlier by the anthropologist Mary Douglas. It is best summarized in her book *How Institutions Think*. Syracuse University Press, 1986.
14. Available from [www.ocai-online.com](http://www.ocai-online.com).
15. For an extended description, see Amedeo Giorgi's *The Descriptive Phenomenological Method in Psychology*. Duquesne University Press, 2009.
16. Doubleday, 1966, and Doubleday, 1959, respectively.
17. The 2004 film *Kitchen Stories* gives a hilarious image of the pitfalls of detached observation research. I recommend it highly.
18. John Van Maanen, *Pledging the Police: A Study of Selected Aspects of Recruit Socialization in a Large, Urban Police Department*. PhD thesis, University of California at Irvine, 1972. See also John Van Maanen, "The Asshole," pp. 221–238 in P. K. Manning and J. Van Maanen (eds.), *Policing: A View From the Streets*. Random House, 1978. Van Maanen was open about his research project. His informants knew that he was not a regular officer but was interested in studying police culture from the inside.
19. My first ethnographic project—a study of a new Japanese church—took 2 years, with a follow-up a couple of decades later. I spent 13 years on a later project, a study of a network of religious social activists. I did not spend full time in the field, though. See James Spickard, "Globalization and Religious Organizations: Rethinking the Relationship Between Church, Culture, and Market," *International Journal of Politics, Culture, and Society* 18 (2004): 47–63; "Ritual, Symbol, and Experience: Understanding Catholic Worker House Masses," *Sociology of Religion*, 66 (2005): 337–358.

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20. Liz Morrish, "A Feminist's Response to the Technologization of Discourse in British Universities," *European Journal of Women's Studies* 7 (2000): 229–238.
21. Norman Fairclough, "Critical Discourse Analysis and the Marketisation of Public Discourse," pp. 130–166 in *Critical Discourse Analysis: The Critical Study of Language*, 2nd ed., Routledge, 2010.
22. Barney G. Glaser and Anselm L. Strauss, *Awareness of Dying*, Aldine, 1965; *The Discovery of Grounded Theory*, Aldine, 1967.
23. On the distinction between middle-range and grand theories in sociology, see Robert K. Merton, "On Sociological Theories of the Middle Range," pp. 39–53 in R. K. Merton, *Social Theory and Social Structure*. Free Press, 1949.
24. James H. Jones, *Bad Blood: The Tuskegee Syphilis Study*. Free Press, 1981.
25. By the end of the study, 128 of the 399 infected men had died of syphilis or related complications, 40 of their wives had been infected, and 19 of their children were born with congenital syphilis.
26. Laud Humphreys, *Tearoom Trade: Impersonal Sex in Public Places*. Duckworth, 1970. I am told that one of the "tearooms" was in the public park across the street from my university office.
27. Peter Monaghan, "Sociologist Is Jailed for Refusing to Testify About Research Subject," *Chronicle of Higher Education*, May 36, 1993, p. 10.