science forgets this and elevates the idea of methods to a fetish).

- *Ethical, political and policy questions.* Here we ask questions about the *point* of doing the research and consider what consequences it might have: for us, for our research subjects, and even for the wider world. All sociology is embroiled with politics and ethics: if it looks like it is being neutral, you may well want to be suspicious.

The discussion in this chapter will be framed by these questions. You can use them as a guide for thinking about your own research projects. But they are only a guide, and suggestions for taking them further will – as usual – be found at the end of the chapter.

What is a sociological 'truth'? Matters of epistemology

A key question to ask of social investigation is a very hard one: 'What kind of truth am I trying to produce?' This raises questions of **epistemology**, *that branch of philosophy that investigates the nature of knowledge and truth.* Our opening concern is to realise that there are different kinds of 'truth'.

People's 'truths' differ the world over, and we often encounter 'facts' at odds with our own. Imagine being a volunteer with Voluntary Service Overseas (VSO) and arriving in a small, traditional village in Africa. With the job of helping the local people to grow more food, you take to the fields, observing a curious practice: farmers carefully planting seeds and then placing a dead fish directly on top of each one. In response to your question, they reply that the fish is a gift to the god of the harvest. A local elder adds sternly that the harvest was poor one year when no fish were offered as gifts.

From that society's point of view, using fish as gifts to the harvest god makes sense. The people believe in it, their experts endorse it, and everyone seems to agree that the system works. But, with scientific training in agriculture, you have to shake your head and wonder. The scientific 'truth' in this situation is something entirely different: the decomposing fish fertilise the ground, producing a better crop.

Our VSO worker example does not mean, of course, that people in traditional villages ignore what their senses tell them, or that members of technologically advanced societies reject non-scientific ways of knowing. A medical researcher using science to seek an effective treatment for cancer, for example, may still practise her religion as a matter of faith; she may turn to experts when making financial decisions; and she may derive political opinions from family and friends. In short, we all embrace various kinds of truth at the same time.

But science represents a very distinctive way of knowing, and one that has come to dominate in the modern Western world.

Common sense versus scientific evidence

Scientific evidence sometimes challenges our common sense. Here are four statements that many people might assume to be 'true', even though each is at least partly contradicted by scientific research.

1 *Poor people are far more likely than rich people to break the law.* Watching a crime show on TV, one might well conclude that police arrest only people from 'bad' neighbourhoods. And, as Chapter 17 explains, poor people are arrested in disproportionate numbers. But research also reveals that police and prosecutors are more likely to treat apparent wrongdoing by well-to-do people more leniently. Further, some researchers argue that our society drafts laws in such a way as to reduce the risk that affluent people will be criminalised.

2 *We now live in a middle-class society in which most people are more or less equal.* Data presented in Chapter 9 show that a very small group of people throughout the world control wealth. If people are equal, then some are much 'more equal' than others.

3 *Differences in the behaviour of females and males reflect 'human nature'.* Much of what we call 'human nature' is created by the society in which we are raised, as Chapter 5 details. Further, as Chapter 12 argues, some societies define 'feminine' and 'masculine' very differently from the way we do.

4 *Most people marry because they are in love.* To members of our society, few statements are so self-evident. But, surprising as it may seem, research shows that, in most societies, marriage has little to do with love. Chapter 18 explains why.

These examples confirm the old saying that 'It's not what we don't know that gets us into trouble as much as the things we *do* know that just aren't so.' We have all been brought up believing conventional truths, bombarded by expert advice, and pressured to accept the opinions of people around us. Sociology teaches us to evaluate critically what we see, read and hear. Like any way of knowing, sociology has limitations, as we shall see. But sociology gives us the tools to assess many kinds of information.

The two sociologies: positivist and humanistic sociologies

The trouble is that precisely what is meant even by 'science' is not agreed upon by philosophers of knowledge. Traditionally, they take one of two views: positivist or humanist (often called interpretivist).

Positivism is *a logical system that bases knowledge on direct, systematic observation*. It usually seeks out law-like statements of social life that can be tested. The work of Durkheim on suicide introduced in Chapter 1 would be an instance of this. Scientific knowledge rests on **empirical evidence** (for Durkheim, recall, these were suicide rates), meaning *information we can verify with our senses*. But even here there is controversy among philosophers over the true nature of science, as we shall soon see.

The second position is interpretivism or humanism. **Humanist epistemology** sees that studying the human world is very different from studying the physical, biological or material world. There is a focus on the human and the symbolic. As such, social science must produce a different kind of knowledge, one that seeks to understand meanings. Research in this tradition will look at the empirical world (as in positivism) but will highlight the importance of understanding and interpretation.

Below, we will look at these two basic positions in a little more detail.

The positivist baseline

Positivist sociologists apply science to the study of society in much the same way that natural scientists investigate the physical world. Whether they end up confirming a widely held opinion or revealing that it is completely groundless, sociologists use scientific techniques to gather empirical evidence. The following sections of this chapter introduce the major elements of positivist investigation.

The ideal of objectivity

Assume that ten writers who work for a magazine in Amsterdam are collaborating on a story about that city's best restaurants. With their editor paying, they head out on the town for a week of fine dining. Later, they get together to compare notes. Do you think one restaurant would be everyone's clear favourite? That hardly seems likely.

In scientific terms, each of the ten reporters probably operationalises the concept 'best restaurant' differently. For one, it might be a place that serves Indonesian food at reasonable prices; for another, the choice might turn on a superb view of the canals; for yet another, stunning decor and attentive service might be the deciding factor. Like so many other things in life, the best restaurant turns out to be mostly a matter of individual taste.

Personal values are fine when it comes to restaurants, but they pose a challenge to scientific research. On the one hand, every scientist has personal opinions about the world. On the other, science endorses the goal of **objectivity**, *a state of personal neutrality in conducting research*. Objectivity in research depends on carefully adhering to scientific procedures in order not to bias the results. Scientific objectivity is an ideal rather than a reality, of course, since complete impartiality is virtually impossible for any researcher to achieve. Even the subject a researcher selects to study and the framing of the questions are likely to grow out of personal interest. But scientists cultivate detachment and follow specific methods to lessen the chance that conscious or unconscious biases will distort their work. As an additional safeguard, researchers should try to identify and report their personal leanings to help readers evaluate their conclusions in the proper context.

The influential German sociologist Max Weber expected personal beliefs to play a part in a sociologist's selection of research topic. Why, after all, would one person study world hunger, another investigate the effects of racism, and still another examine one-parent families? But Weber (1958; orig. 1905) warned that even though sociologists select topics that are *value-relevant*, they should conduct research that is *value-free* in their pursuit of conclusions. Only by being dispassionate in their work (as we expect any professional to be) can researchers study the world *as it is* rather than telling others how they think *it should be*. In Weber's view, this

detachment was a crucial element of science that sets it apart from politics. Politicians, in other words, are committed to a particular outcome; scientists try to maintain an open-minded readiness to accept the results of their investigations, whatever they may be.

By and large, sociologists accept Weber's argument, though most concede that we can never be completely value-free or even aware of all our biases. Moreover, sociologists are not 'average' people: most are white people who are highly educated and more politically liberal than the population as a whole (L. Wilson, 1979). Sociologists need to remember that they, too, are affected by their own social backgrounds.

One strategy for limiting distortion caused by personal values is **replication**, *repetition of research by other investigators*. If other researchers repeat a study using the same procedures and obtain the same results, they gain confidence that the original research (as well as their own) was conducted objectively. The need for replication in scientific investigation is probably the reason why the search for knowledge is called *research* in the first place.

In any case, keep in mind that the logic and methodology of science hold out no guarantee that we will grasp objective, absolute truth. What science offers is an approach to knowledge that is *self-correcting* so that, in the long run, researchers stand the best chance to overcome their own biases and achieve greater understanding. Objectivity and truth, then, lie not in any particular research method, but in the scientific process itself.

Some limitations of scientific sociology

The first scientists probed the operation of the natural world. Many sociologists use science to study the social world; however, the scientific study of people has several important limitations.

1 *Human behaviour is too complex to allow sociologists to predict precisely any individual's actions.* Astronomers calculate the movement of planets with remarkable precision, announcing years in advance when a comet will next pass near the earth. But planets and comets are unthinking objects; humans, by contrast, have minds of their own. Because no two people react to any event in exactly the same way, the best that sociologists can do is to show that categories of people typically act in one way or another. This is no failing of sociology; it is simply consistent with the nature of our task: studying creative, spontaneous people.

2 *Because humans respond to their surroundings, the mere presence of a researcher may affect the behaviour being studied.* An astronomer gazing at the moon has no effect whatever on that celestial body. But people usually react to being observed. Some may become anxious, angry or defensive; others may try to 'help' by providing the answers or actions they think researchers expect of them.

3 *Social patterns change constantly; what is true in one time or place may not hold true in another.* The laws of physics apply tomorrow as well as today; they hold true all around the world. But human behaviour is too variable for us to set down immutable sociological laws. In fact, some of the most interesting sociological research focuses on social diversity and social change.

4 *Because sociologists are part of the social world they study, being value-free when conducting social research can be difficult.* Barring a laboratory mishap, chemists are rarely personally affected by what goes on in test tubes. But sociologists live in their 'test tube' – the society they study. Therefore, social scientists face a greater challenge in controlling – or even recognising – personal values that may distort their work.

5 *Human behaviour differs from all other phenomena precisely because human beings are symbolic, subjective creatures.* Human beings – unlike planets or molecules – are always constructing meaning. And what marks us off from other animals is the elaborate symbolic systems we weave for ourselves. Therefore, sociologists cannot simply study societies from outside; they have to take on board ways of 'entering' these worlds of meaning.

The humanistic stance: the importance of subjective interpretation

As we have explained, scientists tend to think of 'subjectivity' as 'bias' – a source of error to be avoided as much as possible. But there is also a good side to subjectivity, since creative thinking is vital to sociological investigation in three key ways.

First, science is basically a series of rules that guide research, rather like a recipe for cooking. But just as more than a recipe is required to make a great chef, so

scientific procedure does not, by itself, produce a great sociologist. Also needed is an inspired human imagination. After all, insight comes not from science itself but from the lively thinking of creative human beings (Nisbet, 1970). The genius of physicist Albert Einstein or sociologist Max Weber lay not only in their use of the scientific method but also in their curiosity and ingenuity.

Second, science cannot account for the vast and complex range of human motivations and feelings, including greed, love, pride and despair. Science certainly helps us gather facts about how people act, but it can never fully explain the complex meanings people attach to their behaviour (Berger and Kellner, 1981).

Third, we also do well to remember that scientific data never speak for themselves. After sociologists and other scientists 'collect the numbers', they face the ultimate task of *interpretation* – creating meaning from their observations. For this reason, good sociological investigation is as much art as science.

Sociology and the humanities

The recognition of all these limitations leads many sociologists to adopt a somewhat different stance towards their study. They do not claim to be scientists as above, but instead try to make sociology a more humanistic discipline concerned with understanding.


(a)


(b)

Being observed. A basic lesson of social research is that being observed affects how people behave. Researchers can never be certain precisely how this will occur; while some people resent public attention, others become highly animated when they think they have an audience.

Source: (a) Steve McCurry/Magnum Photos; (b) © Jenny Matthews/Alamy.

Q **Does the camera ever tell the truth? How do people behave in front of cameras? What does this suggest to you as a major problem for all research?**