READING FOR LECTURE 8

Kwame Anthony Appiah, Chapter 3 of *Cosmopolitanism* (W. W. Norton & Co, 2007).

In the previous chapter of *Cosmopolitanism*, Appiah sketched the Positivist's distinction between facts and values. There, he focused on values. Here, he focuses on facts. One reason for the Positivist's skepticism about values was that, when people disagree about values, it's hard to decide who's right. But might that be true of facts, as well? Appiah argues that the answer is "yes".

FACTS ON THE GROUND

Living with Spirits

Appiah begins by describing Asante beliefs about spirits and witchcraft. These beliefs are not merely symbolic. They inform people's decisions about practical matters.

Late one evening, at home in Ghana many years ago, I was watching television with my father. As the broadcast day came to a close, the Ghana Broadcasting Corporation played the national anthem. My father loved hymns, and so he sang along. "God bless our homeland, Ghana…" As the singing ended and the screen faded to the test card, he remarked that

he was glad that the government had modified the words of the independence national anthem, which I had learned in primary school. That one began, "Lift high the flag of Ghana." I was a newly minted philosophy graduate at the time, who had recently read John Rawls's modern liberal classic, *A Theory of Justice,* and my response was to say that the old anthem had the advantage that you could sing along with it happily without believing in God. My father laughed. "Nobody in Ghana is silly enough not to believe in God," he said.

That's not how I would have put it; but it's true that Ghana's atheists could hold their meetings in a phone booth. Almost everybody in Ghana believes not just in a powerful divine creator but in a whole range of other spirits. One reflection of this belief is that at funerals, naming ceremonies, marriages, confirmations, birthday parties—indeed, at almost any social gathering—people of all religions will pour libations to their ancestors. When they open a bottle of whisky or gin or schnapps, they will pour some on the ground and ask various dead ancestors, by name, to accept the offering and to keep watch over the interests of the *abusua,* the matriclan. This is not just a symbolic gesture. While they don't think the ancestors literally need liquor, they do think they, and other largely invisible spirits, can hear and respond by helping their living relatives in everyday life. My father—a member of one of the London Inns of Court; an elder in the Methodist church of Ghana; a man whose favorite bedside reading, apart from the Bible, was Cicero—certainly believed this. And he wasn't embarrassed by the fact. His autobiography is full of episodes in which he sought and received the assistance of spirits. When he opened a bottle of whisky at home, after pouring off a little onto the floor of the sitting room, he would speak some words to Akroma-Ampim, an eighteenth-century Asante general who laid the foundations of the family fortune, and Yao Antony, my great-great-uncle (both of whose names, as it happens, I bear), as well as to my great-great-aunt, Yao Antony's sister.

If this were all symbolic, we could suppose that these acts expressed family values or something of the sort. The trouble is the fundamental belief wasn't remotely symbolic. If you don't think your late great-uncle could hear you and help you in your doings, you disagree with my father about the facts.

Here's another thing about which you are likely to disagree with my Ghanaian kin. Most of them believe in witchcraft. They think that there are certain evil people—women and men—who have the power to harm others they dislike without using ordinary everyday means. When my father died, one of my sisters was convinced that an aunt of ours might be practicing witchcraft against us. She wouldn't eat any of the food that our aunt sent us during the period of mourning, and she wouldn't let the rest of the family eat it either. But she thought it was fine for other people in the household to eat it. It wasn't poisoned. Witchcraft medicines know the difference between the people they're aimed at and the ones they're not; the food would harm only us. Since my aunt was supposed to be a powerful witch, this wasn't the only danger we faced. So it was fortunate that there are also practitioners of good witchcraft—many of them Muslim *malaams*, actually—who could counteract bad witchcraft. My sister made sure we bought a white ram to be sacrificed to protect us.

Asante beliefs about spirits and beliefs about witchcraft are extensive, complex, and interconnected. And, as you'd expect, not everybody believes exactly the same things about them. Some evangelical Christians identify the traditional spirits—whose shrines and priests you will find scattered through the country—with devils or with what the New Testament, in the King James translation, calls "principalities and powers." Not so my father, who took his appeals to spirits to be consistent with his Methodism. You could say that most people in Asante believe in a sort of theory, in which the world contains many spirits and invisible

forces that work, like witchcraft, to affect human life. And, since some of the theory is about invisible personal beings—to whom you can pray for help—you might also say that it was part of Asante religion.

Of course, the place where I grew up is, in this way, like most places in the world. Even where the great world religions—Christianity, Islam, Hinduism, Buddhism—have come in, they overlie a set of traditions that include all kinds of invisible spirits who can be invoked both to do good and to do harm.

Are the Asante beliefs about spirits and witchcraft *irrational?* Some people will answer "yes". They will say that, if subject to careful scientific scrutiny, everyone should come to agree that the beliefs are false. But in the rest of the chapter, Appiah argues that this is a mistake. Disagreements about facts can be no easier to resolve than disagreements about values.

Now, the Positivist is likely to contrast these beliefs with modern scientific views. "These traditional religions are not just false, they are irrational: anyone who exposed them to the rigorous examination that scientists practice would be forced to give them up." This is, in fact, very far from evident. In the last chapter, I argued that values aren't as flighty as the Positivist supposes. Here I want to suggest that facts aren't quite so solid. Not because I'm a skeptic about truth. (I once wrote a book called *For Truth in Semantics*.) But because finding the truth isn't just a matter of having open eyes and a level head.

Arguing with Akosua

To illustrate his argument, Appiah sticks with his example of the Asante belief in witchcraft. You might think it would be easy to convince the Asante that there is no such thing as witchcraft. But would it really be so easy? Appiah thinks it through.

You would, he says, have to do two things: first, persuade them that their theory makes incorrect predictions; second, persuade them that your theory does better. But both tasks are more difficult than you might expect.

Take the simple-seeming question of whether you can be harmed by witchcraft. How would you go about persuading one of my Asante kinfolk that it could not be? People do get sick for unaccountable reasons all the time, do they not? Many of them have reason to think that there are people who dislike them. So that once you have the idea of witchcraft, there will be plenty of occasions when the general theory will seem to be confirmed. To rule out the theory of witchcraft, you would first have to understand it better, and then you would have to persuade my relatives both that the theory gets it wrong over and over again and that you have a better story. That could take a very long time. In a real cross-cultural encounter of this sort, you would be invited to explain all sorts of facts you were unaware of, whose explanations you did not know. Akosua, your Asante interlocutor, has an aunt who fell ill last year, and everyone knows that it was caused by witchcraft by her daughter-in-law. The family went to a *malaam* and slaughtered a sheep. She got better. Akosua wants to know why her aunt got better, if the sheep had nothing to do with it; why she

got ill, if there's no witchcraft. And, of course, while you think that these questions have answers, you don't know for sure what they are.

On the other hand, you have to persuade Akosua of the existence of tiny, invisible atoms, strung together to make viruses, particles so small that you cannot see them with the most powerful magnifying lens, yet so potent that they can kill a healthy adult. Consider how long it took to persuade European scientists that this was so, how complex the chain of inferences that led first to the germ theory of disease and then to the identification of viruses. Why should anyone believe this story, just because you said so? And could you—and I mean you, not some biology professor—provide her with convincing evidence? Akosua might well be willing to do one of the experiments you propose. You might, for example, try to show that there's no correlation between whether someone who is thought to be a witch hates you and whether you fall sick. But what if there *were* such a correlation? If Akosua's view made the right prediction—that people who are hated by witches get sicker more often than people who aren't—you wouldn't come to believe in witchcraft. You'd have an alternative explanation. (People who think they are hated by powerful witches might well be more likely to fall ill, mightn't they? Something to do with stress, perhaps?) So it shouldn't surprise you that when your predictions are borne out, she has her explanations, too.

Appiah briefly makes a point which he will return to in more detail later: "in belief, as in everything else, each of us must start from where we are."

There's an oft-told anecdote about a medical missionary in a remote place, who watches, in horror, as people give untreated well water to their babies. The children regularly get diarrhea, and many of them die. The missionary

explains that, even though the water looks clear, there are tiny, invisible creatures in it that make the children sick. Fortunately, she says, if they boil the water, it will kill these bacteria. A month later she's back, and they're still giving the babies the dirty water. After all, if a stranger came into your community and told you that your children got influenza because of witchcraft, would you respond by going out and slaughtering a sheep? Then the missionary has another idea. Look, she says, let me show you something. She takes some water and boils it. See, she says, there are spirits in the water, and when you put it on the fire they flee: those bubbles you see are the spirits escaping, the spirits that are making your children sick. Now boiling water makes sense. Now the babies stop dying. In belief, as in everything else, each of us must start from where we are.

A general strategy of Appiah's in this chapter is to compare and contrast beliefs that (so Appiah suspects) you, the reader, will regard as irrational, with other beliefs that you regard as rational. Is the Asante belief in witchcraft so different from, say, your belief in viruses?

When people get sick for unaccountable reasons in Manhattan, there is much talk of viruses and bacteria. Since doctors do not claim to be able to do much about most viruses, they do not put much effort into identifying them. Nor will the course of a viral infection be much changed by a visit to the doctor. In short, most appeals in everyday life to viruses are like most everyday appeals to witchcraft. They are supported only by a general conviction that sickness can be explained, and the conviction that viruses can make you sick.

If you ask most people in Manhattan why they believe in viruses, they will say two kinds of things: First, they will appeal to authority. "Science has shown," they will say, though if you ask them how science showed it, you will pretty quickly reach an impasse (even with scientists, by the way, unless they happen to be virologists unusually curious about the history of medicine). Second, they will point to phenomena—the spread of HIV or the common cold, the death of their great-aunt last winter, a picture of a virus they once saw in a magazine—where the viral theory explains what happened.

Similarly, in Kumasi, people who are asked why they believe in witchcraft will appeal to authority, too. "Our ancestors taught us about it." And they will then go on to tell you of cases of witchcraft they have seen or heard of, filling in for you all the things that it explains. Sir Edward Evans-Pritchard, one of the greatest anthropologists of the twentieth century, wrote a wonderful book called *Witchcraft, Oracles and Magic among the Azande*, about a people of that name who live in the Sudan. Having explained their ideas about witchcraft in great detail, he observes at one point that sometimes, in the evenings, when he saw a flash of flame in the bush around the Azande settlement where he was living, he found himself thinking, "Look, a witch." Of course, he didn't believe it, really. He knew it was probably someone from the village going off to relieve himself, carrying a flaming torch to guide him on his way. But what he was teaching us is that what you see depends on what you believe. What it's reasonable for you to think, faced with a particular experience, depends on what ideas you already have.

Duhem's Discovery

Duhem's Thesis is that there are always many theories compatible with any body of evidence. It follows from Duhem's Thesis that, no matter how much evidence we collect, it will not determine which theory is true. So, it seems, whatever theory we believe, someone else might reasonably believe a rival theory. That, so Appiah argues, is a problem for Positivism.

That's as true of Western science as of traditional religion. In the early twentieth century, the French physicist Pierre Duhem noticed an interesting fact about the way scientists behave. When they do experiments or collect data to support their theories, other scientists, often those attached to different theories, deny that the evidence shows any such thing. The objections can be of many different kinds. They might say, for example, that the experiment really hasn't been done properly. (Your test tubes were contaminated.) They might say that the so-called data are simply incorrect. (We did the same experiment, and that's not what happened.) Or they could point out that their own theory explained the data just as well. (The theory that life on Earth arrived in the form of basic organisms on a meteorite explains the fossil data just as well as the theory that life evolved by the creation of its basic elements as a result of electrochemical processes in the primeval oceans.) Starting with this observation, he went on to propose a general claim that philosophers know as the Duhem thesis. However much data you have, Duhem said, there will be many theories that explain it equally well. Theories, to use the jargon, are underdetermined by the evidence.

For Positivism, the underdetermination of theory by evidence is a problem. If science is rational, then we want the process of scientific theorizing to give us reasons to believe the theories. And presumably we want to get the best theory we can, given the evidence. But if two people can always reasonably respond with different theories to the same evidence, then something other than reason or evidence must account for their choices. Furthermore, if this is true however much evidence we have, *there will always be more than one possible reasonable account of the facts*. And that will mean that no amount of scientific exploration will allow us to settle on a single picture of the way things are. If Positivism under-states the place of reason in the justification of desires, and thus of values, it overstates the power of reason in the justification of belief, and thus of facts.

Underdetermination of theories by evidence is not the only problem for Positivism, according to Appiah. The Positivist also assumes, wrongly, that there is a neat separation of data, on the one hand, and theories on the other. In fact, so Appiah suggests, data and theories are tangled up: if people disagree about *theories*, they may well disagree about the *data* too.

Underdetermination is worrying enough. But a later student of scientific thinking, the philosopher N. R. Hanson, noticed something equally troubling for the Positivist view about scientific thinking. The way the Positivists thought about getting evidence for our theories was this. First you collect the data; then you see what theories it supports. Observation and experiment, the collection of the basic facts, was supposed to be used as an independent support for theories. What Hanson noticed was that the data never came free of theoretical commitments. When Galileo said

that he saw through the telescope that the moon had mountains, he was assuming—as some of his opponents at the time pointed out—that telescopes work just as well in space as on Earth. That happens to be right. But how did he know? No one, at that point, had ever taken a telescope up into space to check. He just theorized that it was so. And, in fact, it turns out to be enormously difficult—Hanson thought it was literally impossible—to present data in language that isn't infused with theoretical ideas.

It doesn't matter for our purposes whether Hanson was right about the impossibility of separating theory and data, because what's certain is that we don't. When scientists looked at the tracks of charged particles in photographs of cloud chambers—this was the scientific example that Hanson knew best—they said things like, "Look, there's the path of an electron." That's what was reasonable for them to believe. Yet for the rest of us, who don't know the relevant physics or understand how the cloud chamber works, it all looks just like a fuzzy line in a photograph. Hanson's insight was that what it's reasonable for you to believe, as you look out on the world, depends both on what you believe already and on what ideas you have been introduced to. If you don't know about electricity—if you don't have the idea of it—you'll have no reason to wonder, as Benjamin Franklin wondered, whether that is what lightning is made of.

Appiah now develops his earlier point: that "in belief, as in everything else, each of us must start from where we are". To test any beliefs, you must take other beliefs for granted. And what beliefs you end up with will depend on what beliefs you started with.

If what it's reasonable to believe depends on what you believe already, however, then you can't check the reasonableness of all your beliefs. You respond to new evidence in the light of what you already believe, and that gives you new beliefs. Were the original beliefs reasonable? Well, you can test them, but only by taking yet other beliefs for granted. You can't get into the game of belief by starting from nothing. And, of course, we all grow up in a family and society that start us out with a great raft of beliefs that we could not have developed on our own. Concepts and ideas develop in our upbringing. Some concepts and ideas are based in our biological natures—like color concepts, or the idea that there are physical objects in the world. But some ideas we wouldn't be using if we hadn't been given them—like electron, gene, democracy, contract, superego, witchcraft.

Appiah concludes from this that the Positivist's distinction between facts and values is much less sharp than they realize.

There is nothing unreasonable, then, about my kinsmen's belief in witchcraft. They think only what most people would think, given the concepts and beliefs they inherited; if you grew up with their beliefs and had their experiences, that is what you would believe, too. (Nor is belief in the agency of supernatural beings at all alien to the industrialized West: more than half of Americans believe in angels; roughly 40 percent think it's likely that Jesus will return to earth to render judgment sometime in the next half century.)

Is there *any* sense, then, in which our belief that there aren't any witches is in better standing than the Asante belief that there are witches? Appiah

seems to suggest that there is, despite his earlier claim that "there is nothing unreasonable" about the Asante beliefs. He concludes the chapter by sketching what that sense is.

Those of us who were given scientific educations have a significant advantage. It's not that we are individually more reasonable; it's that we have been given better materials with which to think about the world. The institutions of science mean that the theories and ideas that scientists have developed are far superior to the ones that we human beings had before the growth of modern science. If we borrow their concepts, we are plugging ourselves into reality in ways that will make it easier for us to understand and to master the world. The best traditional predictors of the weather in Asante—and that is something that matters for a farming civilization—are simply not as good as the ones that the National Meteorological Office now provides, using modern scientific models. Who knows where we would be with the HIV/AIDS pandemic in Africa if we did not have modern scientific tools: tests for the virus, drugs for treatment, the understanding that predicts that condoms will prevent transmission of the disease? The advance of reason in the industrialized world is not the product of greater individual powers of reasoning. It is the result of the fact that we have developed institutions that can allow ordinary human beings to develop, test, and refine their ideas. What's wrong with the theory of witchcraft is not that it doesn't make sense but that it isn't true. And to find that out—in the way scientists gradually developed our modern understanding of disease—requires enormous, organized institutions of research, reflection, and analysis.

There is only one reality, and theories about witchcraft, like the germ theory of disease, are attempts to understand that one reality. Current medical theories of disease don't get everything right: otherwise, when you

went to the doctor you could be guaranteed a diagnosis, a prognosis, perhaps even a cure. When an American gets a fever and assumes he has an infection, he's just doing what people have always done everywhere: he's applying the concepts that his culture has given him for thinking about disease. If, as I believe, this is a better story than a story about witchcraft, it's not because he's a better person. It's because he has the good fortune to live in a society that has spent enormous amounts of human resources to get that better story.

Scientific stories are not the only words we live by. I began with the ways our language of values helps guide us to a shared approach to the decisions that face us all. And one thing that is right in the Positivist picture is this: the methods of the natural sciences have not led to the kind of progress in our understanding of values that they have led to in our grasp of the facts. So we may be able to learn about values from societies where science is less deeply implanted than in ours: if scientific method has not advanced our understanding of values, then its superiority offers no reason to suppose that our understanding of values is superior. In fact, we have every reason to think that we can learn from other peoples, in ways both positive and negative. And if the Positivist asks *us* what guarantee we have that there is always going to be a way of persuading everyone of the value of everything valuable, we can ask *him* what guarantee he has that we can always persuade everyone of the facts. For the question presupposes that facts are in better shape than values here. And, even within the Positivist picture, as Duhem saw, there is no good reason to accept that claim.

That there are many ways of arguing for values of many kinds should be a good deal less puzzling when we recall that there are many kinds of facts for which we must offer different kinds of support, too. Mathematical beliefs can be justified by proofs. Beliefs about the colors of things get support from how they look in ordinary lighting. Psychological beliefs

about other people get support from what they do and say. Beliefs about our own mental lives gain evidence, sometimes, from introspection.

In the end, though, with facts as with values, nothing guarantees that we will be able to persuade everyone else of our view: this is a constraint that cosmopolitans, like everyone else, must accept. The Positivist holds that with facts, when we disagree, one of us has the truth, one of us is underwritten by the way things are, whereas with values, there is nothing to underwrite our claims. But even if we granted this picture, what would entitle us to think that the universe's being determinately one way or another guarantees that we can reach agreement as to which way it is? We enter every conversation— whether with neighbors or with strangers— without a promise of final agreement.