

I Ethics and observation

1. The basic issue

Can moral principles be tested and confirmed in the way scientific principles can? Consider the principle that, if you are given a choice between five people alive and one dead or five people dead and one alive, you should always choose to have five people alive and one dead rather than the other way round. We can easily imagine examples that appear to confirm this principle. Here is one:

You are a doctor in a hospital's emergency room when six accident victims are brought in. All six are in danger of dying but one is much worse off than the others. You can just barely save that person if you devote all of your resources to him and let the others die. Alternatively, you can save the other five if you are willing to ignore the most seriously injured person.

It would seem that in this case you, the doctor, would be right to save the five and let the other person die. So this example, taken by itself, confirms the principle under consideration. Next, consider the following case.

You have five patients in the hospital who are dying, each in need of a separate organ. One needs a kidney, another a lung, a third a heart, and so forth. You can save all five if you take a single healthy person and remove his heart, lungs, kidneys, and so forth, to distribute to these five

patients. Just such a healthy person is in room 306. He is in the hospital for routine tests. Having seen his test results, you know that he is perfectly healthy and of the right tissue compatibility. If you do nothing, he will survive without incident; the other patients will die, however. The other five patients can be saved only if the person in Room 306 is cut up and his organs distributed. In that case, there would be one dead but five saved.

The principle in question tells us that you should cut up the patient in Room 306. But in this case, surely you must not sacrifice this innocent bystander, even to save the five other patients. Here a moral principle has been tested and disconfirmed in what may seem to be a surprising way.

This, of course, was a "thought experiment." We did not really compare a hypothesis with the world. We compared an explicit principle with our feelings about certain imagined examples. In the same way, a physicist performs thought experiments in order to compare explicit hypotheses with his "sense" of what should happen in certain situations, a "sense" that he has acquired as a result of his long working familiarity with current theory. But scientific hypotheses can also be tested in real experiments, out in the world.

Can moral principles be tested in the same way, out in the world? You can observe someone do something, but can you ever perceive the rightness or wrongness of what he does? If you round a corner and see a group of young hoodlums pour gasoline on a cat and ignite it, you do not need to *conclude* that what they are doing is wrong; you do not need to figure anything out; you can *see* that it is wrong. But is your reaction due to the actual wrongness of what you see or is it simply a reflection of your moral "sense," a "sense" that you have acquired perhaps as a result of your moral upbringing?

2. Observation

The issue is complicated. There are no pure observations. Observations are always "theory laden." What you perceive depends to some extent on the theory you hold, consciously or unconsciously. You see some children pour gasoline on a cat and ignite it. To really see that, you have to possess a great deal of knowledge, know about a considerable number of objects, know about people: that people pass through the life stages infant,

baby, child, adolescent, adult. You must know what flesh and blood animals are, and in particular, cats. You must have some idea of life. You must know what gasoline is, what burning is, and much more. In one sense, what you "see" is a pattern of light on your retina, a shifting array of splotches, although even that is theory, and you could never adequately describe what you see in that sense. In another sense, you see what you do because of the theories you hold. Change those theories and you would see something else, given the same pattern of light.

Similarly, if you hold a moral view, whether it is held consciously or unconsciously, you will be able to perceive rightness or wrongness, goodness or badness, justice or injustice. There is no difference in this respect between moral propositions and other theoretical propositions. If there is a difference, it must be found elsewhere.

Observation depends on theory because perception involves forming a belief as a fairly direct result of observing something; you can form a belief only if you understand the relevant concepts and a concept is what it is by virtue of its role in some theory or system of beliefs. To recognize a child as a child is to employ, consciously or unconsciously, a concept that is defined by its place in a framework of the stages of human life. Similarly, burning is an empty concept apart from its theoretical connections to the concepts of heat, destruction, smoke, and fire.

Moral concepts—Right and Wrong, Good and Bad, Justice and Injustice—also have a place in your theory or system of beliefs and are the concepts they are because of their context. If we say that observation has occurred whenever an opinion is a direct result of perception, we must allow that there is moral observation, because such an opinion can be a moral opinion as easily as any other sort. In this sense, observation may be used to confirm or disconfirm moral theories. The observational opinions that, in this sense, you find yourself with can be in either agreement or conflict with your consciously explicit moral principles. When they are in conflict, you must choose between your explicit theory and observation. In ethics, as in science, you sometimes opt for theory, and say that you made an error in observation or were biased or whatever, or you sometimes opt for observation, and modify your theory.

In other words, in both science and ethics, general principles

are invoked to explain particular cases and, therefore, in both science and ethics, the general principles you accept can be tested by appealing to particular judgments that certain things are right or wrong, just or unjust, and so forth; and these judgments are analogous to direct perceptual judgments about facts.

3. Observational evidence

Nevertheless, observation plays a role in science that it does not seem to play in ethics. The difference is that you need to make assumptions about certain physical facts to explain the occurrence of the observations that support a scientific theory, but you do not seem to need to make assumptions about any moral facts to explain the occurrence of the so-called moral observations I have been talking about. In the moral case, it would seem that you need only make assumptions about the psychology or moral sensibility of the person making the moral observation. In the scientific case, theory is tested against the world.

The point is subtle but important. Consider a physicist making an observation to test a scientific theory. Seeing a vapor trail in a cloud chamber, he thinks, "There goes a proton." Let us suppose that this is an observation in the relevant sense, namely, an immediate judgment made in response to the situation without any conscious reasoning having taken place. Let us also suppose that his observation confirms his theory, a theory that helps give meaning to the very term "proton" as it occurs in his observational judgment. Such a confirmation rests on inferring an explanation. He can count his making the observation as confirming evidence for his theory only to the extent that it is reasonable to explain his making the observation by assuming that, not only is he in a certain psychological "set," given the theory he accepts and his beliefs about the experimental apparatus, but furthermore, there really was a proton going through the cloud chamber, causing the vapor trail, which he saw as a proton. (This is evidence for the theory to the extent that the theory can explain the proton's being there better than competing theories can.) But, if his having made that observation could have been equally well explained by his psychological set alone, without the need for any assumption about a proton, then the observation would not have been evidence for the existence of that proton and therefore would not have been evidence for the theory. His making the observation

supports the theory only because, in order to explain his making the observation, it is reasonable to assume something about the world over and above the assumptions made about the observer's psychology. In particular, it is reasonable to assume that there was a proton going through the cloud chamber, causing the vapor trail.

Compare this case with one in which you make a moral judgment immediately and without conscious reasoning, say, that the children are wrong to set the cat on fire or that the doctor would be wrong to cut up one healthy patient to save five dying patients. In order to explain your making the first of these judgments, it would be reasonable to assume, perhaps, that the children really are pouring gasoline on a cat and you are seeing them do it. But, in neither case is there any obvious reason to assume anything about "moral facts," such as that it really is wrong to set the cat on fire or to cut up the patient in Room 306. Indeed, an assumption about moral facts would seem to be totally irrelevant to the explanation of your making the judgment you make. It would seem that all we need assume is that you have certain more or less well articulated moral principles that are reflected in the judgments you make, based on your moral sensibility. It seems to be completely irrelevant to our explanation whether your intuitive immediate judgment is true or false.

The observation of an event can provide observational evidence for or against a scientific theory in the sense that the truth of that observation can be relevant to a reasonable explanation of why that observation was made. A moral observation does not seem, in the same sense, to be observational evidence for or against any moral theory, since the truth or falsity of the moral observation seems to be completely irrelevant to any reasonable explanation of why that observation was made. The fact that an observation of an event was made at the time it was made is evidence not only about the observer but also about the physical facts. The fact that you made a particular moral observation when you did does not seem to be evidence about moral facts, only evidence about you and your moral sensibility. Facts about protons can affect what you observe, since a proton passing through the cloud chamber can cause a vapor trail that reflects light to your eye in a way that, given your scientific training and psychological set, leads you to judge that what you

see is a proton. But there does not seem to be any way in which the actual rightness or wrongness of a given situation can have any effect on your perceptual apparatus. In this respect, ethics seems to differ from science.

In considering whether moral principles can help explain observations, it is therefore important to note an ambiguity in the word "observation." You see the children set the cat on fire and immediately think, "That's wrong." In one sense, your observation is that what the children are doing is wrong. In another sense, your observation is your thinking that thought. Moral principles might explain observations in the first sense but not in the second sense. Certain moral principles might help to explain why it was *wrong* of the children to set the cat on fire, but moral principles seem to be of no help in explaining *your thinking* that that is wrong. In the first sense of "observation," moral principles can be tested by observation—"That this act is wrong is evidence that causing unnecessary suffering is wrong." But in the second sense of "observation," moral principles cannot clearly be tested by observation, since they do not appear to help explain observations in this second sense of "observation." Moral principles do not seem to help explain your observing what you observe.

Of course, if you are already given the moral principle that it is wrong to cause unnecessary suffering, you can take your seeing the children setting the cat on fire as observational evidence that they are doing something wrong. Similarly, you can suppose that your seeing the vapor trail is observational evidence that a proton is going through the cloud chamber, if you are given the relevant physical theory. But there is an important apparent difference between the two cases. In the scientific case, your making that observation is itself evidence for the physical theory because the physical theory explains the proton, which explains the trail, which explains your observation. In the moral case, your making your observation does not seem to be evidence for the relevant moral principle because that principle does not seem to help explain your observation. The explanatory chain from principle to observation seems to be broken in morality. The moral principle may "explain" why it is wrong for the children to set the cat on fire. But the wrongness of that act does not appear to help explain the act, which you observe, itself. The explanatory chain appears to be broken in such a way that

neither the moral principle nor the wrongness of the act can help explain why you observe what you observe.

A qualification may seem to be needed here. Perhaps the children perversely set the cat on fire simply "because it is wrong." Here it may seem at first that the actual wrongness of the act does help explain why they do it and therefore indirectly helps explain why you observe what you observe just as a physical theory, by explaining why the proton is producing a vapor trail, indirectly helps explain why the observer observes what he observes. But on reflection we must agree that this is probably an illusion. What explains the children's act is not clearly the actual wrongness of the act but, rather, their belief that the act is wrong. The actual rightness or wrongness of their act seems to have nothing to do with why they do it.

Observational evidence plays a part in science it does not appear to play in ethics, because scientific principles can be justified ultimately by their role in explaining observations, in the second sense of observation—by their explanatory role. Apparently, moral principles cannot be justified in the same way. It appears to be true that there can be no explanatory chain between moral principles and particular observings in the way that there can be such a chain between scientific principles and particular observings. Conceived as an explanatory theory, morality, unlike science, seems to be cut off from observation.

Not that every legitimate scientific hypothesis is susceptible to direct observational testing. Certain hypothesis about "black holes" in space cannot be directly tested, for example, because no signal is emitted from within a black hole. The connection with observation in such a case is indirect. And there are many similar examples. Nevertheless, seen in the large, there is the apparent difference between science and ethics we have noted. The scientific realm is accessible to observation in a way the moral realm is not.

4. Ethics and mathematics

Perhaps ethics is to be compared, not with physics, but with mathematics. Perhaps such a moral principle as "You ought to keep your promises" is confirmed or disconfirmed in the way (whatever it is) in which such a mathematical principle as " $5 + 7 = 12$ " is. Observation does not seem to play the role in mathematics it plays in physics. We do not and cannot perceive

numbers, for example, since we cannot be in causal contact with them. We do not even understand what it would be like to be in causal contact with the number 12, say. Relations among numbers cannot have any more of an effect on our perceptual apparatus than moral facts can.

Observation, however, *is* relevant to mathematics. In explaining the observations that support a physical theory, scientists typically appeal to mathematical principles. On the other hand, one never seems to need to appeal in this way to moral principles. Since an observation is evidence for what best explains it, and since mathematics often figures in the explanations of scientific observations, there is indirect observational evidence for mathematics. There does not seem to be observational evidence, even indirectly, for basic moral principles. In explaining why certain observations have been made, we never seem to use purely moral assumptions. In this respect, then, ethics appears to differ not only from physics but also from mathematics.

In what follows, we will be considering a number of possible responses to the apparent fact that ethics is cut off from observational testing in a way that science is not. Some of these responses claim that there is a distinction of this sort between science and ethics and try to say what its implications are. Others deny that there is a distinction of this sort between science and ethics and argue that ethics is not really exempt from observational testing in the way it appears to be.

A note on further reading

For a brief argument distinguishing the role of observational evidence in ethics and in science, see R. M. Hare, *Freedom and Reason* (Oxford, Oxford University Press, 1963), pp. 1-3.

Alan Gewirth notes some complications in "Positive 'Ethics' and Normative 'Science'," *Philosophical Review*, Vol. 69 (1960).

On the "theory ladenness" of observation, see Norwood Russell Hanson, *Patterns of Discovery* (Cambridge, Cambridge University Press, 1958), Chapter 1.

The role of explanation in inference is discussed in Gilbert Harman, "Inference to the Best Explanation," *Philosophical Review*, Vol. 74 (1965).

The suggestions that there can be intuitive knowledge of moral truths is examined in P. F. Strawson, "Ethical Intuitionism," *Philosophy*, Vol. 24 (1949).

Paul Benacerraf discusses problems about mathematical knowledge in "Mathematical Truth," *Journal of Philosophy*, Vol. 70 (1973).