Usually reliable sources

David Papineau

ALVIN I. GOLDMAN
Epistemology and Cognition
437pp. Harvard University Press. £24.50.
0 674 25895 9

Strange things are happening in epistemology. In one well-known example, Mr Smith thinks that one of his friends owns a Ford. This is because Mr Smith's friend Mr Nogot has always owned a maroon Ford. Indeed Smith saw Mr Nogot driving the maroon Ford just that morning. But unknown to Smith, Mr Nogot has recently sold the Ford, and was only driving it somewhere for the new owner. Even so, Smith's belief, that one of his friends owns a Ford, is true. For, as it happens, another of Smith's friends, Mr Havit, has just that morning bought a new Ford, though as yet Smith has no inkling of this.

The question is: does Mr Smith *know* that one of his friends owns a Ford? According to traditional epistemology, a true belief qualifies as knowledge if the believer is justified in believing it. Smith has a true belief. One of his friends does own a Ford. And he certainly seems to be justified in believing it. Didn't he just see Mr Nogot driving the maroon Ford he's always owned? But intuitively it doesn't seem as if Smith knows that one of his friends owns a Ford.

Examples like this are called "Gettier cases", because they were first brought to the attention of philosophers by Edmund Gettier in a three-page article in *Analysis* in 1963. Since then probably more than a thousand books and articles have offered new analyses of knowledge designed to deal with the problematic Gettier cases.

Gettier cases show that knowledge doesn't depend on justification, in the sense of having good conscious reasons for a belief, so much as being hooked up to the world in the right way. Mr Smith has good conscious indications of a state of affairs that would make his belief true. But his belief is only true because of a quite different state of affairs. Mr Smith's belief isn't true because he's in tune with the way the world is. He's just lucky that his belief is true.

That's easy enough to say. The difficulty is to make it precise. The problem which has so occupied philosophers since Gettier is that of specifying the exact sense in which a belief's truth has to be more than an accident if it is to count as knowledge.

Some of the best ideas have come from Alvin Goldman. In 1967 he suggested that a true belief counts as knowledge only if it is *caused* by the fact that makes it true. Mr Smith's belief that one of his friends owns a Ford is caused by the misleading circumstances involving Mr Nogot. But those circumstances aren't what make the belief true. The belief is made true by Mr Havit owning a Ford. And that fact has no causal influence on Mr Smith at all.

Unfortunately this simple causal theory is too crude, as Goldman showed in 1976. Imagine Henry is driving through the countryside with his young son, pointing out items of interest: "that's a cow", he says, "that's a tractor", "that's a barn", and so on. There's nothing wrong with Henry or his eyesight. So when he looks at a barn, and identifies it as such, it seems as if his belief ought to be a clear case of knowledge. But suppose that Henry is unknowingly driving through an area containing a lot of papier-mâché barn façades. As it happens, Henry is looking at one of the few real barns thereabouts, and his belief that the object is a barn is therefore both true and, moreover, caused by the fact that makes it true. But it seems unsatisfactory to call his belief knowledge. For he would have had just the same belief if he'd been looking at a papier-mâché façade. Once more, Henry's veracity seems too much a matter of luck for him to count as having knowledge.

The moral Goldman drew from Henry's story was that knowledge not only needs to be caused by the fact which makes it true, but moreover that this has to be brought about by a *reliable* process, a process that usually produces true beliefs. Henry's belief is caused by a real barn. But, because of the papier-mâché façades, the underlying belief-forming process, namely, scanning the surrounding countryside, is not generally reliable, even though it produces a true belief in the particular case.

In 1979 Goldman went further, arguing that reliability shouldn't be thought of as a replacement for the notion of justification, but rather as a new interpretation of that notion. On this view the mistake made by traditional epistemology wasn't asking for justification as such, but rather in thinking of justification "internally", in terms of conscious reasons, rather than "externally", in terms of production by a reliable mechanism. No doubt the idea that justification depends on reliable mechanisms rather than conscious reasoning runs counter to trained philosophical sensibilities. But Goldman was able to show that the idea is in perfectly good accord with everyday thinking.

Epistemology and Cognition is Goldman's first full-length work on these matters. It falls into two parts. The first, "Theoretical Foundations", develops his thoughts on knowledge, justification and related issues. Much of this is about exactly how reliability should be understood, a question which has been much debated in the recent literature, and Goldman gives a very useful survey of the alternative possibilities, along with his reasons for his preferred solution. There are also chapters on a number of related general topics like truth, realism, content and scepticism.

The second and somewhat longer part, "Assessing Our Cognitive Resources", is a survey of current theories and research in cognitive science. There are chapters on perception, memory, deductive reasoning, probability judgments, belief revision and a number of similar topics. In each case Goldman formulates a general picture of our mental mechanisms, and then uses this picture to assess the reliability of those mechanisms for producing true beliefs. He also assesses the informative power and speed of those mechanisms.

The book is somewhat disappointing. There are plenty of good arguments and telling insights in the first part, but Goldman tries to cover every angle of possible disagreement, and ends up with a complex collection of observations that lacks the thrust of his earlier work. The second section is interesting enough as a survey of recent psychological findings, but it's not much more than that, and there are serious questions to be asked about Goldman's conception of the interaction between psychology and epistemology.

One of the strangest things about recent epistemology is that it seems to have nothing to say about one of the central concerns of traditional epistemology. From Descartes onwards, traditional epistemology has advised us on how to avoid error. This is an immediate corollary of the fact that traditional epistemology deals in conscious reasons. Different traditional theories differ on exactly what kind of conscious reasons suffice for justification. But they coincide in suggesting that the way to avoid error is to make sure that our beliefs have the right kind of conscious backing: careful believers should consciously monitor their thought processes, and embrace a belief only when it is justified.

There seems to be nothing analogous in recent epistemology. Instead of telling us how to avoid error, contemporary epistemologists test proposed analyses of knowledge against intuitions about possible counter-examples. There is a book by Robert K. Shope, called *The Analysis of Knowing: A decade of research*, which details the various theories proposed by Goldman and others, and explains how they deal with ninety-eight different tricky examples from the literature. Henry and the barns appear in Shope's story, as do Mr Nogot and Mr Havit in a number of ingenious variations. Another popular tale involves Tom Grabit, who is observed stealing a book from the library, but whose being known to have done so is complicated by his identical twin also having been in the vicinity at the time, or, in another variation, by his demented mother spreading false tales about a non-existent identical twin.

There is nothing incoherent about trying to distil an "everyday" conception of knowledge from intuitions about such examples. What is not so clear is why this enterprise should count as part of philosophy. Why suppose that the conception so identified will be philosophically significant? In particular, why suppose that it will have anything to do with the traditional epistemological concern to avoid error? These questions become particularly pressing once it turns out that our everyday conception of justification is a reliabilist one. The reliability or unreliability of the mechanisms causing our beliefs isn't in general apparent to consciousness. So it is hard to see how such "external" facts about reliability can be of significance to somebody concerned to avoid error.

However, it would be a mistake, as Goldman himself points out, to dismiss the reliabilist notion of justification as altogether irrelevant to the avoidance of error. It is true that if justification depends on causation by reliable mechanisms, then (as the case of Henry illustrates) we won't always be in a position to make sure our beliefs are justified just by doing some extra *thinking*. But to assume that extra thinking is the only possible way to avoid error is itself to adopt the traditional point of view. From a more general perspective, *anything* that leads to your belief-forming mechanisms becoming reliable will help you to avoid error. Sometimes mere conscious introspection will help achieve reliability. But in other cases, like Henry's, you might need actively to train yourself to make perceptual discriminations that were previously beyond you. Or you might train yourself to stop jumping to conclusions in certain kinds of unfamiliar circumstances. Or, more generally, you might do whatever you need to do to get rid of unreliable mental habits and acquire reliable ones.

Goldman adverts to the possibility of our actively revising our belief-forming habits to increase their reliability right at the beginning and right at the end of his book. But in between he seems to take it back. Early in his argument he explains that he is going to concentrate on "processes", in the sense of innate cognitive mechanisms, rather than on "methods", in the sense of the further mental skills and techniques that humans can acquire. But he provides no obvious rationale for this distinction. Perhaps (though I doubt it) there is a principled way of dividing mental habits into natural processes and nurtured methods. But even so it would be a mistake to conclude, as Goldman often seems to, that the processes comprise a basic mental tool-kit that we can never get rid of, whatever more elaborate devices we later acquire.

One of the psychological experiments Goldman discusses is the well-known case of Linda, the feminist bank-teller. In this experiment subjects are told a story along these lines: Linda is thirty-one years old, single, outspoken, bright, a philosophy graduate, and deeply concerned with issues of discrimination and social justice. The subjects are then asked which is more probable: (a) Linda is a bank-teller; or (b) Linda is a bank-teller and active in the feminist movement. Nearly everybody chooses (b). Eighty-five per cent of decision-science postgraduates at Stanford University chose (b). But (a) is the right answer. The probability of two things both being true must be less than the probability that just one of them is.

Goldman has a theory, involving "representativeness routines", about what makes people prefer (b) to (a), and he argues that such routines might be a reliable route to the truth in general, even if they go wrong in this particular case. But there is a much more obvious point to make about the Linda experiment. It doesn't work with people who have had the error pointed out to them. Anybody familiar with this kind of example will opt for answer (a) without blinking. "Representativeness routines" might in some sense be innate processes, but it is clearly possible for people to stop using them.

Human beings are so smart not because their native thought processes are especially reliable, but rather because all their habits of thought, whether innate or acquired, can alter in response to information about their reliability. What philosophers ought to be asking psychologists is how this happens, and in particular whether there are any limitations on our ability to transcend our natural endowments in the pursuit of truth. Goldman promises us a second volume, in which he will turn from processes to methods, and examine the more general question of "social epistemology". Perhaps this will lead him to ask the epistemologically important questions. It is a pity that he so circumscribes his project in this volume that he does not ask them here.

A Few Carats of Pain

The shadows were roaring
With pain on the other side of the mirror,
She pushed the glass up against the optic
But called the barman to draw my beer;
'You lose your grip', she said,
'In rheumatoid arthritis, which is
Stone in the garden of the joints',
She explained, and in the east wind
As if ice in the air were condensing on this stone,
Black ice; 'Verglas?' She agreed.

Welding in the glass,
Immovable joints under construction
On the other side of the mirror,
Shadows arced out on the face.
She served me chaser whisky anodyne
And the barman drew my beer in his firm grip.
'That's a handsome stone, my dear . . . '
'It's my life-savings, lover-boy,
Small as it is . . . ' among the calcite flowers
Like an arc-tooth in the garden, refracting pain;
'You lose your grip at first
And no sign can be seen except the pain,
So I bought the diamond
To wear on my arthritic hand.' It was like
A folded window into the skin,
It was like a point of pain
Held on a gold band of concentration,
Its interior shadowless.

Her hand, she says, is a garden to this star
Which is a precipice when the east wind blows
And you lose your grip; you know your bones
In this disease, she says, outlined by pain,
'I've crowned this one like a King
With my life-savings . . . '; she pushed
My glass up into the whisky-spring, and smiled;
Her perfume filled the bar, her story gripped us.

PETER REDGROVE

Papineau, David. "Usually reliable sources." The Times Literary Supplement, no. 4381, 20 Mar. 1987, p. 294. The Times Literary Supplement Historical Archive, 1902-2014, https://link.gale.com/apps/doc/EX1200171175/TLSH?u=tlsacc&sid=TLSH&xid=bfd00dfb. Accessed 23 Aug. 2020.