vance one to another which precludes their disjunction being con-
firmed by particular instances. We might put the point this way: a
law ought to be 'recoverable' from its instances. I don't mean, of
course, that a law is entailed by its instances but that *whatever*
process of hypothesis formation is employed it ought to be able to
'pick out' the law from some set of instances of the law. The wildly
disjunctive Kim-laws linking the psychological to the physical
radically fail to meet this condition.

We can conclude that the supervenience of the psychological
upon the physical does not entail that there are laws linking the
two ranges of phenomena and that therefore the position of
anomalous monism is not threatened by this line of attack.[1]

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EVIDENCE AND REASONS FOR BELIEF

By RICHARD FOLEY

IT is natural to think that evidence and epistemic reasons for
belief go hand-in-hand. When you have one, you have the other.
Having evidence for the truth of a proposition gives you an
epistemic reason to believe it — i.e. a reason that you have insofar
as one of your ends is to have accurate and comprehensive beliefs.
Correspondingly, if you lack evidence for the truth of a proposi-
tion, you have no reason to believe it insofar as your ends are
epistemic.

This is an attractively simple idea. Unfortunately, it is too simple. Belief in accordance with the evidence can itself affect the evidence, and when it does, evidence and epistemic reasons for belief can come apart.

Suppose you know that you will get your degree just in case you pass the final exam. You currently neither believe nor disbelieve that you will get the degree, but you do nonetheless have evidence that you will pass the exam. You know that you have studied hard and that there is relatively little that you do not understand, and moreover you yourself would concede, at least if you took the time to think about it, that this makes it likely that you will pass and thus get your degree.

So far there's nothing particularly unusual about the case. It's just another case in which you fail to believe a proposition for which you have good evidence. But now, add this wrinkle. In an attempt to teach you humility, your examiners will alter the exam, making it much more difficult, if you come to believe that you will get your degree. Indeed, they will make the exam so difficult that you will be unlikely to pass. Moreover, the examiners are able to anticipate your belief, and thus they are able to ensure that if you come to believe that you will get your degree, the onslaught of belief and the alteration of the exam will be simultaneous. Finally, suppose you know all of this. You know that the examiners are prepared to act in this way.[1]

Then you are in a bind. You cannot believe that for which you have good evidence without undermining that evidence and thereby making your belief irrational. But notice, the problem is not with your evidence. By hypothesis, the evidence that you will get your degree is perfectly adequate and you realize this. Nor is the problem like those encountered in the familiar paradoxes of belief. The proposition that you believe p and p is false is a proposition that can be true, but there is a question of whether you could genuinely believe it to be true. By contrast, there isn't any question of your being able to believe the proposition that you will get your degree. The problem lies elsewhere. It lies in the fact that belief in accordance with your evidence would destroy that evidence.[2]

[1] Earl Conee discusses a similar case in 'Evident but Rationally Unacceptable', *Australasian Journal of Philosophy* 65 (1987) 316–26.

[2] Analogous problems arise with respect to intentions, plannings, choosings, tryings, and the like. Ordinarily, if you now have reasons to do X at some later time, you also now have reasons to form an intention to do X at that time. There are exceptions, however. The intention itself might undercut your reasons for doing X and hence your reasons for intending it. For example, you might have adequate reasons to confront your bosses tomorrow with your suspicions of the firm's illegal dealings even though you know that if you were now to form an intention to do so, this would make you nervous. You might also know that when you are nervous, you have a tendency to be insulting and that this in turn is likely to make your bosses defiant and hence even less willing than they are now to look into the matter.

In so far as your goal is an epistemic one, what attitude is it rational for you to take towards the proposition that you will get your degree? Is it rational for you to believe or disbelieve or withhold on this proposition?

It's hard to say. None of these options is epistemically desirable. If you disbelieve the proposition — i.e., if you believe that you won't get the degree — you would then be believing what you realize is unlikely to be true. But you won't do any better by believing that you will get the degree. You realize that if you were to believe this, the exam would be altered, thus making it unlikely that you will get the degree. So once again, you would be believing something that you realize is unlikely to be true. The remaining option is to withhold judgement on the proposition that you will get the degree, but this too is undesirable, since you would then be withholding on a proposition that you realize is likely to be true.

Thus, insofar as your ends are epistemic, you really are in a bind. There isn't much to choose among the three options — believing, disbelieving, and withholding.[3] Appealing to other ends may help some. In particular, you do have pragmatic reasons not to believe that you will get the degree, since believing this is likely to have undesirable consequences. It is likely to result in your not getting the degree. So, this would seem to favour not believing over believing.

Still, the main point here has nothing to do with non-epistemic reasons for belief. The point is that believing that you will get the degree would be epistemically undesirable, despite the fact that you have adequate evidence for the truth of this proposition. It would be a belief that is unlikely to be true, given what your evidence would be.[4]

This is an important point for epistemology. It illustrates that evidence for the truth of a proposition, however exactly we con-

[3] Similar puzzles can be generated for degrees of belief. So, the problems here cannot be avoided by opting to do epistemology in terms of degrees of belief rather than beliefs *simpliciter*.

[4] Ordinarily, if you become convinced that you have good evidence for a proposition, this is enough to prompt belief in it, but the above situation is one of the exceptions to this general rule. One way of illustrating this is to suppose that it is not an exception. Then the moment you become convinced that, given your current situation, you are likely to get your degree, you will come to believe that you will get your degree. But then, at the next moment, assuming that you are aware of this belief, you will realize that you are now likely not to get your degree and hence you will come to believe this instead. Moreover, matters won't stabilize there. Like a yo-yo, you will continue to vacillate between belief and disbelief until either the exam is given or exhaustion sets in. The alternative and more plausible suggestion is that in this kind of situation, where you are fully aware of your predicament, you might not believe that you will get the degree. You might not believe this proposition despite your being convinced that you have good evidence for it. For a contrasting view, see Richard Swinburne, *Faith and Reason* (Oxford: Clarendon Press, 1981), Chapter 1, who argues that believing that P likely to be true is equivalent to believing P.

strue evidence, need not invariably generate a corresponding reason to believe the proposition. This is so because belief in accordance with the evidence might itself eliminate the evidence.[5]

The reverse is also possible. Belief against the evidence can itself create evidence, as is the case with some kinds of self-fulfilling beliefs. Consider another exam case. Suppose you don't have strong evidence for thinking that you will pass the exam. The evidence indicates that your current chances of passing are about the same as your chances of failing. However, you know if you were to believe that you will pass, this would increase your confidence, and you also know that if you were confident, you would do much better on the exam. Indeed, you would do well enough to pass.

Here again, evidence and reasons for belief come apart, only from the other direction. You currently lack adequate evidence for the proposition that you will pass but nonetheless have a reason to believe it, and not just a pragmatic reason. Believing this proposition is defensible insofar as your goal is to have accurate and comprehensive beliefs. You yourself realize that in believing that you will pass, you would be believing a proposition that is likely to be true.[6]

On the other hand, it is also epistemically desirable to withhold on the proposition that you will pass the exam. After all, you realize that your current chances of passing are only about 50–50, and you realize also that if you withhold judgement on whether or not you will pass, these chances won't be altered.

So, with respect to your epistemic ends, there is nothing to choose between withholding and believing. If you were to believe, then believing would be the best option. But equally, if you were to withhold, withholding would be the best option.

Is there something to choose between these two options if we take into consideration your non-epistemic ends? Perhaps, but even here there are considerations on both sides. Since passing the exam is important to you and since believing that you will pass

[5] Let p be the proposition that you have never thought the proposition that $25^2 = 625$, and suppose that you have adequate evidence for p — perhaps, e.g., you know that you have never tried to square any number greater than 15. This is another kind of case in which belief in accordance with the evidence might eliminate that evidence (since believing p itself involves thinking the proposition $25^2 = 625$).

[6] Once again, similar problems arise with respect to intentions, plannings, choosings, tryings, and the like. Ordinarily, you now have reasons to form an intention to do X at some later time only if you now have reasons to do X at that time. There are exceptions, however. Think of cases in which the intention to do X will produce benefits even if you don't do X. Here is an extreme example: someone offers you a million dollars if tomorrow you form an intention to drink a toxin on the day after tomorrow; if you form the intention tomorrow, you will get the money whether or not you actually drink the toxin on the day after tomorrow. (This is Gregory Kavka's example. See Kavka, 'The Toxin Puzzle', *Analysis* 43 (1983) 33–6.)

will help you pass, you have practical reasons to acquire this belief. So, all else being equal, this favours belief. But all else may not be equal. By hypothesis, you realize that you are likely to pass the exam if you come to believe that you will, but this need not be enough in itself to prompt belief, especially since you are convinced that your current chances of passing are only 50–50. Thus, if you are to acquire the belief, you may have to plot against yourself in a Pascalian manner so as to get yourself into a position where you can believe. This itself may have significant costs, and if the costs are great enough, they will outweigh the benefits of belief, making it irrational, all things considered, to engage in such plottings.

In any event, this is a side issue. The relevant point for epistemology is that this and the previous case illustrate that evidence and epistemic reasons for belief do not inevitably go hand-in-hand. They can come apart. Since belief itself can create evidence, you can have an epistemic reason to believe a proposition for which you lack evidence, and since belief itself can destroy evidence, you can lack an epistemic reason to believe a proposition for which you do have evidence.

There is nonetheless a general, albeit more complicated, way in which evidence and epistemic reasons for belief are linked. They are subjunctively linked. Having adequate evidence for a proposition gives you an epistemic reason to believe it, unless believing the proposition would itself undermine the evidence. Correspondingly, if you don't have adequate evidence for a proposition, then you don't have an epistemic reason to believe it, unless believing it would itself create adequate evidence for it.[7]

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[7] Compare with Richard Jeffrey's view that decisions must be ratifiable. See Richard Jeffrey, *The Logic of Decision*, 2nd ed. (Chicago: University of Chicago, 1983).

EPISTEMIC OBLIGATIONS AND DOXASTIC VOLUNTARISM

By PHIL GOGGANS

ACCORDING to one popular view of epistemic justification, one is justified in holding a particular belief if one has not violated any epistemic obligations in forming or sustaining that belief. This is generally known as the 'deontological conception of epistemic justification'. Proceeding on the 'Ought implies Can'