

12 Is There a Reason for Skepticism?

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Two compelling and persistent projects of contemporary epistemology are engaging skepticism and searching for adequate epistemic principles. The former project, of course, can be traced in various forms through the ancients and moderns, and the last decade has seen skepticism debated with renewed vigor. The centrality of skepticism in epistemology is manifest. It both presents a foil against which positive epistemology is modified and tested, and offers powerful arguments that perhaps even lead to the conclusion that skepticism correctly captures our ultimate epistemic condition (Stroud 1984).

The latter project—generating and defending epistemic principles—arguably has a shorter history, but has been an extremely prominent and widely pursued research program for at least a half century. Sometimes it is overly associated with the important work of Chisholm, but this would be to underestimate the ubiquity of trying to make sense of epistemic achievement via principles that, taken together, allege to encode all cognitive transitions involving mental states where belief-output is of high epistemic quality (Cruz manuscript).

While these two projects have not always been specifically undertaken together, it is reasonably easy to see how the combination might go. That is, it is reasonably easy to see what principles the skeptic is deploying in skeptical arguments, and from there we may ask whether those principles are properly normative in reasoning. On first inspection, for most of us those principles appear unassailable. That is part of the explanation for why we take skepticism seriously.

The fact that skeptical arguments need to appeal to epistemic principles at all is not surprising. A series of *non sequiturs* leading up to the conclusion, “therefore you do not know you have hands,” would not do. Skeptical

line here and conclude that the particular principle used in generating (some) skeptical arguments is *not* one that we should view as normative with respect to our reasoning. I maintain that the skeptic must appeal to an especially strong epistemic principle of discriminating evidence for a belief, and that this principle is so demanding that it ultimately undermines skepticism itself.

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The epistemological framework I am working in is cast in terms of epistemic principles, so I am anxious to ensure that they do not arouse undue suspicion. By *epistemic principle*, I have in mind a rule that states the conditions under which a set of inputs (typically mental states like beliefs or perceptions) yields epistemically high-quality output (typically a justified belief²). Epistemic principles do not merely describe the rules that people actually use. Rather, they prescribe rules. Descriptive details of how we come to believe what we do, originating in psychology or sociology, may be relevant to our understanding of epistemic principles, but they cannot tell us how we ought to form our beliefs. Epistemic principles are identified by the intuitive epistemic credentials of the output (Sosa 1980). If the output of a rule is non-accidentally epistemically laudable, then we have before us a plausible candidate for an epistemic principle.

Consider some examples: Some epistemologists have proposed that there is an epistemic principle regarding the good inferential relationship between perceptual states (or beliefs about perceptual states) and beliefs about the way the world is. One way of putting this perceptual principle is, "If a person has a clear sensory impression that x is F (or of x 's being F) and on that basis believes that x is F , then this belief is *prima facie* justified" (Audi 2001, 43). Another way is: "If S believes that he perceives something to have a certain property F , then the proposition that there is something to be F , as well as the proposition that there is something that is F , is one that is reasonable for S " (Chisholm 1966, 45). A third: "Having a percept at time t with the content P is a defeasible reason for the cognizer to believe P -at- t " (Pollock and Cruz 1999, 201). Other formulations of this principle can be found elsewhere and in quite diverse epistemologies (cf. Bonjour 2000, 30; Plantinga 1993, 99; Sosa 1980, 22). They all seem to be after the same thing, namely the claim that sensing that p is a fallible but good basis for an inference to the belief that p .

Similarly formulated principles abound with respect to, for instance, memory. When it appears to S that she remembers that p , then S is (highly

arguments aim to be rationally persuasive, or at least to have enough of the trappings of rationality so as to be distinguishable from opining or uttering gibberish. In order to be compelling in this way, skeptical worries must be articulated or articulatable through principles of reason that lead us to the skeptical conclusion via our appreciation of the plausibility of the premises and of the rational irresistibility of the outcome. It has often been observed that this makes it so that the skeptic cannot be attempting to call into question all of our epistemic apparatus at once. Specifically, the skeptic cannot be calling into question the rational procedure, whatever it may be, that is being employed to yield the skeptical conclusion. According to the *principles approach* to epistemology, the skeptic needs to appeal to epistemic principles in order to make her alternative characterization of our epistemic situation a genuine competitor (i.e., something other than a series a *non sequiturs*) to non-skeptical conclusions. These principles will then remain undoubted, so that radical doubt reaches only so far.¹

In spite of this limitation, skepticism seems to retain a potent arsenal of arguments that lead to startling conclusions. The claims that I might be a brain-in-a-vat, or that I have no evidence that the future will be like the past, or that there might be no past at all and that I came into being an instant ago with memories in place, still seem cogent and worrisome, even though in making them skeptical arguments follow epistemic principles. And these skeptical possibilities have been sufficient to vex generations of epistemologists with the threat that we are irrational to believe the things that we ordinarily believe.

My first aim in this essay is diagnostic. I will argue that skeptical arguments originate in a tension between our epistemic principles. Individual principles enjoy our endorsement both from the first-person perspective as well as from the perspective of understanding why our cognition operates according to those principles. Skepticism, I claim, arises from the unexpected *interaction* of some of those principles. From this diagnostic claim, I move to a more critical stance. We may ask after the epistemic credentials of the individual principles implicated in skeptical arguments. If the individual principles are genuinely constitutive of our epistemic cognition, then we may be led to a kind of pragmatic resignation with respect to skepticism. That pragmatic resignation would involve the insight that the principles involved in generating skeptical arguments are crucial to thought as we have it, but that their interaction leads to conclusions that are unexpected and (to some) odious. If, on the other hand, the very principles involved in skeptical arguments are suspect, then we have a way of addressing skepticism and perhaps of answering the skeptic. I scout this second

defeasibly) justified in believing that p (cf. Audi 2001; Pollock and Cruz 1999). One can also find discussion of inductive principles. Induction is a particularly interesting case, because the principles involved in it are not so simple to state as those which are involved in perception and memory. Goodman (1954) taught us that we need to include a projectibility constraint in our inductive principles, so no simple rule of the form *discovering that most Fs are G is a prima facie reason for thinking that all Fs are G* will be adequate (Pollock 1989).

We can isolate a generic schema for thinking about epistemic principles. The epistemologist claims that inferences are apropos when a mental state ψ_n (a belief) is based on the content of prior mental states $\psi_1, \dots, \psi_{(n-1)}$: Being in mental states $\psi_1, \dots, \psi_{(n-1)}$ is a good (but defeasible) basis for an inference to mental state ψ_n in the cognizer.

We can say that the transitions captured by the generic principle schema are justification-preserving.³ Justification-preservation names the capacity of a principle to ensure that “downstream” contentful states inherit the epistemic laudableness of the “upstream” contentful states.⁴ The epistemologist is relying on the possibility of filling this schema for all the principles that we possess, and the result would be an abstract catalog of our capacity for good reasoning.

Viewed individually, the principles state what types of mental states are adequate starting points for generating particular high quality beliefs, but the principles are usually not content-specific. Presumably, this is because the principles that govern epistemically good cognition must be flexible enough to accommodate whatever content is delivered to the believer through her experiences in the world or as a result of her own thoughts. In my view, content-neutrality—that is, the property had by principles such that they can range over a variety of mental states with differing content—is one of the distinguishing features of epistemic principles. Principles that specify a narrow instance of reasoning—for instance, that it is reasonable to believe that there is an apple before you when confronted by the perceptual features of an apple—are not principles of reasoning as such. This represents a plausible explanatory scruple on the part of epistemologists. Epistemologists could in principle seek to enumerate all the instances of reasoning that start with particular mental states and lead to particular justified beliefs. It is obvious, however, that that strategy would fail to capture the phenomenon of rationality at the right level of abstraction.

For all their content-neutrality, however, the principles are usually *faculty-specific*, by which I mean there is a principle for each intuitively circumscribed cognitive faculty. Thus we have a principle for perception, a different principle for memory, a third principle for induction, and perhaps additional principles of abduction and other kinds of reasoning. This is due to a different kind of explanatory scruple. It looks to many epistemologists as if instances of epistemic achievement can be grouped into natural kinds and fruitfully tackled piecemeal. Those kinds map on to an intuitive carving-up of mental faculties. Indeed, it would not be surprising if one of the two derived from the other, but the priority here is obscure. At any rate, the epistemic principles to be found in the literature follow the contours of a mind divided into kinds of cognitive capacities.⁵

Some epistemic principles might be single-step imperatives, as are the ones governing perception and memory, above. I understand these one-step principles as limiting-case inferences that are justification-preserving. Epistemologists have carefully attended to these because they appear to be the likeliest candidates for being fundamental and basic to our cognition. When we move away from mundane cases of justified belief to rarified cases involved in, say, good scientific inference, the long chains of epistemic principles governing a conclusion may be quite complex.⁶

When epistemic principles are formulated, they are explicit to the philosopher doing the formulating. They may or may not have a psychological reality in the reasoner to whom the principles are attributed. Thus, epistemic principles need not be consciously or straightforwardly causally explicit in the epistemic agent. This keeps open the possibility that the underlying realization mechanism is the system of causes that can be understood normatively, which would be a kind of naturalism that I am sympathetic to (Pollock and Cruz 1999). Perhaps we would then be inclined to say that the epistemic principles supervene on the epistemic agent's psychology, but I take that to be a more partisan commitment than is necessary for present purposes.

Note, too, that the schema does not identify a relation that is *merely* causal in any straightforward sense. If ψ_n were merely causally related to $\psi_1, \dots, \psi_{(n-1)}$, then principles would be instances of causal (perhaps counterfactual-supporting) analyses of the relations between mental states. This would leave out any role for the contents of the various mental states involved in the inference. Presumably it is the contents of the mental states that persuade us that the principles yield rational or justified beliefs.

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Against the backdrop of this conception of epistemic principles, I am now able to say something about how we might understand certain kinds of skepticism. Here, I engage some familiar kinds, but I acknowledge that it would take some work to adapt the framework I am advocating to other kinds.

Consider the challenge that hackneyed external-world skepticism presents us with. Descartes believes that the world is more-or-less as he perceives it, but his perceptual evidence is wholly compatible with an alternative scenario where he is being deceived by an evil genius. After all, in the case where he is misled by a sufficiently powerful deceiver, there is simply no way he could ferret out the deception. Everything would seem to him as it would in the case with no evil genius and no villainous deceit. The combination of two factors—that the alternative hypothesis has nothing obviously wrong with it, and that the alternative hypothesis is completely at odds with what we believe—is devastatingly powerful in leading us to question whether our ordinary beliefs about the external world are justified (Stroud 1984; Greco 2000).

It appears that Descartes is appealing to a fairly agreeable consideration, namely something like: Evidence for the belief that p fails to adequately justify that p if the evidence is entirely equally compatible with some other belief that is in tension with that p . To be sure, there is need for refinement since, among other worries, the phrase “in tension with” is not at all clear. On some readings, this demand on reason or knowledge is completely dubious. My evidence for the belief that Earth is roughly spherical is completely compatible with the possibility that such claims are part of a massive and elaborate hoax played on me along with some bizarre optical illusions involving objects on the horizon. And it would appear that the hoax hypothesis is in tension with my actual belief. Is this enough to make the hoax hypothesis the basis for a skeptical argument? I do not think so, and that suggests that there must be other considerations at work that determine which “in tension” possibilities are the relevant ones. As a first pass, it looks very much as if the two alternatives need to belong to scaffoldings of evidence and belief that are sufficient to sustain them. An elaborate shape-of-Earth hoax would require massive effort and engineering. Maintaining the hoax would be daunting and overwhelming, as we could imagine a thousand simple ways that I might seek to expose the charade. The scaffolding of evidence for the hoax hypothesis is fragile and easily undermined, and thus insufficient to sustain the hypothesis as a viable

skepticism-inducing competitor to my ordinary beliefs. There is no question that more imaginative accounts of the nature of the hoax might make it more and more difficult to uncover. At the limit we would be presented with something equivalent to an evil genius hypothesis. Still, for scenarios short of the evil genius hypothesis (or its equivalents), their mere possibility does not seem sufficient for compromising the rationality of my ordinary beliefs. This appears to be because those scenarios are subject to considerable evidential considerations—ones either already had at the time the scenario is proposed, or ones easily available once the scenario is a live possibility—against them.

As a general account of which possibilities create enough tension to generate skeptical arguments, this is far too vague to be anything more than a research-direction.⁷ For our purposes here, though, it will do, since the external-world skeptic I have in mind has engineered a possibility where the collateral evidence *is* as durable as the evidence for the claim that the world is as it appears. This is because there is, by hypothesis, no collateral evidence that could have a bearing on the rival scenarios.

So, the external-world skeptic is offering a possibility that ought to at least make us nervous about the justificatory status of some of our ordinary beliefs. But what specific epistemic principle is at work here in the skeptical challenge? It seems that often, in the literature, this question has been dodged by attempting to capture skeptical claims via a theory of epistemic defeat. The way the account usually goes has it that the existence of alternative possibilities that undermine the connection from evidence to a belief, constitutes a defeater for that belief. The theory of defeat has, in turn, been treated as a part of the overall epistemic framework that is separate from particular epistemic principles. Sometimes this separation has been made explicit.⁸ The idea is that we can see that the skeptical challenge ought to weaken our conviction with respect to our ordinary beliefs, and this weakening has been thought to take place at the pillar between evidence and belief. I now, however, think that treating the skeptical challenge as an instance of epistemic defeat separate from a framework of epistemic principles is a mistake, or at least a serious infelicity in nomenclature.

Think of it this way. Suppose someone fails to acknowledge that reasoning of Descartes's sort is cogent, and suppose that she does not have some account of why this is so. She simply shrugs and says that Cartesian reasoning does not undermine her ordinary beliefs. What we would want to say in response is that Descartes appears to be appealing to a manner of reasoning that surely we must all take seriously because there are many

non-skeptical compelling applications of that reasoning. We might bolster our case through examples—by, for instance, offering a court case where the evidence is equally compatible with guilt or innocence, so that epistemically (though not legally, in the U.S. legal system) we should suspend judgment. Or we might rehearse live controversies in science where a rival theory of a phenomenon explains the data as well as the received view, and also does well on non-evidential scientific virtues. We would be inviting our reticent interlocutor to appreciate that there is a general strategy of reasoning that governs good cognition in the relevant circumstances. We are urging the normative status of a *principle*, and we are attributing to it the content-neutrality that seemed distinctive of principles. This is a more illuminating appraisal of what is going on than merely invoking epistemic defeat. In this case, claiming that the skeptical argument defeats the beliefs of the stubborn reader of Descartes says nothing of the manner of defeat or the power of the Cartesian strategy. This is why I prefer to attribute to the skeptic a specific principle of reasoning. The principle, I expect, is something like this:

(DE) If *S* possesses total evidence *e*, and if *e* does not discriminate between two or more conflicting conclusions, then it is not rational for *S* to believe one of those conclusions.

Call this the *discriminating evidence principle*. The discriminating evidence principle is a powerful constraint on our reasoning, and is crucial in both rarified scientific and mundane reasoning. Should we understand DE as being content-neutral, like other principles? There are at least two reasons to do so. First, it seems that we can readily make DE consciously explicit in ourselves by reflecting on the intelligibility and plausibility of DE. Once we do that, many find DE unassailable in its content-neutral form. For any evidence and for any conclusion, if that evidence does not discriminate, then it is inadequate for drawing a conclusion. The second reason to think that DE is content-neutral is, again, the clear need for cognition to be sufficiently general. It might well be adaptive to be able to reason about anything at all, and a principle like DE might well need to be deployed with respect to any kind of evidence and belief. If DE were restricted in its content, we would be subject to determinate kinds of cognitive error where alternative possibilities, even when salient and reflectively considered, would mysteriously fail to undermine our beliefs.

Now, if we understand DE as content-neutral, then it seems even to apply to beliefs that are on first blush positively sustained by other principles. To illustrate, recall our perceptual principle (for convenience, I will take

Audi's as representative): "if a person has a clear sensory impression that *x* is *F* (or of *x*'s being *F*) and on that basis believes that *x* is *F*, then this belief is *prima facie* justified." The perceptual principle serves us well in cognition. By and large, we believe and we are justified in believing that things are as they perceptually seem to us. We have at our disposal, then, an argument for commonsense realism that might go as follows:

(1) I appear to have two hands.

(2) Therefore, it is reasonable for me to believe that I have two hands.

The connection between (1) and (2) in the commonsense realist's argument is legitimated by the perceptual principle. Of course, the conclusion remains defeasible, but it strikes one as reasonable as far as it goes. The external-world skeptic, however, claims that any application of the perceptual principle can be undermined in light of the discriminating evidence principle. Thus, the skeptic points out that,

(3) I may right now be subject to the deception of an evil genius; therefore it is not reasonable for me to believe that I have two hands.

And the connection between (1), (2), and (3) is legitimated by DE. Our perceptual evidence simply does not discriminate between the world being as we think it is and the world as a fabrication of an evil genius. Therefore, claims the skeptic, it is not epistemically reasonable for us to prefer one belief to the other, regardless of the apparent applicability of the perceptual principle. For the external-world skeptic, this is the end of the line, as there is no possible evidence available that would tip the balance back in favor of the perceptual principle. This reasoning can seemingly easily be applied to our memory principle or inductive principle or, perhaps, any other proper principle of epistemic justification. Through arguments like this, skepticism can seem to have a dramatic and crushing power over our pretensions to rationality. By pushing to the limit the application of a principle that is at the same time innocuous and crucial in our cognition, the skeptic has completely undermined our epistemic confidence. Can skepticism really be this potent so easily?

It is illuminating here to deflect some anti-skeptical positions that I think go wrong. One way of resisting skepticism alleges that epistemic principles that articulate defeasible justification *already* address skepticism. Beliefs that are defeasibly justified are often viewed as *prima facie* justified. Their *prima facie* justifiedness, it is sometimes thought, itself constitutes additional justificatory power, so that the agent's evidence is precisely not equivoaled in the way that is required by the skeptic's use of (DE). By this

account, that a belief is *prima facie* justified is enough to tip the balance in favor of, for instance, the perceptual belief or the memory belief.¹⁰ Indeed, some epistemologists might well think that the very point of the *prima facie* status had by the justifying power of epistemic principles is to break the deadlock between belief and non-belief.

It is not entirely clear what conception of *prima facie* justification is adequate to dispatch skepticism so readily, but one way to charitably reconstruct this view is as follows: Suppose that agents could entertain propositions without at all subjecting them to epistemic appraisal through the machinery of epistemic principles.¹¹ By this hypothesis, any proposition entertained by an epistemic agent initially enjoys full epistemic neutrality in the sense that it is neither justified nor unjustified, nor is mere suspension of judgment one way or the other the proper epistemic stance. From that condition of neutrality, an epistemic principle might then be deployed. For example, if the proposition is perceptual, then it might well enjoy a *prima facie* justified status in light of the perceptual principle. The anti-skeptical argument at hand wants to treat the skeptic's appeal to (DE) as applicable only to propositions in the state of full neutrality. Once the proposition gains some justificatory momentum through an epistemic principle, it can no longer be subject to the skeptical challenge.

I confess that I find this doctrine exceedingly strange. The *prima facie* justified status of beliefs that originate in genuine epistemic principles is first and fundamentally a recognition of fallibility. The mere recognition of fallibility, however, should not be conflated with a positive reply to skepticism. Two more specific worries about this conception of epistemic principles present themselves. The first is that this anti-skeptical response fails to make sense of the appeal of skepticism in the first place. It has been seen by many to be a desideratum of an account of skepticism, that it should explain skepticism's appeal and traditional role in our philosophical imagination. Treating the *prima facie* justificatory impetus of epistemic principles as *by itself* nullifying, for instance, external-world skepticism, leaves it mysterious as to why anyone would have been impressed with this kind of skepticism in the first place. All one would need in order to have an effective reply to Descartes in the Second Meditation would be to proclaim that epistemic principles offer *prima facie* justification, and that is enough to tip the balance in favor of perceptual beliefs even in the face of the proposal that we are being deceived by an evil genius. And that's it? It would not seem so, because it looks rather like the skeptic is taking into account the *prima facie* impetus of epistemic principles, and saying that, in spite of such *prima facie* justifiedness, there is yet an undefeated possibility that is

equally adequate to the data of the senses but is incompatible with the beliefs that the agent maintains are justified.

Nor, incidentally, would an account that assigned a default positive epistemic status to a belief help here. It might be thought that the belief that *p*, when *p* is the output of perception, is justified until there is some defeater for it, because *all* beliefs are justified until there is some defeater. This can be understood as due to a kind of innocent-until-proven-guilty impulse.¹² This will not help in the skepticism case, though, because the external-world skeptic is offering a claim—that we are brains-in-vats or deceived by an evil genius—that we would not want to count as justified simply because we have no defeater for it. It is simply not the case that any belief that presents itself for reflection is justified until such time as a defeater for it is found. We instead wonder *whether* to accept as justified a belief that we entertain. But merely having some other mundane belief, like “there is a chair before me,” is not enough to defeat the skeptic's claim. Again, this is because that ordinary belief is not incompatible with the skeptic's proposal. What seems to be needed is a solution to the skeptical problem that will allow us break the deadlock.

The second problem with this anti-skeptical response comes into stark relief when we attempt to make sense of justified belief in cases where principles are in tension. Consider cases where the perceptual principle certifies a belief as *prima facie* justified, while the memory principle at the same time declares the same belief as unjustified. Perception delivers that *p*, while memory delivers that *not-p*. The Müller-Lyer illusion may well be a case of this sort. Familiarly, the illusion arises when looking at two lines of equal length where one is bounded by outward-pointing arrowheads and the other by inward-pointing arrowheads. The line with the outward-pointing arrowheads appears to be longer than the line with the inward-pointing arrowheads, so that the perceptual principle licenses the belief that they are *not* of equal length. But anyone who recalls having the illusion explained and recalls measuring the lines herself ought, it would seem, to believe that the lines *are* of equal length. And this memory-belief also enjoys a *prima facie* justified status. Which belief, then, is *prima facie* justified?

The question at hand is not one about which belief ultimately has the greater evidence in its favor, as I am imagining a case where we simply see the Müller-Lyer figure and simply remember that the lines are of equal length. The question being asked here is, at the moment that we look at the Müller-Lyer illusion, which belief is *prima facie* justified? Answering this question may appear to require developing a hierarchy of epistemic principles so that we might be able to judge which beliefs among those

produced according to proper principles are more justified if they should be in tension. This, I submit, would be a misadventure. It is not the case that epistemic principles are somehow ordered in a way that makes some trump others in terms of *prima facie* justifiedness. Rather, epistemic principles generate beliefs that ought, with respect to the proposition in question, to move the epistemic agent away from a state of disbelief or neutrality to a state of belief pending more evidence. If two or more epistemic principles yield beliefs that are in tension, both or all of those beliefs are *prima facie* justified (Senor 1996). What is required is acquiring more evidence to resolve the tension between beliefs.

The case of illusory perceptual figures is such that more evidence is available, and with the Müller-Lyer figure the matter is settled once the lines are measured. (DE) is about evidence itself, though, and this is the important fact that the anti-skeptical position here fails to accommodate. (DE) makes a claim about what is reasonable to believe when there is no recourse to further evidence. In this way, it specifies what to believe in the case where there are two or more beliefs in tension, and where evidence does not help. The mandate of (DE) applies even when the beliefs are *prima facie* justified, and it can overcome *prima facie* justification. Cognition requires just such a principle if there are going to be times when the evidence remains resolutely equivocal. That is what makes the skeptic's use of (DE) legitimate.

To return, then, to my diagnosis of skepticism: I claim that the external-world skeptic is appealing, in her reasoning, to a perfectly intelligible epistemic principle; and this principle, when applied to instances of our perceptual principle, yields the skeptical result. My understanding of external-world skepticism, then, is different from most accounts of how such arguments work. I treat skepticism as showing that some of our epistemic principles are in tension in the sense that, when applied to one another, the outcome is a kind of cognitive breakdown. This understanding of skepticism might well lead us to a pragmatic resignation. The resignation is due to the fact that we can be brought to see what is going on in skeptical arguments, and we can see that their rational credentials are an inevitable result of the epistemic principles that we employ. We can see that the perceptual principle and (DE) usually only conflict locally and in a way that is important to our reasoning; we would be worse off as cognitive agents if these principles never conflicted locally. Only in the skeptical case, and when the principles involved are made consciously explicit (i.e., when we are doing philosophy that attends to skepticism), are our reasonings massively undermined.

Clearly the discriminating evidence principle is *most readily* activated with respect to ordinary empirical beliefs and requires some work to see that its content-neutrality makes it applicable to other epistemic principles. This is part of the explanation for why we must be brought around to seeing the force of skepticism, and why—as Hume artfully observed—it loses its grip on us so easily when we turn away from philosophy. Our perceptual principle is central to our cognition, so naturally there is some resistance to undermining it. We can thus conclude that our epistemic principles are shaped to accommodate our reasonings about ordinary beliefs. Indeed, we would not be able to reason in the way that we do without them. The value of our epistemic principles is not merely instrumental. Rather, we should think that the value is constitutive of the cognition itself. Recognition of that intrinsic value—our susceptibility to skeptical challenges notwithstanding—is the pragmatic element of our appreciation of skepticism in the framework I have offered.

4

I find the above pragmatic resignation appealing, in that it accounts both for the power of skepticism and for how tenuous and elusive it is. Moreover, it fits with a broader view of our cognitive lives as not smoothly integrated and unified but instead as a collection of epistemic processes that do not necessarily fully cohere, and that tend to break down when confronted with rarified reflection and speculation.¹³

In this final section, however, I want to advance a stance that is less defeatist with respect to skepticism. It is worth reflecting on the strategy of external-world skepticism in terms of what would be required for our ordinary beliefs to survive the challenge and be resolved as justified. The skeptic maintains that there can be no evidence in the sense of additional justified beliefs that can overturn the skeptical challenge, and in that regard I am inclined to agree with her. But, as the entire framework of epistemic principles suggests, acquiring evidence in the form of additional justified beliefs is not the only way that a belief can become justified. Indeed, this is a powerful virtue of the account because it is how the account avoids an infinite regress of justification, namely by having a belief justified if it answers to one of our epistemic principles, not all of which call for justified beliefs in their antecedents. We may wonder, then, whether there is any epistemic principle that we can apply to the output of the discriminating evidence principle in order to show that its application in skeptical

arguments is illicit. Obviously there is no straightforward way of applying a principle like the perceptual principle to the output of (DE). We cannot literally perceive that the skeptic's application of (DE) is defective. We saw above, however, that (DE) could readily apply to the deliverances of other epistemic principles such as the perceptual principle. What happens when we apply (DE) to its own output? It would seem that the content-neutrality of (DE) allows for such an application. And if we can craft a case where the skeptic's use of (DE) is possibly defective, but where the skeptic's evidence with respect to the application of (DE) does not discriminate, then it would seem that the skeptical challenge is in substantial trouble.

Surely it is possible for an application of the discriminating evidence principle to be defective, and for it to be reasonable to believe that this is so. Imagine this: You firmly and clearly remember that your conscious and nonconscious applications of the discriminating evidence principle is defective. Make this scenario as vivid as you like, so that, perhaps, you have a clear recollection that a cognitive neuroscientist told you that have a rare brain defect that compromises your application of the discriminating evidence principle.¹⁴ This would be an instance of invoking the memory principle in a scenario that undermines the (DE) principle. Now, you may well have reason to consider another explanation—namely, that you are misremembering this bizarre story of the defectiveness of your applications of the discriminating evidence principle. But this cannot be enough to cast doubt on this deployment of your memory principle, unless we simply stipulate the primacy of the discriminating evidence principle.

Or suppose that you have abundant inductive evidence that you chronically misapply the discriminating evidence principle. That is, suppose that you keep a careful log of all the times in the past year you have consciously or unconsciously applied (DE), and you discover while looking over it that you are mostly incorrect in its application (i.e., you think it applies when it does not, or vice versa). Here, an inductive principle appears in a scenario that undermines your (DE) principle. You may think that another explanation is that your inductive evidence is suspect; again, however, this appears to be begging the question in favor of the discriminating evidence principle.¹⁵

Likewise it is possible for (DE) to be defective without the skeptic or the skeptic's interlocutor knowing that it is or having any inkling that it is. When it seems to you that the discriminating evidence principle applies, it *might* well be the case that you are forgetting or are not in a position to appreciate the abundant evidence that your application of the discriminating evidence principle is completely defective.

In sum, one can seemingly be skeptical with respect to the discriminating evidence principle; and if one is, then most other kinds of skepticism—including those of the Cartesian or Humean or Russellian sort, relying as they do on the discriminating evidence principle—will be nullified, because the commonsense realist can marshal these observations to build a case against skepticism. The external-world skeptic argues that it is unreasonable to believe that the world is as our senses claim it is. The reasoning, recall, went like this:

- (1) I appear to have two hands.
- (2) Therefore, it is reasonable for me to believe that I have two hands.
- (3) I may right now be subject to the deception of an evil genius; therefore it is not reasonable for me to believe that I have two hands.

Here the perceptual-principle connection between (1) and (2) was undermined by the (DE) principle, which led to (3). Now, another iteration of (DE) might offer

- (4) I may be misapplying (DE); therefore it is not reasonable for me to retract my earlier argument (namely, 1 and 2).

(4) is again sustained by (DE). My claim is that this argument arises out the very content-neutrality of (DE) that the skeptic exploited in the first place. Here, (DE) is being used to neutralize an earlier instance of (DE), and it looks like the skeptical argument is undermined. The same strategy that the skeptic is using against commonsense beliefs is now being used against the skeptic. A merely possible epistemically defective condition is postulated, and this defective condition is being marshaled to discredit one of our beliefs. In this case, that belief is the belief that the skeptical challenge undermines our ordinary reasoning.

We are left with a kind of skepticism that is exotic and boggling, but it is not clear that anything is wrong with it. It is crucial to insist here that the fact that (DE) is being undermined cannot, by itself, constitute a victory for external-world skepticism. It is not as if the skeptic can accept that the content-neutral version of (DE) implodes, and treat that as showing that our reasoning is in general bollixed up. The ordinary reasoning that leads to the conclusion that the world is as it appears to be does not employ (DE), and stands on its own as yielding a *prima facie* justified belief. The initial argument for our commonsense beliefs employing the perceptual principle shows that.

Nor does the implosion of (DE) threaten to undermine its use in what appear to be legitimate contexts, such as reasoning in the law or in science,

where some rival hypotheses really do appear to undermine the justifiedness of our beliefs. The discriminating evidence principle can be applied to itself, but that does not imply that it *must* be applied to itself in every context of reasoning. It is the skeptic who is insisting on a fully content-neutral understanding of (DE), and who is deploying (DE) in the case where no further evidence can be brought to bear. If the skeptic insists on her case, then the commonsense realist can deploy (DE) in the same fashion, but in ordinary reasoning (DE) yields to evidence that can make a difference, if any can. The implosion of (DE) looks to be wholly the result of treating it as completely content-neutral. This implosion suggests that it is not content-neutral in the way that other epistemic principles are;¹⁶ there are, after all, reasons to resist content-neutrality. For instance, one might be sufficiently impressed with work on the domain-specificity of cognitive capacities, such that claims to full generality even in central-system thought become suspect. Evolution may well have kludged together our reasoning system, and (DE) might have been selected for use only in mundane contexts. This, of course, is all wholly speculative, but the handwaving is a gesture against the inevitability of the content-neutrality of (DE). I urge that we ought not to accept a content-neutral form of (DE) as a normative principle on reasoning.

The argument, recall, for (DE) being content-neutral was our tendency to reflectively endorse something like (DE) when it is made consciously explicit, and the thought that cognition should be sufficiently general to include us from potentially dangerous cognitive illusions. There are now obvious replies to both arguments. First, it would seem that we can be wrong in what we endorse as a normative principle if the epistemic consequences are sufficiently intolerable. Becoming cognizant of the intolerance of the results of a principle constitutes further reflection on that principle. The commonsense realist does view the skeptical argument as intolerable, and the implosion of skepticism above ought to make the argument (and the fully content-neutral version of the principle that generated it) intolerable to the skeptic, too. A different way of putting this is to claim that the content-neutral version of the (DE) is not one of our principles, though we can mistakenly think that it is. We had believed that a completely content-neutral form of (DE) was one of our principles, but the only reason we thought that was because we thought that it had a legitimate role in compelling skeptical arguments. Once it is seen that it does not work in skeptical arguments, we have no reason to think that it is one of our principles. Epistemologists should instead hunt for more content-specific versions of (DE).

Perhaps the skeptic's best ploy is to resist the claim that we can be defective with respect to deploying (DE). In one respect this looks to be a hopeless gambit. Since epistemic principles operate through some portion of our psychology, it would be remarkable if this part of our psychology were immune from error. Still, matters would be clearer if we had a more specific articulation of (DE) going wrong. Consider two conflicting conclusions that are compatible with an agent's total evidence, and where the agent is on the brink of believing that the conclusions are compatible with her total evidence. To craft a scenario where (DE) is defective, we can appeal to the machinations of a discrimination demon. The discrimination demon maliciously switches an agent's belief that her total evidence fails to discriminate to the belief that her evidence *does* discriminate, and thus that one of two conclusions is to be preferred on the basis of this evidence. If the agent is pressed to reflect on the way in which her evidence discriminates, she may well detect that her evidence does not in fact discriminate. Unfortunately, when she is on the brink of forming the belief that (DE) has indeed been violated and that she should suspend belief in the conclusions, the discrimination demon again performs a switch. A parallel tale may be told regarding our belief that a particular conclusion is favored by our total evidence as against an alleged competitor. The discrimination demon will switch that belief to the belief that the total evidence fails to discriminate. Alas, this might be the condition that we are all in.

Given that it appears possible for us to be defective in deploying (DE), the skeptic may urge something more like a phenomenalist's analogue to (DE): If on our total evidence, an hypothesis *appears* not to discriminate, then it is irrational to prefer the original belief.¹⁷ The thinking is, just as we cannot be wrong about how things visually appear to us, we cannot be wrong about it *seeming as if* a belief is subject to the discriminating evidence principle. The skeptic may insist that all that is required is that it appears to us "from the inside" that the skeptical challenge is an instance of the discriminating evidence principle being properly deployed.

I have some concerns about phenomenalism in general, as I am persuaded that we can be wrong about how things *appear* to us in the perceptual case.¹⁸ I am therefore tempted to maintain that we can be wrong in whether it *seems* to us that our total evidence fails to discriminate. Even putting aside those doubts about phenomenalism, however, there is something suspicious about this move on the skeptic's part. Suppose the skeptic opts for a consistently phenomenal reading of (DE). That would mean that in the initial argument against commonsense realism, the skeptic is claiming that the skeptical challenge relies on the appearance of the applicability

of the discriminating evidence principle. Skepticism would thereby show, not that we are *unjustified* in maintaining our ordinary beliefs, but that we *appear* to be unjustified in maintaining our beliefs. Admittedly, this appearance is according to our own lights, and that might be thought to be sufficient to secure the skeptical conclusion. Notice, though, that the parallel move in the perceptual argument is precisely what the skeptic is resisting. The commonsense realist employs the perceptual argument to draw the conclusion that the world *is* the way that it appears to be. The external-world skeptic is not (usually) denying that the commonsense realist is correct to think that the world appears a certain way. Rather, the skeptic is denying the realist's conclusion, namely that one can go from this claim about how the world appears, to a claim about how the world *is*. The way this inference is undermined, again, is to imagine a situation in which the appearance is consistent with a quite different state of affairs than the one that is proposed by the commonsense realist. If the skeptic insists on a phenomenal reading of the discriminating evidence principle, then she is claiming as legitimate an inference from the total evidence not *seemingly* to discriminate, to a conclusion that the total evidence does not *actually* discriminate. The skeptic has helped herself to just the kind of inference that skepticism aims in general to reject.¹⁹ The commonsense realist may object that, just as it is illegitimate by the skeptic's lights to draw a conclusion about how the world is from how it appears in the perceptual case, so too it is illegitimate to draw a conclusion about what is justified or unjustified from what appears to be justified or unjustified. The potential gap between appearance and reality in the realm of justification may be a difficult to appreciate, but all that is required to create that gap is a scenario in which the appearance is consistent with a quite different state of affairs than the one that is concluded by the skeptic. The anti-skeptical skeptical scenarios at the beginning of this section are just such scenarios.

I conclude that the dialectical strategy of skepticism can be used to undermine skepticism, by compromising the integrity of the discriminating evidence principle. Since it is possible that when confronted with skeptical arguments we are incompetently applying the discriminating evidence principle, it is unjustified for us to conclude that the skeptical challenge is successful in undermining our ordinary beliefs. What of skepticism, then, and its traditional command over the philosophical imagination? We can take on a pragmatic resignation with respect to the implosion of skepticism. That is, in the spirit of resignation we can see how we might have thought that (DE) could be deployed in a content-neutral form, be-

cause the content-neutral version of (DE) appears, on first inspection, to be reflectively pristine. The above considerations, however, show that the content-neutral version is untenable; and that, in turn, shows that the content-neutral version of (DE) is not one of our normative epistemic principles—and thus cannot be used in skeptical arguments. The skeptic's challenge is no less exotic than the troubling application of (DE) to itself. In both cases an esoteric mere possibility is employed to undermine a piece of reasoning that would appear to lead to an epistemically positive belief. On the other hand, there may yet remain considerations that urge pragmatism here. (DE) might be so very neutral that we can treat it as *almost* fully so, and that will tend to invite us to craft mistakenly anxiety-inducing skeptical arguments. Our temptation is so strong that perhaps we need not resist it all of the time. But is there really a reason for skepticism? The answer looks to be "no."

Acknowledgments

I am much indebted to Jonathan Vogel, Melissa Barry, Alan White, and Will Dudley for years of conversation on these and closely related issues. John Pollock's influence on my approach infuses the entire essay, and is much appreciated, and Jonathan Weinberg's comments on a version of this essay were invaluable. Thanks also to Michael Bergmann, John Greco, Tom Kelly, Brad Armour-Garb, Ron McClamrock, Youngshin Hahn, Joe Sheiber, P. J. Graham, Kris Kirby, Scott Sturgeon, and an anonymous referee for this volume, and to audiences at SUNY Albany, at Williams College, at the Canadian Symposium on Skepticism, and at the seventh Annual Inland Northwest Philosophy Conference.

Notes

1. This is not the same as saying that the skeptic must herself endorse the rational procedure or principles as rational. Some skeptics may well claim to merely take on the mantle of rationality in order to advance a skeptical claim. In this case, it is only the skeptic's interlocutor who needs to accept a framework of epistemic principles. I will neglect this subtlety in what follows, but it must be noted from the outset that these reflections on skepticism and skeptical arguments are aimed only at those who take reasons and reasoning seriously.
2. Justifiedness is the premiere epistemically positive property that philosophers focus on, but there are others. See, e.g., Goldman's (1986) discussion of *power* and *speed*.

3. See also Van Cleve's (1979) discussion of generation principles and transmission principles.
4. Sellars (1975) talks about this as *transmitting reasonableness*.
5. Two points: First, I do not mean to be committing to a historically accurate sense of faculty psychology. Rather, the phrase captures the typical principles approaches to epistemology. Second, the tidy identification of kinds of cognition suggested by the usual collection of epistemic principles strikes me as a glaring limitation of the literature on epistemic principles, especially given the attention to naturalized, i.e., more scientifically realistic, epistemology in the last thirty years. Here I am merely describing the literature's division of mental faculties, not endorsing it. See Sturgeon forthcoming for a nuanced discussion of this issue. My own more naturalistic approach to epistemic principles can be found in Cruz manuscript.
6. This observation is the basis of the liaison between epistemology and artificial intelligence research in Pollock's work (e.g., Pollock 1995). Since epistemologists will sometimes be incapable of following the complex interactions between principles, it is useful to encode the principles in an artificial reasoner. The epistemologist will then have a summary of the interaction of the principles that can be assessed for intuitive reasonableness. For the specific discussion of induction, see Pollock and Cruz 1999, 234–238.
7. For a different kind of theory of relevance, see Greco 2000, chap. 8.
8. For instance, Pollock and I talk of different levels of epistemic theorizing, and locate a theory of defeat at a higher level than theories of particular kinds of reasoning, in Pollock and Cruz 1999, 153.
9. One anti-skeptical reaction here maintains that, against appearances, the skeptical scenario is discriminable, and that, thus, the discriminating evidence principle cannot be used by the skeptic. For instance, Williamson (2000) claims that the intuitions that the skeptic exploits are part of a complex that cannot be readily made sense of as directly impugning our ordinary knowledge claims. Instead, he argues, our ordinary knowledge may be thought fundamental to the conceptual framework that we deploy in assessing skeptical scenarios. If that is so, then our worry that we do not know the things we ordinarily claim to know may be a kind of conceptual illusion. I am sympathetic with this strategy, very broadly conceived, in the sense that I will ultimately claim that skeptical scenarios can be discriminated from mundane ones; but my approach is quite different from Williamson's.
10. I thank Michael Bergmann and John Pollock for pressing this point.
11. This way of putting things casts the issue of how epistemic norms work in a more active, self-reflective way than I maintain. In my view, norms are deployed more or less automatically when a proposition is entertained. Or, even better, by the time a proposition is entertained, it has *already had* its epistemic status calculated,

- and this calculation comes *along with* the proposition as it is entertained in consciousness. So, on my rendering, to entertain a proposition is to simultaneously entertain its content as well as its epistemic status for the agent at the moment of entertaining it. Of course, this epistemic status is defeasible and the act of entertaining the proposition explicitly might occasion a recalculation of the proposition's epistemic status. These niceties are set aside, above, to illustrate what I take to be going on in the way that some epistemologists understand *prima facie* justification.
12. Pollock calls theories of this sort, "negative coherence theories" (Pollock and Cruz 1999, 80–84). Harman (1986) offers a version of this kind of view, but his theory does not assign default justification to *all* beliefs. Instead, beliefs that we actually possess enjoy positive status.
 13. I am reminded here of the enduring counter-intuitiveness of, for instance, quantum mechanics. The discomfort we feel when confronted with some of the ways of characterizing quantum-mechanical states could, I expect, be accommodated on an account that identifies a tension between the principles that govern our reasoning about middle-sized objects on the one hand, and scientist's massively complex and ramified reasoning about experimental results and scientific theories.
 14. Or, as I would prefer, a defect that compromises the cognitive mechanism on which the (DE) principle supervenes.
 15. Here it is being assumed that the begging-the-question principle has a kind of primacy over other principles, but that is also worrisome. What if you are forgetting the massive inductive evidence that you have to the effect that you tend to think you are begging the question when you are not? I will not pursue this possibility here.
 16. I am attempting to be generous to content-neutrality here. I actually think that our epistemic principles are not generally fully content-neutral, but that they can mistakenly be taken for such when reflected on consciously.
 17. Jonathan Weinberg suggested the phenomenal analogue to (DE) in defending skepticism.
 18. For discussion, see Pollock and Cruz 1999, 56–59.
 19. I thank Melissa Barry for helping me see the issues here.
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