

A RATIONALE FOR RELIABILISM

What bothers people about reliabilism as a theory of justified belief? It has yet to be formulated adequately, but most philosophical theories have that problem. People seem to be bothered by the very idea of reliabilism, with its apparent disregard for believers' rationality and responsibility. Yet its supporters can't seem to understand its opponents' complaints. I believe that the conflict can be clarified, if not resolved, by drawing certain important distinctions. Indeed the fundamental distinction, about justification itself, suggests that the two sides are not really talking about the same thing. After drawing these distinctions, I will offer some positive suggestions about the relation of reasoning to reliability. These suggestions will depend on a certain conception of the nature of reasoning itself. The conception I will sketch departs dramatically from common philosophical views but is akin to the notion of *default reasoning* currently influential in Artificial Intelligence.

Some Preliminary Distinctions

I am concerned with reliabilism only as a theory of justified belief. Originally, as with David Armstrong's and Alvin Goldman's versions,¹ reliabilism was a theory of knowledge. *Epistemological* reliabilism was designed to solve the Gettier problem not by augmenting but by replacing the justification condition in the traditional analysis of knowledge as justified true belief. The problem was to find a suitable conception of reliability. Armstrong's conception, for example, was too strong, seeming to entail that a reliably formed belief must be true. At any rate, it wasn't long before reliabilism took the form of a theory of justified belief itself, thanks mainly to Marshall Swain and again to Goldman.² The idea, roughly, is that to be justified a belief must be formed as the result of reliable processes,³ where now reliability does not entail truth. I take it that what is under dispute today is *justificational* reliabilism, and hereafter that is what I will mean by "reliabilism."

The difference between epistemological and justificational reliabilism has been obscured, I suspect, by an ambiguity in the notion of reliability itself, at least insofar as it is understood, as it often is, in terms of the notion of relevant alternatives. On that understanding, a process is reliable not just if it generally leads to true beliefs but only if it generally results in the ruling

out of all relevant alternatives. The trouble is that what counts as a relevant alternative depends on whether we are talking about knowledge or merely about justified belief. So there are really two different notions of relevance involved here, but in the literature these are not explicitly distinguished. A *justificationally relevant* alternative is one that must be ruled out if a belief is to be justified, while an *epistemologically relevant* alternative must be ruled out if a justified (and true) belief is to qualify as knowledge. In other words, JRA's but not ERA's are alternatives that, under the circumstances, one has reason to consider.⁴ No alternative can be both an ERA and a JRA in the same situation, and so the difference between the two must be kept in mind when the notion of relevant alternatives is invoked to explicate reliabilism of either sort, justificational or epistemological.

There is also confusion about the notion of justification that reliabilism is supposed to explicate. People on both sides of the dispute assume that this is not the traditional notion. Mark Pastin, for example, calls it a "nouveau-justification or justification-surrogate concept."⁵ And Goldman seems to agree when he says he is not retracting his earlier view, the aforementioned version of epistemological reliabilism, on which justification is not necessary for knowledge. He insists that he then meant classical, "Cartesian" accounts of justification and that in now maintaining that justified belief is necessary for knowledge, he means justified belief as understood in reliabilist terms.⁶ Pastin and Goldman both view the traditional notion of justified belief as inherently regulative, hence as not explicable by the obviously descriptive notion of reliability. Thus they do not regard reliabilism as an account of the traditional notion. However, as I will suggest, reliabilism is a nontraditional account of the traditional notion, insofar as this is the notion that figures in the traditional definition of knowledge as justified true belief.

Two Conceptions of Justified Belief

Be that as it may, there surely are two conceptions of justified belief involved in the debate, the *internalist* and the *externalist* conceptions. Laurence Bonjour has contrasted them nicely.⁷ Internalism requires that a person have "cognitive grasp" of whatever makes his belief justified. Being justified depends on how rational and "epistemically responsible" (whatever these mean precisely) he is in coming to hold the belief. In contrast, the externalist (reliabilist) conception allows that the source of justification can be "external to the person's subjective conception of the situation." On this conception epistemic rationality/responsibility is neither sufficient nor even necessary for justified belief. Since a believer can reasonably and responsibly rely on false principles it is not sufficient. It is

not necessary because certain beliefs, such as perceptual and introspective beliefs, can be justified even though for them the question of rationality/responsibility generally does not arise.

Put most simply, externalism is simply the denial of internalism. But it can be put more informatively, if tendentiously, as holding that being justified is that property, whatever it may be, which a true, "ungettiered" belief must possess in order to qualify as knowledge. Put in this way it is not explicitly committed to denying that justifiedness is regulative but leaves that question open. Still, the externalist conception of justified belief does *seem* descriptive, whereas the internalist conception is explicitly regulative.⁸

Arguments Against Reliabilism

Intuitively, what seems right about internalism is the idea that the epistemic merit of a belief depends on the performance of the person who arrived at it. Just as we do not downgrade an action because it has unforeseeable bad consequences, so we do not downgrade a belief because it is based on something that the believer had no reason to question. We assess his rationality and responsibility in forming the belief. Innocent ignorance does not change the assessment. This can be seen, the internalist argues, by comparing two subjectively identical situations in which a person forms the same belief on the basis of the same supposition, but such that the supposition is true in one situation but false in the other. The internalist would hold that the two beliefs are equally justified.

How can the externalist answer this internalist argument? Suppose that the pair of situations just described make up a Gettier example, so that in both situations the belief in question is true and justified. Then in the first situation the belief would qualify as knowledge, since it is based on a true supposition, whereas in the second the belief would not so qualify, since the supposition is false. Now recall that for the externalist being justified is whatever property an "ungettiered" true belief must have to qualify as knowledge. Besides the difference in truth value between the two underlying suppositions, which seems irrelevant to questions of justification, there is no difference in the justifications for the two beliefs. So must not the externalist grant that the belief is just as justified in the second situation as it is in the first?

However, the externalist must concede this point only if the supposition in question is specific in content. For only then could it, if false, "gettier" a justified true belief. If the false supposition were a broad generalization (or a general principle), the externalist would insist that reasoning which relies on it not only could not give one knowledge but could not, no matter how rational and responsible the agent, yield justified beliefs.⁹ Any true, rationally/responsibly acquired belief based on some false generaliza-

tion fails to qualify as knowledge but not because it has been gettiered. It is not the situation that keeps the belief from qualifying. The culprit is the falsity of the supporting generalization, not its local inapplicability. Thus it seems that the real conflict between internalism and externalism concerns whether there is an empirical side to what it is for a belief to be justified. Clearly internalism cannot allow that beliefs formed rationally and responsibly can fail to be justified because they are based on what is in fact a false generalization. Later I will try to resolve this conflict by suggesting that even though relying on a false generalization cannot give one justified beliefs, one can be justified in so doing.

In perhaps the most thoroughgoing critique of externalism to date, Laurence Bonjour¹⁰ charges it with violating the requirement that "beliefs that are to constitute knowledge must be epistemically . . . justified . . . meaning roughly that the acceptance of the belief must be epistemically rational, that it must not be epistemically irresponsible" (p. 53). He maintains that any belief meeting this requirement must be based on "a justificatory argument," hence be "inferentially justified" by other beliefs.

This requirement implausibly rules out noninferential or "basic beliefs," since those beliefs are not justified on the basis of other beliefs. Yet Bonjour cheerfully concedes this, as in the context of his diagnosis of the strategy behind externalism (reliabilism in particular). Taking it to be foundationalist as opposed to coherentist, Bonjour views it as designed to avoid the "epistemic regress of justification" by "locating a class of empirical beliefs whose justification does not depend on that of other empirical beliefs" (p. 53). The problem is that noninferentially justified beliefs obviously cannot meet the justification requirement mentioned above. There must be something that makes them justified, but it cannot be necessary for the believer himself to recognize this feature and take it to make the belief justified. For that would render the "belief not basic after all, since its justification depends on that of these other beliefs" (p. 55). So if externalism is to solve the regress problem, "though there must in a sense be a reason why a basic belief is likely to be true, the person for whom such a belief is basic need not have any cognitive grasp of this reason" (p. 55). Bonjour goes on to give an example, which I will consider later, designed to bring out "the fundamental intuition about epistemic rationality that externalism seems to violate," hoping if not to refute externalism then at least "to shift the burden of proof decisively to the externalist" (p. 56).

Unfortunately, Bonjour has not shifted the burden. As he himself admits,

Any non-externalist account of empirical knowledge that has any plausibility will impose standards for justification which very many beliefs that seem commonsensically to be cases of knowledge fail to meet in any full and explicit

fashion. And thus on such a view, such beliefs will not strictly speaking be instances of adequate justification and of knowledge. But it does not follow that externalism must be correct. This would follow only with the addition of the premise that the judgments of common sense in this area are sacrosanct, that any departure from them is enough to demonstrate that a theory of knowledge is inadequate. (p. 66)

However, Bonjour is well aware that according to foundationalism, basic beliefs "provide the foundation upon which the edifice of empirical knowledge rests" (p. 54). Therefore, if he is going to deny that they really are justified and really do provide such a foundation, he needs to defend coherentism, something he does not do. Until he does that, he has not shifted the burden of proof to the externalist.

Moreover, Bonjour should distinguish *epistemologically basic* from *psychologically basic* beliefs. A belief is epistemologically basic if it is justified without any support from the believer's other beliefs; it is psychologically basic if not actually inferred from other beliefs. Clearly a belief can be psychologically basic without being epistemologically basic (the converse seems false). Perhaps there are no epistemologically basic beliefs (at least no empirical ones) but plenty of psychologically basic ones, such as ordinary memory and perceptual beliefs. This would be so if any belief formed without inference from other beliefs could conceivably be disconfirmed by others that were brought to bear against it. In particular, as my proposed conception of reasoning will suggest, psychologically basic beliefs can result from processes that occur only if not blocked by other processes that reliably lead to the occurrence of thoughts of reasons against the belief.

The point of mentioning the distinction between epistemologically and psychologically basic beliefs is that the reliabilist does not have to regard beliefs that are merely psychologically basic as "sacrosanct." It is enough that they generally be justified, i.e., have what it takes generally to qualify as knowledge. Even if they are not formed by inference from other beliefs, their justification could still depend on other beliefs. So I think Bonjour is wrong to assume that externalism must be motivated by the foundationalist need to escape the epistemic regress. Indeed, if justifiedness is ultimately to be explained in coherentist terms, reliabilism is a solution to a different epistemic regress problem, a problem that internalism cannot solve. This is the problem of justifying everything on which our purportedly justified beliefs depend. Internalism cannot solve it because it treats justifiedness as a purely internal matter: if p is justified for S , then S must be aware (or at least be immediately capable of being aware) of what makes it justified and why. Reliabilism requires no such thing. Instead, it requires only that the

generalizations and principles that cognitive processes follow be true in order for the beliefs that result from these processes to be justified and, if true and ungettiered, to qualify as knowledge.

Justified Beliefs and Justified Believers

Curiously enough, some internalists and some externalists allow that theirs is not the only legitimate conception of justification. For example, Hilary Kornblith, an internalist, acknowledges that his notion of justified belief as a product of epistemically responsible action is not the only legitimate notion of justified belief.¹¹ And Goldman the externalist distinguishes between "theoretical and regulative justification principles."¹² Regulative principles are for epistemic agents to follow; theoretical principles are for epistemologists to discover. Of course, this distinction would be trivial if it turned out that for every valid regulative principle there is a corresponding theoretical principle, namely one asserting the validity of the regulative principle, but clearly Goldman would reject such a suggestion outright.¹³ At any rate, I believe there to be a distinction that provides a place for principles of both sorts and, further, that captures the difference between the internalist and externalist conceptions of justification.

I propose that we distinguish between a person being justified in holding a belief and the belief itself being justified. What makes a person justified in holding a belief resides in the quality of his epistemic action. There is much that this can involve, including asking fruitful questions, considering plausible alternatives, and properly evaluating evidence. Without trying to spell out precisely what good epistemic action involves, let's just say that a *person* is justified in believing something to the extent that he holds the belief rationally and responsibly. However, a *belief* can be justified even in the absence of any action on the part of the believer, as in the case of beliefs formed automatically or routinely, without any deliberate consideration. Indeed, I suggest that most of our beliefs are of this sort, including run-of-the-mill perceptual, memory, and introspective beliefs. The distinction is clearest in the case of psychologically basic (noninferential) beliefs, since whatever would make someone justified in holding such a belief would also render that belief psychologically nonbasic. If a basic belief is justified at all, because it is basic there is nothing one does in order to be justified in holding it. Nothing counts as being rational or epistemically responsible in holding such a belief. This is why Bonjour conceded that psychologically basic beliefs cannot satisfy the internalist conception of justification. If only he distinguished between people being justified in

believing and beliefs being justified, he would not have to make such a skeptical concession.

This distinction defuses an internalist argument offered by Kornblith.¹⁴ Insisting that "justified belief cannot be identified with reliably produced belief," Kornblith argues,

Since epistemically responsible action may result in something less than reliably produced belief, an agent may be justified in holding a belief without that belief being reliably produced. Beliefs produced by unreliable processes, where the extent of the unreliability would not be detected by epistemically responsible agent, are nonetheless justified.¹⁵

In effect, Kornblith is equating a belief being justified with an agent being justified in holding it. If he distinguished the two, he could then say that an agent can be justified in holding an unreliably produced belief even if the belief itself is not justified. And, of course, he could say that a belief is justified even if it is not the case that the believer is justified in holding it (which does not mean that the believer would be justified in not holding it).

So I think that our distinction captures what is right about both conceptions of justification. They are conceptions of two different things! Taking rationality and responsibility as the marks of justification, internalism can maintain that whatever makes a person justified in holding a belief must be available to him. And externalism can maintain that being justified is whatever property a true, ungettiered belief must possess to qualify as knowledge. As we have seen, a belief need not be justified in that sense in order for a person to be justified in holding it. For since he can rationally and responsibly rely on some false generalization or principle, reliance on which cannot give him knowledge, he can be justified in holding a belief that is itself not justified.

Finally, our distinction undercuts a seemingly decisive counterexample to externalism put forth by Bonjour. He describes the case of a completely reliable clairvoyant who "possesses no evidence or reasons of any kind for or against the general possibility of such a cognitive power, or for or against the thesis that he possesses it," and asks, "Is Norman epistemically justified in believing that the President is in New York City?" (p. 62) Now Norman either does or does not believe that he is a reliable clairvoyant, but by hypothesis he has no reason to believe that he is. So if he does, this belief is unjustified and thus cannot help justify his belief about the President's whereabouts. But if Norman has no belief about the reliability of his clairvoyance, his belief about the President's whereabouts is, according to Bonjour, "epistemically irrational and irresponsible, and thereby unjustified," since "part of one's epistemic duty is to reflect critically upon one's beliefs" (p. 63). Now even if fulfilling this "duty" is necessary for Norman to be

justified in believing, that leaves open the question, once our distinction is drawn, whether the belief itself is justified. The reliabilist could maintain that it is. Given the reliability of the process that leads to such beliefs, this process gives Norman knowledge whenever it results in a true belief (unless, of course, the belief has been "gettiered").

Since he uses it to criticize Goldman, presumably Bonjour would take the example to show that simple reliability is not enough even for justified belief. Yet Goldman himself recognizes that simple reliability is not enough and requires in addition to the reliability of the process leading to the belief that there not be available a reliable defeating process. Thus Goldman could explain why Norman's belief is not justified, though the result of a reliable cognitive process, by the fact that Norman fails to reflect on the reliability of his clairvoyance. The process of doing so, which surely would incorporate inductive principles generally relied on by Norman, would lead him to doubt or even deny the reliability of his clairvoyance. After all, Bonjour has stipulated that Norman does not have inductive support for believing himself clairvoyant. If he did have such support, contrary to Bonjour's description of the case, his belief that he is reliably clairvoyant would be justified.¹⁶

Let's go further and suppose that it does not occur to Norman to reflect on his powers of clairvoyance. Now it doesn't occur to most people to reflect on their powers of perception, and yet perception can give them knowledge, hence justified beliefs. So why couldn't clairvoyance do the same for Norman? It might seem that Norman is required to reflect on his clairvoyant powers in a way that ordinary people are not required to reflect on their perceptual powers, but what is the relevant difference? I think there is no relevant difference, and that there seems to be one only because of our doubts about clairvoyance in real life (what if we were all clairvoyant?). So if Norman really is reliably clairvoyant and has no reason to believe otherwise, it seems that his beliefs based on that power are as justified as ordinary perceptual beliefs.

One way to appreciate this is to imagine that what we take to be the perception of physical objects is not a matter of their affecting our sense organs. Instead, a benign Cartesian demon, recognizing the unbridgeable mind/body barrier, has arranged the world so that our sensory experiences are generally veridical, just as they are (presumably) in fact. But our knowledge of physical objects would be by clairvoyance, not perception. Then we would all be in Norman's position, except there would be now a way to check the reliability of our clairvoyance. Indeed, in this hypothetical circumstance the situation with clairvoyance would just like our actual situation with perception, where simple reliability generally *is* enough for justified belief!¹⁷

The Default Conception of Reasoning

Bonjour gives the impression that the dispute between internalism and externalism is solely about basic beliefs, but it goes further than that. This is evident from Goldman's formulation.¹⁸ His recursive definition of justified belief distinguishes *categorically* from *conditionally* reliable belief-forming processes. Categorical reliability is defined for belief-independent processes, which lead to beliefs not based on other beliefs, i.e., to psychologically basic beliefs. Conditional reliability is defined for belief-dependent processes, which lead to beliefs based (at least partly) on other beliefs. Reliability here is conditional since what comes out of the process depends on what goes into it. Now why doesn't Goldman content himself with reliabilism about basic beliefs and let the internalists have their way with inferential beliefs? As we saw, Goldman is skeptical about the prospects of identifying and adequately formulating regulative doxastic principles. Moreover, he observes that "doxastic habits" not only do but must precede "the choice of a doxastic principle," since otherwise "there would be an infinite regress of choices [of doxastic principles]."¹⁹ I agree with Goldman, but I think the issue goes even deeper than this. It concerns the very nature of reasoning.

I have been supposing (contrary to Bonjour) that most of our everyday, garden-variety beliefs qualify as knowledge, and that to do so they must be justified. Accordingly, a reasonable theory of justified belief (hence of knowledge) must take into account real-life limitations on our everyday reasoning. Now philosophers tend to focus on reasoning at its most explicit and deliberate. Yet such reasoning is exceptional: most of the reasoning that gives us knowledge is largely inexplicit. It is what in Artificial Intelligence is called *default reasoning*.²⁰ It is so called because it contains steps that are taken by default. That is, each such step is based on some generalization or stereotype which is overridden only if there occurs the thought of an alternative or of a reason to the contrary. The stereotypical assumption is like the default value assigned to a variable in a computer program. When a value needs to be assigned, the default value is assigned automatically if no alternative is provided, and the program runs from there.

The simplest case of default reasoning is when a question comes up and we believe the first thing that comes into our heads. This pervasive phenomenon can lead to justified beliefs insofar as it is reliable. Its reliability depends, as I will explain later, on how reliable we are at knowing when to think twice. Jumping to conclusions enables us to form beliefs much more freely than explicit consideration would allow. This does not mean that they are less justified (or are governed by lower standards of

justifiedness), for in most cases explicit consideration would yield the same result—after considerable time and attention.

More elaborate reasoning, containing a number of steps, can still be (and generally is) default reasoning, for there can be an implicit assumption at any step along the way. We implicitly assume a proposition whenever we reason in a way that is sensitive to it: drawing inferences consistent with it and not drawing ones inconsistent with it. Ordinarily we do not question such an assumption unless there occurs to us some reason to do so. We rely on our ability to detect or to think of reasons, when worth considering, for challenging our assumptions. For example, we often apply generalizations automatically and yet, relying on our ability to detect exceptions, we often know when not to apply them. These abilities can become highly refined, as with experts like detectives and doctors (as modeled by expert systems in AI), but we are all experts about many aspects of the world around us.

When our reasoning to a conclusion is sufficiently complex, we do not survey the entire argument for validity. We go more or less step by step, and as we proceed, we assume that if each step follows from what precedes, nothing has gone wrong. That is not always so, for an implausible conclusion along the way may lead us to question some previous step (either a premise or a bit of reasoning). An intermediate conclusion will seem implausible if it conflicts with other beliefs. Of course there is no guarantee that we will detect every such conflict, but we implicitly assume that when there is one, we will detect it and go back over our reasoning. Here we rely on our ability to detect such conflicts. Even if our lines of reasoning were always perspicuous, so that we could view them as a whole, there would still be points at which we do not actually check for validity but simply "go along" with the reasoning at that point. We just "see" that the next step follows. In any case, to lead to justified belief reasoning does not have to be evaluated in every evaluable respect. It can include steps that are not explicitly evaluated and implicit assumptions that would become explicit only if such steps were evaluated explicitly. Their implicit "evaluation" consists simply in their not being questioned. Such an evaluation is reliable insofar as the person is reliable at detecting good reasons for questioning steps in his reasoning. Moreover, generally a person is not aware of what validates his reasoning and might not even be able to be aware of all of it. Even if he were aware of what must be true for his reasoning to be valid, he might have no idea how to establish these underlying presuppositions. That would require, in effect, knowing how to answer the skeptic, and that's too much to ask of the ordinary cognizer (not to mention the seasoned epistemologist!).

Since justified beliefs commonly result from default reasoning, the internalist conception of justification is psychologically unrealistic and

epistemologically inadequate, even when restricted to inferential beliefs. Even if all aspects of reasoning, however complex, could be evaluated explicitly, it would be absurd to require reasoning to be evaluated in every evaluable respect in order to lead to justified belief. To be sure, no internalist I know of holds that such thoroughgoing evaluation is necessary for justified belief, but I don't see how an internalist can consistently settle for less. To impose the requirement merely that the believer be able to perform such an evaluation would be plausible only if coupled with the requirement that the believer know when actually to perform the evaluation. However, the latter is a reliabilist requirement, not an internalist one. And even if it were plausible to require merely that the believer be able to perform a thoroughgoing evaluation, that would divorce what justifies a belief from the process actually leading to it.²¹

Finally, the default conception of ordinary reasoning suggests that what makes a belief justified is not merely the actual reasoning that leads to the belief. Would-be reasoning is relevant too, reasoning that would take place if thoughts of certain possibilities occurred to the person. This means that how justified the belief is depends on the reliability of the process of thinking of relevant possibilities (JRA's) and even on the reliability of the process whereby they are evaluated. As we shall see next, this is true even in the case of psychologically basic beliefs.

Taking Things for Granted

The default conception of everyday reasoning has an interesting application to Gilbert Harman's approach to the Gettier problem, an approach which has been charged, in my view unjustly, with being psychologically implausible. He proposes a psychological strategy of using intuitions about knowledge "to decide when reasoning has occurred and what reasoning there has been."²² The strategy is based on the principle (P) that reasoning can give one knowledge only if it contains no false steps. Harman suggests that what distinguishes a gettiered justified true belief from its normal counterpart is that the reasoning leading to it contains (essentially) something false. Now if principle P is to distinguish the two cases, the reasoning leading to the gettiered belief must be elaborate enough to contain the requisite false step. But then the reasoning in the normal case, where there is genuine knowledge, has to contain a counterpart of that step. Thus Harman's strategy can seem psychologically unrealistic, in that it requires attributing implausibly elaborate reasoning to the normal believer. If I may allude to a few well-known examples, the believer seems not even to consider, much less affirm, that what he takes to be a barn is not a papier-mache facade, that the candle he seems to see directly is not really being

reflected through a system of mirrors, or that Havit (or anyone other than Nogot) is not the student who owns a Ford. I suggest that the step required in the normal case corresponding to the false step in the gettiered case concerns a proposition which is not explicitly considered but is merely taken for granted.

Let us look at the second case, Harman's perceptual Gettier example. A person has a justified true belief that there is a candle in front of him. He does not know this, though, for he is unaware (and has no reason to suppose) that what he sees is really the reflection in a mirror of another candle off to the side. However, he does not seem to be explicitly thinking any such thing when he infers that there is a candle in front of him. For this reason Michael Williams argues that there is no evidence to warrant ascribing reasoning that does include this supposition.²³ There is the further consideration that the belief about the candle is but one of countless beliefs continuously being formed as a person contemplates his surroundings or navigates about them. It seems highly unlikely that for each and every object a person takes to be before him, he draws a distinct intermediate conclusion like the one Harman suggests for the case of the candle. That seems not only implausible but highly inefficient. Much more plausible to ascribe and efficient to use would be a generalization like this: ordinarily things are as they seem, because they seem as they do because of the way they are. This generalization could be used over and over, as countless perceptual judgments are made. It would function as an intermediate step each time one infers the presence of something, but a new intermediate step would not be needed for each new inference. There is no reason to suppose, Harman's strategy notwithstanding, that this same step explicitly occurs over and over, as each succeeding judgment is made. And yet such truncated reasoning, though lacking an element corresponding to the intermediate step, could be both explicable and justified, provided it makes sense to say that the required intermediate step is at least *implicit* in the reasoning. I suggest that we can make sense of this with the help of the following psychological distinction, which can serve further to defend Harman's strategy against the charge of psychological implausibility.

Let us distinguish between reasoning *realizing* an inference pattern and its merely *instantiating* that pattern. A piece of reasoning realizes an abstract pattern of inference if it contains psychologically real elements corresponding to all the steps of that pattern. It merely instantiates that pattern if there is some step that is not explicitly included but merely implicitly assumed. This distinction makes sense, I suggest, if we suppose that our ordinary, routine reasoning, as in perceptual judgment, operates according to something like the following rule, which I call the *taking-for-granted rule*.

(TFG) If it seems to me that p , then infer that p , provided no reason to the contrary occurs to me.

If our routine reasoning relies on the TFG, this reliance leads to justified beliefs insofar as we are able to detect abnormal circumstances. I must be pretty good at knowing when not to infer that things are as they seem in order to be justified, when the situation is normal, in supposing that things are as they seem. If I were insensitive to abnormal situations, I would directly infer that p even when I should not. In following TFG, whenever I directly infer that things are as they seem, i.e., without considering reasons to the contrary, I implicitly rely on my reliability at detecting indications of abnormality.

I am suggesting that we jump to conclusions except when we look before we leap. That's obviously efficient, but how reliable is it? Offhand, jumping to conclusions seems to gain speed at the risk of error. It looks as though it could get us into lots of trouble. But don't forget, drawing inferences is, as Mill observed, "the only occupation in which the mind never ceases to be engaged." We can't avoid trading off possible error for speed, for there are always more inferences to be made. If we didn't generally jump to conclusions, we wouldn't make most of the inferences that need to be made. In any case, it seems that when we do jump to conclusions, we are generally right. We are generally right in our snap judgments about the kinds and qualities of things we perceive around us, right in our recollections of our prior experiences, right about persons, places, and things we seem to recognize, right about what people mean when they talk to us. Perceptual judgment, recall, recognition, and understanding utterances²⁴ are all clear cases of generally reliable jumping to conclusions. Since this is not a monumental coincidence, somehow our inferences must take relevant information into account without getting bogged down in irrelevancies. But how? How do we resolve the tension between efficiency and reliability? After all, reliability requires ruling out alternatives to the tempting conclusion. The way this tension is resolved, I suggest, is that alternatives can be effectively and legitimately ruled out without even being considered, at least not consciously. This can occur if our reasoning processes have the following feature: we consider an alternative only when there is special reason to do so. Otherwise, without explicitly thinking that the alternative does not obtain, we reason as if it does not.

Obviously our reasoning can work like this only if we are equipped somehow to detect the presence of reasons for considering alternatives that we ordinarily take for granted not to obtain. A belief resulting from such a process is justified to the extent that the process not only leads to true beliefs, at least generally, but also guards against forming false beliefs, by

means of precautionary subroutines that are generally activated when and only when they need to be. For it is only to that extent that following TFG can lead to justified beliefs. In the ungettiered case of the candle, for example, I couldn't know that there is a candle in front of me simply by inferring this from how things appear if I did so on the basis that objects are as they appear. That is, if I followed the preposterous appearance-is-reality rule (AIR), "If it appears to me that p , then infer that p ," then when I inferred that something is as it appears my reasoning would instantiate an obviously invalid inference pattern and could not lead to justified beliefs. Fortunately, my reasoning follows a different rule, TFG, and generally instantiates a valid inference pattern, one that is validated, I suggest, by what we might call the *take-for-granted principle*:

(TFGP) Its appearing to one that p justifies directly inferring that p provided that

- (a) it does not occur to one that the situation might be out of the ordinary, and
- (b) if the situation were out of the ordinary, it probably would occur to one that the situation might be out of the ordinary.

(The force of "ordinary" here is to exclude sources of illusion, distortion, and hallucination.) When TFGP applies, I am justified in taking for granted that the situation is ordinary, unless it occurs to me that perhaps my perception is being affected abnormally, say by bad lighting or by devious psychologists. Thus, as clause (b) provides, TFGP licenses my implicit use of TFG to the extent that I am able to detect abnormal circumstances. I must be pretty good at knowing when not to infer that things are as they seem in order to be justified, when the situation is normal, in supposing that things are as they seem. If I were insensitive to abnormal situations, I would directly infer that p even when I should not.

TFGP licenses me to jump to conclusions if I don't think of a reason not to. Thus, the justification of such an inference is conditional on the nonoccurrence of a certain thought. In the case of visual belief, for example, ordinarily I assume that things are as they look, unless it occurs to me that my vision is being affected abnormally. Similarly, in the case of recall, as of somebody's name or the spelling of a certain word, I take for granted that the first thought that comes to mind is the right one—unless it occurs to me that it might not be, say because some other possibility comes to mind.

If this picture of ordinary reasoning and its justification is at all correct, it has a fundamental consequence for the dispute between internalism and externalism. Since making inferences according to TFG requires the

nonoccurrence of a certain thought, TFG has the remarkable feature that it cannot be explicitly followed. For if TFG occurred to me while I was following it, then I would have to consider whether there are occurring to me any thoughts to the contrary of my prospective conclusion, in which case I would no longer be drawing that conclusion directly. Instead, my reasoning would contain the additional thought that there are no reasons contrary to the conclusion. But that's not the way jumping to conclusions goes, or at least not the way it seems to go. I don't seem to draw my conclusion after noting that no contrary possibility has occurred to me, and if I did reason in that way, undoubtedly plenty of such possibilities would occur to me.

* * *

Only externalism is compatible with the supposition that in everyday life we employ default reasoning and that this reasoning generally leads to justified beliefs and gives us knowledge. Internalism may be appropriate as a conception of what it is for a person to be justified in holding a belief, but not as a conception of justified belief itself. Now I have not addressed the problem of precisely how to formulate externalism, reliabilism in particular. Solving it would require finding a suitable way to individuate cognitive processes²⁵ and specifying the precise role of back-up processes. Whether this can be done remains to be seen, for I have tried to show only that in principle there is nothing wrong with reliabilism.

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NOTES

1. D. M. Armstrong, *Belief, Truth, and Knowledge* (London: Cambridge University Press, 1973); Alvin I. Goldman, "Discrimination and Perceptual Knowledge," *Journal of Philosophy* 73 (1976): 771-91.

2. Marshall Swain, "Justification and Reliable Belief," *Philosophical Studies* 40 (1981): 389-407; Alvin I. Goldman, "What Is Justified Belief?," in George S. Pappas, ed., *Justification and Knowledge* (Dordrecht, Holland: D. Reidel, 1979), pp. 1-23.

3. Swain presents his view as the "reliable indicator" theory of justified belief, and his formulations strongly suggest that reliability is to be predicated of individual beliefs, but he does maintain that being a reliable indicator just is being the result of a reliable process (p. 405). However, Swain's formulation, which I will not take up here, is quite different in detail from Goldman's.

4. For example, if there appears to be a sleeping hippopotamus on your front lawn, before believing that one is there you have reason, considering you don't live in a hippo habitat, to rule out the JRA's that a stuffed, papier-mache, or robot hippo is out there. But if there appeared to be a puppy on your front lawn, normally you would have no reason to consider the analogous alternatives. They would be JRA's only if you believed or had evidence that there were stuffed, papier-mache, or robot puppies around. But such an alternative could still be an ERA. For example, if Martians had placed some lifelike puppy robots in the neighborhood and you were unaware of this and had no reason to suspect it, you would not know that there is a puppy on your lawn even if you justifiably believed this and were in fact looking at a real puppy. In the circumstances, knowing this would require ruling out the ERA that what you are looking at is a robot. However, you have no reason to rule it out—it is not a JRA.

5. Mark Pastin, "The Multi-Perspectival Theory of Knowledge," *Midwest Studies in Philosophy* 5 (1980): 97-11, p. 97.

6. "What Is Justified Belief?," p. 1. In "The Internalist Conception of Justification," *Midwest Studies in Philosophy* 5 (1980): 27-51, Goldman remarks that many epistemologists have "[mistakenly] assumed that a regulative notion of justification is the same notion of justification as the one that appears in the analysis of propositional knowledge" (p. 29).

7. Laurence Bonjour, "Externalist Theories of Empirical Knowledge," *Midwest Studies in Philosophy* 5 (1980): 53-73, p. 55.

8. Note that the issue here is not the proper *standards* of justification. Internalism may require that what makes a belief justified be available to the believer, but it does not insist that a justified belief be certain, much less true. Like Descartes, Bonjour and most contemporary internalists accept the first condition on justified belief, but unlike Descartes they reject the second. They recognize that justification is fallible: a belief does not have to be true to be justified. This point is relevant here, since the infallibilist conception of justified belief rules out the possibility of Gettier examples, contrary to what both externalists and most internalists take for granted. Gettier examples are justified true beliefs that qualify as knowledge in one situation but not in another, though justified in the same way. By Cartesian standards a belief can qualify as knowledge only if completely or conclusively justified, so that it is certain and cannot be false. As the infallibilist Robert Almeder argues in "The Invalidity of Gettier-type Counterexamples," *Philosophia* 13 (1983): 67-74, any putative Gettier example is incompletely justified, since there is always some relevant feature of the situation that the justification of the (true) belief must have failed to take into account.

9. Here the internalist might invoke the alleged distinction between "objectively" and "subjectively" justified beliefs and say that his argument, indeed his very conception of justification, applies only to subjectively justified beliefs. The trouble is, however, that this distinction is bogus. Subjectively "justified" beliefs that are not "objectively" justified are reasonable or "excusable," as Goldman puts it ("The Internalist Conception of Justification," pp. 37-38), but that does not make them genuinely justified, any more than two lines that are "subjectively equal" (i.e., look equal) because of an optical illusion, are genuinely equal.

10. In "Externalist Theories of Empirical Knowledge." In what follows the page references to Bonjour are to this article.

11. Hilary Kornblith, "Justified Belief and Epistemically Responsible Action," *Philosophical Review* 92 (1983): 33-48.

12. "The Internalist Conception of Justification," p. 28.

13. Goldman does not argue explicitly against this correspondence, but his rejection of it is evident from the nontrivial differences between the various plausible principles of each sort that he examines. It seems to me that a decisive reason for rejecting the correspondence claim is that the same theoretical principles can dictate different regulative principles in different sorts of worlds. For example, a source of error that is worth taking into account in one world might not be worth bothering with in another, save for some special reason for considering it. Moreover, which regulative principles are validated by the theoretical principles may depend on how and how well the cognitive processes to be regulated actually work.

14. It also undercuts two otherwise plausible objections to reliabilism recently put forth by John Pollock ("Reliability and Justified Belief," *Canadian Journal of Philosophy* 14 (1984): 103-14). Space does not permit giving them the attention they deserve, but the first objection, in a nutshell, is that since reliability is a probabilistic notion, reliabilism leads to the lottery paradox. I cannot rehearse Pollock's argument here, but clearly it depends on the assumption that reliabilism sanctions a purely probabilistic rule of acceptance. Such a rule leads to the lottery paradox, as Gilbert Harman noted in *Thought* (Princeton: Princeton University Press, 1973), pp. 118-19. Now Harman exposes a further trouble with such a rule, arguing that "given any evidence, some false conclusion will be highly probable on that evidence (p. 22) and that "purely probabilistic rules are incompatible with the natural account of Gettier examples by means of principle P" (p. 124). Fortunately, as we have seen, reliabilism is a theory of justified belief in the sense relevant to the analysis of knowledge, not in the sense of being justified in believing. Rules of acceptance are relevant to the latter, not the former, and Pollock makes no attempt to show that reliabilism sanctions any purely probabilistic rule of acceptance.

Pollock also argues against reliability as a necessary condition for justified belief.

We often become justified in believing a conclusion by reasoning to it from other beliefs we are already justified in holding. But from the fact that our premises are reliable, it does not follow that our conclusion is reliable. In general, by conjoining a number of beliefs which are both justified and reliable, we can arrive at a conclusion which is justified but as improbable and hence unreliable as we desire. (p. 106)

This argument can be disposed of quickly. For one thing, reliabilism invokes the notion of reliability of belief-forming processes, not that of beliefs themselves. Moreover, we may "often become justified in believing a conclusion by reasoning to it from other beliefs we are already justified in holding," but not when our conclusion is "improbable and hence unreliable." Reliabilism can account for this straightforwardly. Any reasoning process that is insensitive to such probabilistic considerations is unreliable and therefore does not lead to justified beliefs.

15. "Justified Belief and Epistemically Responsible Action," p. 44.

16. Indeed, sometimes simple reliability is enough, as with unreflective agents. After all, such people are capable of knowledge, hence of justified beliefs. So even if it is "part of one's epistemic duty to reflect critically upon one's beliefs," they lack the psychological resources to do this.

17. Later I will qualify this statement by adding that reliable belief-forming perceptual processes be backed by reliable processes for detecting when the situation is out of the ordinary.

18. See, in particular, the formulations on pp. 13, 14, and 20 of "What Is Justified Belief?"

19. "The Internalist Conception of Justification," p. 47.

20. The conception of reasoning sketched here is developed more fully in my "Default Reasoning: Jumping to Conclusions and Knowing When to Think Twice," *Pacific Philosophical Quarterly* 65 (1984): 37-58.

21. See Harman (cited in n14, above), pp. 26-32.

22. *Ibid.*, p. 47.

23. Michael Williams, "Inference, Justification, and the Analysis of Knowledge," *Journal of Philosophy* 75 (1978): 249-63.

24. See Kent Bach and Robert M. Harnish, *Linguistic Communication and Speech Acts* (Cambridge, MA: The MIT Press, 1979), pp. 84-96.

25. Goldman recognizes this problem in "What Is Justified Belief?", pp. 12 and 20. Robert Nozick takes up the analogous problem for this theory, a form of epistemological reliabilism, in *Philosophical Explanations* (Cambridge, MA: Harvard University Press, 1981), 179-85.